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# ENGLISH PROCEEDINGS

# GAINING KNOWLEDGE POST-DISASTER: THREE CASE STUDIES

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## ABSTRACT

*This study was an examination of what small business owners could learn from disaster and how the local community support services could encourage this effort. The owner-managers in the study gained personal insight and growth while they learned from other small businesses owners, survivors of previous disasters, and their communities. The examination included why, during interviews, small business owners questioned about recovering from disaster seemed not to have gained transferable business knowledge post-disaster, yet stated they had learned a great deal. In the small qualitative study, Jewell (2012) applied Weick's theory of sensemaking to determine perceptions of learning in three small business owners during disaster recovery. The study findings indicated the small business owners gained learning post-disaster, but they did not discuss transferable business acumen when remembering their recovery processes following the disaster. Instead, their focus was on personal and employee spiritual growth, which they believed was more important. The article clarifies how managers learned post-disaster and how local community support programs could help businesses plan for future crises.*

**JEL:** International Journal of Management and Marketing

**KEYWORDS:** Sensemaking, Crisis, Disaster, Small Businesses

## INTRODUCTION

The qualitative research by Jewell (2012) looked at three small businesses, each having recovered from disasters: an internal flood, a city-wide flood, and an accidental fire. This article discusses the learning mentioned by owner-managers within their interviews, which suggested that only personal learning and not transferable business acumen took place. Though the data from interviews suggested only personal growth, the ability to rebuild offered evidence that real business knowledge might have been gained by owner-managers but was discarded or overlooked during the interviews. This article contends small business owners do learn post-disaster but do not discuss learning that could help other businesses in their prevention planning or disaster recovery processes. Instead, the owners focus on the spiritual growth, which they feel is more important. The article suggests owner-managers can learn from several sources, including other business professionals, survivors of previous disasters, and their communities.

## LITERATURE REVIEW

### Learning Needs of Small Business

Small companies are a major source of growth in free market economies and their survival is an issue of concern (Lussier & Pfeifer, 2001). Without proper disaster plans or the tools to rebuild, small businesses could fail following a crisis. Survival research by Dobrev and Carroll (2003) indicated smaller businesses might lack the bureaucratic restraints found in larger companies, which might provide them the flexibility necessary to achieve rapid recovery. If small companies plan for potential disasters and utilize their available resources, they may be better able to overcome and succeed post-disaster. Therefore, small businesses need to learn from other

small business owners who have experienced and recovered from disasters. The ability to learn during the demands of crisis is considered difficult, yet crisis provides learning opportunities (Moynihan, 2008).

### Why Small Businesses Lack Learning

Learning can be operationally defined as the modification of behavior through practice, training, or experience. Small business respondents have indicated learning was not a priority for them (Matlay, 2000). Small business managers, who often deal with more daily activities than do managers of larger firms, may be hampered by a plethora of activities and thus not be able to focus on the need to prepare for potential disasters. This oversight not only hurts the managers, but also may harm others, such as suppliers and customers. By failing to make time to train pre-crisis, managers may rely heavily on outside support as they determine how or if they will recover from a disaster.

Organizations have been found to lack learning post-disaster because they believe the disaster was a one-time event (Hale, 1997; Roux-Dufort, 2000). Organizations have taken a defensive stance about their isolated disaster events and have been reluctant to consider the situations as learning opportunities (Roux-Dufort, 2000). Businesses may lack motivation in learning post-crisis in order to maintain collective self-esteem and may be prone to be defensive, evidenced by rationalizing, idealizing, fantasizing, or symbolizing to keep their corporate identity intact (Brown & Starkey, 2000). This article contends that owner-managers can learn and that organizations can change post-disaster.

### How Small Businesses Can Learn

Even though small businesses are crucial to the economy, little research has been done on training program effectiveness or on educating management (Huang, 2001). While small business owners need to take the time to search out resources to ensure proper knowledge of potential hazards, insurance needs, and local resources that can offer help if a disaster were to strike, educating the owners might be challenging due to lack of time or resources available. Learning post-disaster involves the assimilation of information obtained during recovery and the ability to apply the knowledge to other situations (Cope & Watts, 2000). Small businesses willing to encourage a learning atmosphere may be at an advantage during recovery and rebuilding because they already have plans in place.

Crisis events can be the catalyst for organizational learning (Sitikin, 1992). Optimal learning following a crisis requires being open to ideas, understanding the crisis situation, and nurturing the ability to access problems surrounding the crisis while being aware that problems happen anywhere (Jaque, 2008). The ability to look at a given set of circumstances and redefine a company's goals helps managers to focus on the current situation of their organization. This strategy needs to be used pre-disaster to ensure managers can access where or when a disaster could produce problems for the organization. After a disaster has struck is not the ideal time to learn where organizational resources are or who can help deal with the stress of recovery. Preparing a disaster plan well in advance of a crisis may enhance recovery and provide assistance to managers who feel stress following a disaster. Small business owners may feel too busy to learn, yet many owners report they are willing to take courses if the training facility location is close and information is applicable (Walker, Redmond, Webster, & Le Clus, 2007). Local government agencies, insurance providers, and small business organizations should focus on training for small business managers to ensure recovery from or potential prevention of crises.

Outside support following a crisis may be crucial for small organizations, especially for those that have not prepared for disaster situations. Organizations need to build support prior to crises by joining local networking groups and attending community and governmental meetings to ensure they have the needed resources in place if crisis were to strike. Outside financial and physical support can come from other business owners willing to provide temporary accommodations following a disaster and from community programs structured to offer financial support for rebuilding.

Small businesses must make the time to network with their community and peers to ensure they know who they can call if they have a need. Small business leaders feel a benefit from peer networks and can learn come from the experiences of others (Zhang & Hamilton, 2009). Local organizations may be able to provide access to training opportunities for small companies that are willing to take classes on crisis prevention and disaster planning. The benefit for small businesses of a peer network is the support post-disaster, both emotionally and financially. The network and other small business managers can offer them the desire and means to rebuild. Peer networks may support small business learning and recovery post-disaster because they offer expert advice from individuals who have gone through and recovered from a crisis situation. Small business owners may prefer to learn only what seems relevant in crisis recovery and disaster rebuilding. Training specifically directed to the needs of small organizations can seem relevant to small business leaders as they hear the stories of peers' rebuilding efforts. Many small business owners may not spend time focusing on potential disaster; therefore, training and advice from other small business owners or experts in the field must encourage them to create a preparation plan.

Zhang and Hamilton (2009) suggested that small business managers could learn by heeding the perceptions of others, such as employees, suppliers, competitors, and other associates in the industry. Survivors of disaster may support by helping small business owners create prevention plans and disaster recovery plans. Having local small business organizations support each other may provide the guidance needed during extreme situations such as disasters. Management education literature mentioned that collaborative learning increased the knowledge of business owners (Bruffee, 1994). Such individuals, who understand the stress and the sense of being overwhelmed that happens post-disaster, can provide not just sympathy and a listening ear but also resources. Crisis victims can offer supplies for rebuilding, for example, or needed insight into paperwork requirements for insurance or government funding. Small business owners need to be able to locate other business owners who have survived a similar disaster and to seek their valuable insight in rebuilding.

### Weick Sensemaking Theory

Sensemaking has been defined as an ongoing creation by individuals of situations or actions in an attempt to rationally comprehend them (Weick, 2001). Sensemaking and learning can coordinate the actions of individuals (Allard-Poesi, 2005). Sensemaking helps people construct meaning out of past situations (Gioia & Chittipeddi, 1991), allows individuals to determine what is significant within a situation, and helps them decide what is important enough to remember. Retrospective sensemaking allows individuals to look back on their experiences to make sense of the event through their own individual perspectives (Weick, 1988). Knowledge gained from studying recovery sensemaking may provide disaster planning and prevention strategies for small businesses.

## METHODOLOGY

I reviewed Jewell's (2012) research to study the transcripts. I wanted to see where small businesses could learn and why they believed they had learned yet were unable to provide transferable knowledge when asked directly. Interviews were conducted with owner-managers and employees of three small organizations in a small Midwestern city and nearby town. Each organization had overcome a crisis: an internal flood, an external flood, and a fire. Since the disasters, which occurred in 2008 and 2010, all three businesses had rebuilt and the owner-managers and employees had ample time to reflect upon the knowledge gained during and after the recovery process. The researcher asked management directly what they learned from their individual crises and then asked employees what management had learned following the crises. Potential transferable knowledge for other small business managers was, therefore, an important element of the study. Jewell's (2012) study was an examination of how small businesses learned from their disaster situations. The investigation asked how small business could learn from disaster. The study sample was three small businesses in which the owner served as the only manager and in which the staff numbered 15 or fewer. Companies chosen were located within small communities, with two cases from a small town with a population of less than 2,000, and one case from a small city of around 130,000. Each of the owner-managers and their employees had endured an internal or an external flood or fire and were able to rebuild their company in 2008 or 2010.

## RESULTS AND DISCUSSION

Owner-managers gained knowledge of a personal nature: spiritual growth, understanding what was socially and emotionally important, and the true nature of stress. One manager discussed how the crisis allowed the company to do things they had not expected to accomplish until 10 years in the future. A second manager learned a new understanding for what "busy" really meant, while a third manager discussed no longer looking at monetary things in the same way and coming to understand what was "really important." All of the owner-managers in Jewell's (2012) research felt they learned substantially from their situations, yet none of them were able to provide clear advice for other small businesses. On further investigation of Jewell's (2012) interview questions related to the rebuilding process and the answers given during employee interviews, it seemed actual knowledge that could be transferred to other business owners was realized. This underlying knowledge seemed to have been gained by owner-managers but not discussed when the owner-managers were asked what they learned. The information surfaced only as details about the recovery process, such as the truly helpful actions of insurance agents, new decisions to rebuild outside of a flood zone, and the importance of a supportive community.

All owner-managers discussed the stress post-disaster and the feelings of being overwhelmed. Owner-managers also discussed the help provided to them by other local professionals who opened their businesses to them or supplied them with materials for clean-up and rebuilding. Employee interviews indicated owner-managers must have gained useful insight because employees discussed what owner-managers learned, such as backing up computer files, working together, and no longer using extension cords. Behaviors changed; thus learning must have taken place, yet owner-managers preferred to focus their attention on personal growth rather than discussing insightful information that could help other small business managers with crisis prevention or planning. The reluctance implied that small Midwestern business owners in general might not be willing to share advice unless directly asked, which places other business owners at a disadvantage in disaster prevention and planning.

### Managers' Learning

Of the three owner-managers interviewed, all believed they learned from going through a disaster. All three focused on personal growth and asserted that their company was better following the crisis. Two of the three of the owner-managers stated they felt they were ahead by several years in improvements to their companies. While all three owner-managers indicated that they had received help from the community or from local professionals, none reported they learned from the community or the professionals.

### Employees' Learning

Interviews with all seven employees indicated they also believed owner-managers or the company learned from the crisis and rebuilding. Six of the seven employees believed the company learned the value of teamwork and coming together. Four of the seven employees believed the company learned how to prepare better for future disasters.

## **CONCLUSION**

The results of interviews from both owner-managers and employees displayed knowledge about how to rebuild: building outside flood zones, having back-up files secured off site, and purchasing better equipment. The results also indicated which resources were helpful during the process: community driven classes, peer networks, and speaking directly with survivors of disaster. This type of transferable information is what other small business managers planning for disaster or trying to prevent a crisis need to know.

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# PEDDLING BY POD: MOBILE MARKETING FOR REAL ESTATE PROFESSIONALS

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## ABSTRACT

*The use of podcasts to convey educational materials to a public that is mobile, on the go, and continually multitasking has grown exponentially over the past few years (McDonald & Hawcroft, 2011; Scott, 2009). With the growth of technology and its appeal to younger and younger users, mobile learning has become the new learning medium. Now comes the question of business values and applications for incorporating podcasting in consumer sales to a growing techno-savvy and younger consumer population (Ferrel, Gonzalez-Padrom, & Ferrel 2010). Previous research had indicated that there is educational, business, and creative value in podcasts (McDonald & Hawcroft, 2011; Nath, Singh, Iyer, & Ganesh, 2010; Ferrell, et al., 2010). Other research found focus, creativity, content, and aesthetics to be necessary elements to create effective podcasts (Palmer & Devitt, 2007; Villano, 2009; McDonald & Hawcroft, 2011). The data that appeared to be missing from existing literature was the value of creating effective podcasts designed specifically to market a product. The lack of such specific research was the inspiration for this literature review. The question posed for this study was how to create an effective podcast for use by real estate professionals to market fixed real property to a mobile community.*

**JEL:** G14, G29

**KEYWORDS:** Podcast, Real Estate Professional, Mobile Marketing, Marketing Tool

## INTRODUCTION

Mankind is attached to his music literally. As far back as the 1970's and the advent of the stereobelt and the Walkman (Conti, 2009), portable music has become an integral part of a proper wardrobe. In the quest for more music and less bulk, came the MiniDisk, then MP3 players, followed by the iPod. From there improved technology has resulted in the iPod Nano with 16 gigabytes of storage, a radio, camera, video camera, and pedometer in a tiny 3.6 x 1.5 x .24 inches case that weighs 1.28 ounces. It is no wonder that with such convenience and size ownership has become another Apple status symbol. The largest demographic using iPods was reported in 2009 to be in the 13-17 years-old bracket (Baker, 2009; Johannes2006) with use beginning in toddlers and continuing through geriatrics. New technology, new users (younger users), and the potential to store vast amounts of digital data is the perfect storm for new applications. Younger users are without fear of the new technology. New technologies, growing populations, aging campuses, and innovate teachers and teaching methods are expanding the use of educational mobile technology (Rosell-Aguilar 2007; Ng'ambi and Lombe 2011). With the internet came e-learning (Gaden, 2010), – distance learning from home or job either in synch or at-your-own-pace. Next generation learning is m-learning technology (Rosell-Aguilar 2007; Ng'ambi and Lombe 2011), – mobile applications for enumerable teaching opportunities.

College students are faced with choices of traditional class-room, online, or hybrid (one-half traditional classroom and one-half online) courses. Online and hybrid courses reduce the load of students on campus, but fail to meet, in certain cases, the learning style needs of the student

(Gaden, 2012; Ng'ambi and Lombe 2011; Rosell-Aguilar 2007). Further examination of e-learning course structures is needed to address reaching across learning styles to best service the tactical and/or relational learner.

Now comes m-learning. Mobile learning is that which occurs via mobile technology, iPods, MP3 players, smart phones or iPads (Sahilu, Ahmed, and Haron,). Hand held, wireless mobility allows the user easy access to learning almost anywhere, at any time, and therefore popular connectivity tools (Kant 2012). From third grade math (Sahilu, Ahmed, and Haron, 2012) to political, organizational and business applications, m-learning is the next generation of delivering educational materials (Crittenden, Peterson and Albaum, eds. 2010; Gaden 2010; Kant 2012; Sahilu, Ahmed, and Haron, 2012).

Organization communication requires delivery of uniform information across all departments and locations. Inherent in multi-location, multi-national corporations, consistent delivery of intra-organizational training is difficult, and costly. Technology is flattening the world, the internet is connecting the farthest corners of divergent cultures, and the amount of available knowledge grows daily. The speed of change in technology and information demand rapid transfer of information. Delivery of training modules, policy and procedure manuals, and other corporate messages may find podcasts a uniform, economical mode to quickly deliver complex information.

Still another application of podcasts in is business-to-consumer selling. Today's consumer makes decisions on the go. Transportation prices are continually increasing with gasoline currently hovering around three dollar and fifty cent price with projection price as high as five dollars a gallon by 2014 (*Ausick and McIntyre, 2012*) add traffic congestion that is burdensome and irritating. These factors alone are sufficient to change purchasing patterns. With digital technology, stereoscopic 3D advertising, and wireless mobile devices, the consumer can view, if not try before-you-buy merchandise, thereby often replacing a trip to the retailer (Yim, Cicchirillo, & Drumwright, 2012). Additional research on the use of mobile media in direct sales is needed to more fully understand the potential of this technology in direct sales. It is the combination of factors, younger consumers accustomed to the digital age, increasing costs of going from point A to point B and back again, the speed of change in society, the market place, and the world, that informs this research. The days of driving around looking for a deal are longer financially practical, while looking for the perfect purchase online offers a practical, faster, and cheaper alternative.

That having been said, let's look at an industry that could make better use of digital technology to increase sales and profitability. The real estate industry has not been the most eager to take up new technology (Crittenden, et. al 2010; Yuan, Lee, Kim, and Kim 2013). Notwithstanding the reluctance of agents to engage the new technology, buyers are eager to 'shop online' before hopping in the car. The new technology is described as the process by which humans modify nature to meet their needs and wants (National Academy of Engineering 2009). The new home search once involved meeting at the real estate office to look at the listing book (yes, a book of tiny black and white photos and an abbreviated list of features), narrowing the search to a list of suitable properties, jumping in the car with the agent and driving to each. Changes in society, violent acts against realtors, increased transportation costs, and wider sales territories, that process began to change.

With improving technologies and the ability to e-mail listing information with color photos to prospective purchasers, the process of discovering suitable properties began to change. The agent and buyer(s) then met at a selected property, then caravan to the next properties. Color photos

online were a great improvement over the listing books, providing more vivid detail and saving time. Now, even newer technology offers the realtor more effective means of exposing a client to a property via guided tour with audio descriptives to enhance the photos, pointing out details that might otherwise be overlooked. A picture may be worth a thousand words; a picture with a well-designed message is worth much more. Therefore, this study poses the following questions:

RQ1: What elements constitute an effective podcast?

RQ2: How can the real estate profession prepare an effective podcast to inform a potential buyer of the most pertinent features of a property?

RQ3: How can the real estate professional deliver property podcasts to target audiences?

RQ4: Are there particular features of a property that appeal differently to different cultures?

Previous research focuses on the use of podcasting and mobile technology as an effective teaching platform (Palmer, & Devitt, 2007). Businesses and organizations are finding podcasts an efficient way to deliver training and organizational communication across departments and across a global marketplace at times and places best suited to the target audience (Crittenden, Peterson & Albaum, 2010). Businesses are beginning to study direct sales employing mobile technology (Ferrell, Gonzalez-Padron, & Ferrell, 2010). This study proposes that informational podcasts of real properties listed for sale are a useful sales tool for the real estate professional in the age of mobile technology.

## LITERATURE REVIEW

Web 2.0 has revolutionized societies, allowing the exchange of information to become almost instantaneous around the globe (Darwish & Lakhtaria, 2011; Nath, Singh, & Iyer, 2010). The internet is now more than an information source. Web 2.0 provides a participatory platform in which prior consumers of content (downloading content) to also be contributors of new content (upload content) (Darwish and Lakhtaria 2011). Web 2.0 is a set of innovations that provides a platform for the storage of applications and files not on the user's desktop, where software becomes a service, not a product. Web 2.0 also allows participation. Social sites, such as facebook, Wikipedia, YouTube, blogs, video sharing, and podcasts, permit formation of diverse communities without borders of affiliated ideas that might otherwise never have the opportunity to interact. Web 2.0 applications are diverse including education, academic libraries, geographic information systems, e-banking, commerce, and political change. For the purposes of this study, the focus will be limited to consumer education along the lines of product information and commerce, in the context of real estate professionals marketing to more technologically advanced, generally younger buyers.

To understand the impact of Web 2.0 (Darwish & Lakhtaria, 2011; Nath, Singh, & Iyer, 2010), it is necessary to understand the rate of increase of internet users, and the distribution of information like rhizomes connecting a living network (McNeill, 2011). Internet usage worldwide has grown 566.4% from 2000 to 2012. Over 34% of the world's population is online. (Internet User Stats 2012 Q2). Logically, consumers are online, therefore, further research on ways to employ new technology to sell a particular product or service may be the difference between success and failure. Similarly, the US mobile subscriber base neared 330 million by early 2013 (US Mobile Market Insights, Statistics and Forecasts, 2013) From third grade math to politics and international relations, podcasting has been proven as a developing platform for

delivering education (Kant, 2012; Kiger, Herro, and Prunty 2012; Ng'ambi and Lombe, 2011; Ralph, Head, and Lightfoot, 2010; Rosell-Aguilar 2007). Podcasting, or m-learning, differs from e-learning in that m-learning is mobile in that m-learning and podcasts are mobile platforms. The restrictions of location and time are eliminated. E-learning may require both time and space restrictions, in that the class may meet online at the same time (synchronous class meetings – everyone joins an instructor or facilitator led virtual classroom) and may require interaction with the instructor and classmates via “live,” albeit online discussions. This interaction limits user convenience, as meeting time is controlled by the instructor and/or the university. Another limitation of e-learning in a synchronous condition is the inability to view and review the discussion portion of the class. Other e-learning courses are asynchronous, with the learner engaging the material at times most convenient to the learner. The future of education, especially higher education, may rest on the shoulders of digital delivery of courses, materials, and learning modules (Sahilu, Ahmed, & Haron, 2012; Kiger, Herro, and Prunty 2012).

More complex and knowledgeable consumers compound the complexities of the marketplace driven by digital media and more sophisticated technologies (Crittenden, Peterson, and Albaum, 2010). Sales oriented businesses have embraced the use of certain technologies in sales and inventory management, yet there is limited research on the impact of technology on direct sales, with more interaction via technology with less traditional face-to-face sales interaction (Ferrell, Gonzalez-Padron, and Ferrell, 2010). There appears to be a gap in the body of knowledge of direct sales using different technology tools. Therefore there is a need for further research in consideration of the increasing use of mobile technology by a population that appears to prefer the freedom of mobility and instant information.

Regardless of the intention, e-learning, m-learning, organizational communication, or marketing tool, a listener preference framework (Tsagkias, Larson and de Rijke, 2010; Villano, 2008) has been constructed in which the following elements were shown to be critical to listener preference: (1) strong, topically focused content; (2) fluent, articulate, conversational speech; (3) podcast context; and (4) technical execution (Tsagkias, Larsen and de Rijke 2010). The first element, strong, topical content requires consistency of structure, contains factual information, cites resources where appropriate (in the case of the real estate professional, tax records, school districts, etc.), and is of a reasonable length. The second element, the podcaster, must exhibit a fluent, non-hesitant, and articulated speech pattern. Conversational style with inflection is also preferred. Third the podcast context must address the listener directly, and have a real world context. Lastly, the technical execution is important to the listener. Background music, if any, should match the content and be unobtrusive. The address and description should be accurate, with careful attention to editing effects and studio quality sound. The feed should be reliable, and have a logo and links to the multiple listing site. Note podcasts originating from the real estate professional's website may contain contact information for the REP, however a podcast embedded in the multiple listing site may not identify the real REP or his/her firm (National Association of Realtors, 2013b).

Another important feature in preparing marketing podcast for real estate properties is to include home features that appeal to different cultures. For example, Asian purchases generally prefer homes facing north, while Latin Americans have a preference for tile. There appears to be little, if any, existing research on the features preferred by prospective home buyers of diverse cultural backgrounds. This topic is ripe for research and would add to the body of knowledge on cultural preferences, and add insight to cross cultural marketing of real properties.

## DISCUSSION

Research by Tsagkias, et al. (2010) satisfied RQ1: regarding the elements necessary for an effective podcast as being (1) strong, topically focused content; (2) fluent, articulate, conversational speech; (3) podcast context; and (4) technical execution (Tsagkias, et al., 2010). Based on those findings, the real estate professional can prepare an effective podcast by observing the four elements reported by Tsagkias, et al. (2010). The real estate professional must first draft and incorporate scripts that are consistent with the property (a bungalow is not the Tal Mahal), including factual demographic property information, organized in a logical, sequential manner. The second and third elements are consistent with all podcasts, and presentations, in that articulated delivery in a conversational manner with inflection, addressed directly to the buyer in language understandable to all. The fourth element is the most difficult for the low-tech preferences of REPs (Yuan, Lee, Kim & Kim, 2013) relates to technical execution, including quality photos and/or videos, attention to sound quality and sound quantity (Tsagkias, et al., 2010). To assist the low-tech REP a google.com search for “user friendly podcast software” yields numerous software programs, applications, sites, and resources to record podcasts (google.com) which satisfies RQ2: How can the real estate profession prepare an effective podcast to inform a potential buyer of the most pertinent features of a property? The National Association of Realtors (NAR Handbook, 2013a) limits certain advertising through the multiple listing services, however a podcast may be linked to properties entered into the multiple listing services, with certain limitations. The National Association of Realtors (2008) reported Google, Zillow, Trulia, and Yahoo began working together to craft an exchange that would permit the multiple listing services to share property listing data with numerous search engines at once, therefore each REP’s properties offered for sale are, in essence, broadcast over the Internet.

Normal and ordinary REP business practices include a website acknowledging that sixty-five (65%) percent of realtor business generated from some form of purchaser/internet interactions (National Association of Realtors, 2013b). Ninety (90%) of home buyers use the internet to begin a home search; ninety-one (91%) of that ninety (90%) percent use a real estate professional to make the home purchase; and thirteen of the ninety (90%) percent use mobile applications (Molony, 2012). Prior research and current statistical data support and facilitate RQ3: How can the real estate professional deliver property podcasts to target audiences? A thorough search of prior literature failed to provide studies of culturally specific preferred property features, therefore, the data failed to provide support for RQ4: Are there particular features of a property that appeal differently to different cultures? This lack of research is an area of sales and marketing for real estate professionals calls for additional research to add to the body of knowledge on culturally specific residential preferences, if any.

## CONCLUDING COMMENTS

Prior research suggests that podcasts, as well as other digital means of delivery, have and will continue to impact the use of technology in delivering entertainment, education, and new methods of marketing various products. The number of internet home buyers that first engage in home searches using the internet demand real estate professionals seeking maximum economic performance employ more technology to reach buyers (Acharya, Kagan, and Zimmerman, 2010; Dermisi, 2010; Yuan, Lee, Kim, & Kim, 2013). This study suggests that podcast may provide a useful tool for real estate professionals and adds to the body of knowledge supporting podcast as a medium to deliver information to prospective purchasers of real property. The absence of podcasts used by real estate professionals at this writing suggests that real estate professionals have little or no knowledge and/or interest in preparing podcasts of the properties offered for sale, or that they find the technology inhibiting. The literature supports the use of podcasts to market

real property to the growing tech-savvy population of buyers that are comfortable with and enjoy using technology in pre-purchase searches. A series of focus groups using separate samples of real estate professionals and younger buyers is recommended to assess perception of podcasts as a marketing tool and as an early search tool. Additionally, a longitudinal test study of prepared podcasts linked to listed properties would be a source of data to compare the effectiveness of podcast enhanced listed properties against properties marketed without podcasts.

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### **BIOGRAPHY**

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## USE OF DEPRECIATION AS A TAX POLICY DEVICE TO CONTROL INFLATION

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### ABSTRACT

*The Internal Revenue Code contains many provisions providing credits, deductions, and other tax advantages intended to achieve various economic goals considered desirable by Congress (I.R.C. §§ 38, 46-48 (1986)). The depreciation allowance is one such deduction (The Treasury Department, The President's Tax Proposals to the Congress for Fairness, Growth and Simplicity, Section 4, 160-161 (1985). The government uses depreciation extensively as part of a tax incentive program based upon the theory that tax benefits stemming from depreciation reduce the cost of doing business, and thus stimulate capital formation (Frederic W. Hickman, 1975). Capital formation, in turn, induces economic growth for the following reasons: (1) Capital formation increases productive capacity by providing resources to those who can use them to expand business operations. (2), By enhancing productive capacity, capital formation increases productivity. (3), Increased productivity results in more goods, more services and more wages. (4) As increased productivity and more goods keep prices down and help suppress inflation (Ways and Means Committee, H. Rep. No. 350, 67<sup>th</sup> Congress, 1<sup>st</sup> Sess. 10-11 (1921).*

*Congress realized the importance of capital formation and extended significant tax benefits to business to stimulate economic growth (Ways and Means Committee, H. Rep. No. 350, 67<sup>th</sup> Congress, 1<sup>st</sup> Sess. 10-11 (1921). The purpose of this paper is to examine the appropriateness and effectiveness of depreciation as a means of stimulating capital formation and controlling inflation.*

### EVALUATION OF DEPRECIATION

The main purpose of depreciation deduction is to recover original cost of depreciable assets. To fulfill this purpose, actual depreciation must correspond to the economic depreciation. It was assumed that straight-line depreciation was a correct method to measure economic depreciation (I.R.C. § 168 (West 1992). In fact, until 1954 Congress relied upon the appropriateness and justification of the straight-line depreciation (The Treasury Department, supra note 3), as a proper method. The Congressional approach changed in 1954 with the adoption of accelerated depreciation methods for motivating economic growth (Fredric W. Hickman, supra note 4 at 286). To achieve this objective, Congress made several changes in depreciation system during the period between 1954 and 1985. Besides income measurements, other paramount reasons for these changes included controlling inflation and stimulating savings and investment. However, the following discussion reveals that the Congress failed to achieve these objectives.

#### Control of Inflation

In 1981, Congress believed that the existing depreciation methods did not correctly account for inflation. For many assets, depreciation methods in use understated real economic depreciation, resulting in over-taxation of the income derived from such assets. In addressing this problem Congress allowed an alternative depreciation method, the Accelerated Cost Recovery System

(ACRS) Allen Sinai, et al., 1983). The implementation of ACRS did not; however, provide an effective cure for inflation due to the following reasons:

#### Unstable Rate of Inflation

The rate of inflation is not always constant. At a low-inflation rate, accelerated depreciation provides an excessive depreciation allowance where as at a high inflation rate it provides an insufficient allowance for cost recovery. For example, high inflation in the 1970's eroded the value of the depreciation deduction. After 1981, inflation declined sharply creating negative effective tax rates on income from many assets (Charls W., 1987).

#### Nature of Depreciable Property

Depreciable assets in a given class may not have the same rate of economic depreciation. Many assets are more sensitive to improvement in technology and shifts in market structure than other assets. ACRS does not differentiate between assets with varying economic depreciation rates. Rather, it applies the same rate of depreciation for all assets in a particular class.

#### Depreciation Base

Accelerated depreciation such as ACRS and MACRS, base depreciation deduction on historical rather than current replacement cost. The present value of fixed depreciation deductions varies with changes in the rate of inflation. Accelerated depreciation methods fail to take this important factor into account (FRBNY Quarterly Review, Winter 1991, Volume 15 No. 3-4 at 4.).

#### Income Measurement

Income is the basis of all accounting and, therefore, accuracy in its measurement is a prerequisite for the success of economic and financial programs, including the control of inflation. Accelerated cost recovery methods by creating inaccuracy in the measurement of income, tend to defeat programs based on real income accounting.

#### Effects on Savings and Investments

It were expected that low effective tax rates due to faster recovery periods available under ACRS would provide incentives for investment in depreciable property. But accelerated depreciation failed to provide the expected savings and investment incentives. According to the Treasury Department, ACRS fails to account for inflation as a real replacement costs. Therefore, the benefits of ACRS, including incentives in depreciable property, decrease.

### **CONCLUSION**

The stated purpose of depreciation allowance in the Unites States is to facilitate accurate measurement of taxable income. In order to encourage investment in certain desired assets, the United States' Congress made extensive use of depreciation deduction. The existing empirical

studies do not conclusively prove the success of depreciation deduction in stimulating investments in desired channels.

The need for accuracy in income measurement is very important therefore, tax laws regulating the depreciation deduction need to insure that taxpayers receive a deduction equal to the real economic depreciation of depreciable assets. Until a method which correctly measures economic depreciation is devised, straight-line depreciation indexed for inflation should be treated as real depreciation for financial reporting purpose.

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# PRICING STRATEGY FOR THE URBAN TOURISM AREAS: A TOOL FOR REGIONAL TOURISM DEVELOPMENT AND SUSTAINABILITY

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## ABSTRACT

*This paper reports on the development of a pricing strategy for the urban tourism areas. The focus is on the Tshwane Tourism region in South Africa. South Africa's scenic beauty, sunny climate, cultural diversity and reputation for delivering value for money have made it one of the world's fastest growing events, leisure and business travel destinations. The country is highly diverse in terms of its climate, culture, tourist activities and infrastructure, catering for every tourism niche, from business, eco and cultural tourism through to adventure, sport and events. A literature review was conducted where the general tourism trends internationally, national and in the urban tourism business world was examined. The literature review also identified the strategies for successful pricing in the urban tourism areas like the Tshwane Tourism area. The paper presents a practical solution of how urban tourism areas can formulate pricing strategies.*

**JEL : M10**

**KEYWORDS:** Price, Cost, Customer, Discounts, Urban, Tourism

## INTRODUCTION

The Tshwane Municipality is the Capital of South Africa and has fine heritage sites, museums and art galleries. These include the Union Buildings and its spectacular gardens, as well as the Diamond Hill Battlefield, Voortrekker Monument and Freedom Park. Other must-sees include the Pretoria Botanical Gardens, the Zoo, and museums and galleries such as Melrose House, the Pioneer Museum, and Sammy Marks museum (Tshwane 2012). The City is particularly proud of its natural heritage and is world renowned for its many trees. Affectionately known as the Jacaranda City, Tshwane is home to the Pretoria National Zoological Gardens, the largest zoo in the country and the botanical gardens are spread over 76 hectares. Outdoor activities include bird watching, nature reserves, golf and adventure sport. The City not only caters for the casual tourist; business visitors have access to superb conference and hospitality facilities at hotels and conference centres.

This paper attempts to discuss the pricing strategy for the Urban Tourism areas like Tshwane Touris Area in South Africa.

### Urban Tourism Destination as a Product

The tourism product can be defined as, “an amalgam of many components, the attractions of the destination, the facilities at the destination and the accessibility of it” (Bennet, 2005). This shows that the tourism product is not just a hotel, airline or sunny beach; rather it is the combination of different components constituting a comprehensive product. In addition to this, tourists view the product experience as a price-based experience, and from this, it follows that the price and product image are the basic components of the tourist product. Tourists choose a destination based on the following considerations:

appeal of facilities and attractions;  
accessibility by any mode of transport they prefer;  
affordability(Price); and  
The image that corresponds with their preferences and needs (Bennet, et. al 2005).

The following discussion will be based on the theoretical background of pricing:

### Price

The effective way for a company to generate maximum profits is to get its pricing right. This will boost profit in the organisation and wrong price can minimise profits. Many Managers should realise that profits are generated at the transaction level, the point where the product meets the consumer, (see also Jain, 2000, Bennet, 2000). The consumer should be regarded as a central factor in the process of setting prices. In the tourism industry, setting prices could be a complicated task, because tourists buy the total product, including hotels and restaurants jointly, which are all part of a packaged price. It is important to know the entire product. Strydom, (1992) suggests, “[p]rice fixing meaning the determination of a price by a company must recognise facets such as the quality of tourist’s offerings, peak seasons and competitors”. According to Jain, (2000) there are typical pricing problems that include:

product line price imbalances. Different companies offer the same product at different prices, making it difficult for a business to decide upon a proper price;

competitors’ prices are higher or lower than those of the challenger. When the competitor’s prices are higher, customers may choose to go to the challenger where prices are lower;

middlemen exert excessive pressure to generate sales. This will cause a loss if the prices have to be lowered to sell the product in large numbers since the business may run at a loss;

sales decline. Declining sales make it difficult to determine a proper price for the product since the organisation has to allocate more money to strategies for improving sales percentages;

an effect by environmental realities due to frequent price changes. Changing prices frequently makes it difficult to determine a stable price that will suit customer expectations; and

the customer’s perceptions of price offering vis-à-vis distortion. If the price does not meet the customer’s willingness to pay, he/she will be discouraged from buying the product (Lambin, 2000).

### Pricing Strategy for New Products

According to Lambin, (2000), experts suggest various pricing strategies that the organisation may implement, and these are discussed as follows:

*Market skimming strategy:* Market skimming occurs when the organisation targets a small market with a relative high-priced product. High demand for a product in most markets results in market skimming. The high demand leaves customers insensitive to prices since there is no choice but to obtain the product from the service deliverer (Johnson, 2000; Kotler, et. al. 2003 and Lambin, 2000).

*Market penetration strategy:* According to Lumsdon, (2002), a penetration strategy is common when the market is sensitive to price and the competitor is challenged by lower prices. The market penetration strategy offers lower prices on products similar to those of the competitor in order to gain a share of the competitor's markets (Holden and Nagel, 2002).

### Price Strategies for Existing Products

The following discussion is based on price strategies for existing product.

*Maintenance of the price:* If a market segment, which is responsible for a significant portion of a region's product sales, is not affected by a change in the environment, existing prices can be maintained. Such a strategy is appropriate where a price strategy is difficult to determine because the reaction of customers and competitors to price change cannot be predicted (Kotler, et. al. 2003).

*Price increase:* Increase in prices can be conducted during periods of high inflation, high prices may be useful to keep profitability (Holden and Nagel, 2002).

*Price reduction:* There are three reasons for deciding to lower prices:  
it can occur as a strategy for defence against competitors;  
price lowering can take place based on aspects such as extended experience and technological progress and  
price lowering can be a reaction to client's needs. If low prices are a prerequisite for market growth, clients' needs must be seen as a pivotal point in the marketing strategy (Holden and Nagel, 2002).

The company should take into account the following considerations if a price reduction strategy is decided upon:

- price reduction may have a long-term impact, such as the perception of inferior products in comparison with competitors' products; and
- a superior and exclusively positioned image can be damaged in the process.

If price lowering destroys the enterprise's financial position, the strategy must be avoided even if it may be the best option under the circumstances (Kotler, et. al. 2003; Holden and Nagel, 2002).

*Price flexibility strategy:* According to Jain, (2000) a price flexibility strategy means that a product with similar features may be offered to different markets at different prices. For example, SAA offers different classes with various price fares on the same airline.

*Single price strategy:* A single price strategy occurs when a product is priced to accommodate a specific market segment. According to Strydom, (1992) a single strategy may be applied in the following circumstances:

students or aged markets can receive special prices;  
a group of people utilising a tourism product may be granted a price reduction; and  
regular tourism product users may receive price reductions.

*Product line price strategy:* A company price competitive products in its product line differently.

*Price leadership strategy:* According to Jain, (2000), price leadership is applied when one organisation emerges as the leader and indicates the price.

*Bundling pricing strategy:* Marketers who use this pricing strategy combine several of their products in a package and reduce their prices in this manner. A restaurant may introduce an all-inclusive price for a starter, dessert, meal, and juice, or include a salad bar. The product bundle adds an advantage for the customer who can benefit from a product that he/she might not have bought. No matter how minimal the benefits are regarding the products, the customer might be influenced to buy them. For example, an airline might include on-board services such as refreshments, in-flight movies or magazines in the ticket price.

*Premium pricing:* According to George, (2008), tour operators, restaurants and resorts make use of premium pricing to position themselves as upmarket offerings within a certain type of market. The reflection of value and quality complemented by promotional messages should however match customers' expectations. Physical evidence should reflect the price of the product complemented by current technology used for information systems and online bookings.

*Discriminatory pricing:* Tourism prices can be adjusted to suit different consumers, locations and times. This means that the same product may be priced at two or more different prices, although the costs are the same. For example, a hotel may charge more for a room during busy times and charge less for the same room when it is not busy. Marketers may also use yield management to apply price discrimination to the target market.

*Tactical pricing (based on volume and time of purchase):* Companies that buy large numbers of rooms in a hotel pay certain rates, either for a single period or throughout the year. For example, tourism associations organising a conference at a hotel may receive one free room per night for every 20 room-nights booked (George, 2008).

*Psychological pricing:* Here, the price is slightly adjusted to attract consumers. Psychological pricing avoids using prices such as R20, R50, or R100. Instead, prices are set slightly lower to reflect the perception of added value to customers. For example, to jump from R9, 95 to R10, 00 may look like a big increase, and instead, a marketer uses prices such as R19, 95 or R99. 00 (Morrison, 2002).

*Pricing methods:* Kotler, et. al. (2003) recommends the following pricing methods in the service industry:

*Cost-orientated price determination:* For profit purposes, the variable cost and average fixed cost of a product are calculated and a certain percentage is added to the cost (Kotler, et. al. 2003).

*Competitor-orientated price determination:* The organisation takes its pricing cue from the competition and may not necessarily implement equal price fixing. The organisation should have reserve finances that will enable it to survive price war periods. The organisation should not focus

on one pricing strategy, but must have alternative strategies in place to keep up with the competition.

*Value-based price determination:* The value of a product's price is determined by the customer's willingness to pay for the product. Price is based on what consumers think an offering is worth, and therefore marketers should first find out how much consumers are willing to pay for an offering with or without certain benefits. Marketers should also look at cost, competitor's prices and the customer's willingness to pay, and then decide on the price. The price should always be set around what the customer is willing to pay (George, 2008). When the organisation's pricing strategy is in place, the distribution strategy may follow.

### Problem Statement

Before 1994 South Africa was a white only Government system. The African majority were oppressed and not allowed legally to have living wages in their work. The white dominated the work environment areas and this influenced the pricing to discriminate against the Black South Africans not to be able to travel or engage in the tourism activities. After 1994 the first Black South African government under the leadership of Dr Nelson Mandela emerged and one of the challenges was to make sure the majority of the population being Black people have Jobs in the country. Part of the restoration was to give living waged Jobs to Black South Africans and majority of the Black South Africans. However the main challenge still remains the higher prices that pushed the majority of the population to be involved in VFA travelling more than participating in the tourism holidays.

### The Research Question

*Main research question:* The paper research question is: What are the best pricing approaches for the Urban Tourism areas like Tshwane Tourism Area ?

### Sub-Questions

What are the different methods of pricing that Urban Tourism area can implement as part of affordability?

What is the best price and impact on tourism area in the Tshwane area?

What are the best pricing strategies that can be followed by Tshwane Tourism area for the sustainability of Urban Tourism area?

### The Research Design And Methodology

This paper is based on the ethnographic methodology and literature review in nature.

*Population:* Population is the entire study subject. In this case, population refers to Tshwane Municipality area (Jennings, 2001).

*Sample size:* Sample size is the total numbers of selected individuals that will be privileged to partake in a study (Plowright, 2011). The sample size is however considered as a fraction of the entire population. The sample size will be selected with the aid of non-probability, selective sampling and purpose sampling (Jennings, 2001).

### Data Collection

For the data collection purposes the following sources were consulted:

- a. South African Tourism Website;
- b. South African Tourism Satellites;
- c. Tshwane Tourism Website;
- d. Literature on pricing and
- e. National Department of Tourism South Africa Domestic Tourism Growth.

### Research Inferences and Discussions

The following discussion makes conclusion and recommendations on the Urban areas like Tshwane Tourism area in terms of pricing strategies:

#### Pricing Strategy That Should Be Implemented in the Tshwane Tourism Area

The tourism products the Tshwane Tourism are not all owned by the Tshwane Municipality and this makes it difficult to formulate common prices for all tourism products.

The following recommendations may be used by Tshwane to determine prices for individual product owners:

Tshwane Tourism area should collect information about prices of accommodation, restaurants, entertainment and attractions in competing areas. The collected information should be updated from time to time and be made available to all stakeholders. It will assist stakeholders to identify the dangers of overpricing.

Tshwane should encourage stakeholders to offer special prices as part of a package to tour groups or delegates to conferences and

Tshwane should host workshops with stakeholders aimed at developing their skills to determine prices. Table 1 demonstrates the correct price determination for guesthouses in Tshwane area:

Table 1: Correct Pricing Determination

Stride 1	<b>Determine what tourists are prepared to pay per night for a double room, for example R 400. This information may be collected through research in the form of satisfaction questionnaires that clients are required to complete before departure.</b>
Stride 2	Determine the costs per double room per night at the guesthouse. For example, total monthly expenses of the guesthouse amount to R 15 000. Divide by 30 to determine the cost per day = R500. Divide by the number of double rooms (for example 3) to determine costs per double room per day = R 167.
Stride 3	Determine the average price at competing guesthouses, for example R 430 per night.
Stride 4	Make use of the concept of psychological pricing, in other words rather determine a price of R 390 than R 400 per night. It creates a favourable perception in the minds of customers.
Stride 5	Determine the appropriate price for the double room for the guesthouse. In this example a good price to ask may be R 389. It is marginally lower than what customers are prepared to pay as well as lower than prices at competing institutions. In this example, a profit margin of 132% will still be materialized. Be aware of the risk of charging too low prices since it may create a perception of inferior quality.

*Adapted from Van Lill (2006)*

Furthermore the Tshwane area should engage with all the stakeholders to determine the best pricing strategy for the Tshwane area for sustainable tourism growth. This can be done through the Tshwane Municipality organizing inter tourism stakeholders ones a in there months to assist the stakeholders in terms of correct pricing methods. The Tshwane Municipality can involve expertise from Universities in Tshwane area to assist with best pricing practices.

## CONCLUSION

The paper focused on the importance of pricing strategies in the Urban areas like Tshwane Tourism area. If the Urban areas can implement the recommendations tabled in this paper then they will be one step closer in achieving sustainable growth and development. Urban areas like the Tshwane Municipality should therefore adopt these strategies which will in turn assist in terms of developing a unique pricing system in Tshwane and create a harmonised tourism business environment for sustainable tourism growth.

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# THE DEVELOPMENT OF A PROMOTIONAL STRATEGY FOR THE URBAN TOURISM AREA

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## ABSTRACT

*This article reports on the development of a promotional strategy based on the case of Tshwane Tourism region in Gauteng Province, South Africa. A literature review was conducted where the general tourism trends internationally, national and in the Tshwane tourism area was examined. The literature review also identified the elements of a promotional strategy. Data was collected in the Tshwane Tourism area and their tourism activities were reported. The article presents a practical solution to Urban Tourism areas in terms of developing an effective promotion strategy to take economic advantage of the growing tourism industry. The conclusions recommend an innovative business ideology integrating marketing concepts that could contribute towards developing an effective promotion strategy for the urban tourism areas.*

**JEL: M10**

**KEYWORDS:** Promotion, Advertising, Sales Promotion, Publicity, Personal; selling, Merchandising

## INTRODUCTION

According to the South Africa Tourism annual report (2011) most of the foreign visitors' purpose of visit was recreation and leisure with spending on shopping. Recreational and Leisure Tourism is a major foreign and domestic visitor's motivation to travel factor in South Africa. The South African Cabinet in October 2010 approved South African New Growth Plan identifying tourism as one of the six core pillars of economic growth in South Africa. The South African Government Tourism Medium-Term Strategic Framework (2009) election manifesto identifies the following overall priorities in order of importance:

*creating decent work and sustainable livelihoods;  
education;  
health;  
rural development, food security and land reform and  
the fight against crime and corruption, and building cohesive and sustainable communities.*

For the South African Government to achieve this strategy so that to take advantage of the growing tourism globally a serious promotional strategy is needed. This paper reports on the perceptions of development of a promotional strategy for there in Tshwane Tourism area in South Africa.

## LITERATURE REVIEW

The literature view will discuss the theory based on promotion as follows:

Promotion

The promotional mix is a powerful tool used to make people aware of the existence of the product. The promotional mix consists of the following aspects: advertising, personal selling, sales promotion and publicity.

#### Determining Promotional Objectives and Strategy

Determining promotional objectives and tasks follows the target audience identification. Objectives should reflect strategies that the organisation needs to take and should take into account which responses are legitimate (Wells, et. al. 2000 and Briggs,2001). According to George, (2008), the organisation should consider the following factors influencing promotional strategy:

- markets and products. The organisation should promote relevant products to the relevant markets;
- the product life cycle. Promotional budgets can be more expensive in the growth stage than in the maturity stage of the product life cycle;
- buyer behaviour. The manner in which the customers purchase the products influences the promotion timing. During the low demand periods, more promotional strategies are needed to increase the level of product demand; and
- competitors' activities. The competitors should be monitored and evaluated from time to time in terms of promotional strategies that they apply. This will help the organisation to keep up with the competitor promotion strategies.

Middleton (2008) points out that promotion consists of methods that within limitation are interchangeable, with some standing at a better position to obtain the envisaged results. Promotional methods include the following:

- advertising;
- personal sales;
- sales promotion; and
- publicity.

#### Advertising

According to George:2008), “[a]dvertising is the means by which we make known what we have to sell or what we want to buy.” Advertising is popular in the tourism industry, with heavy cost requirements. Organisations should exercise care and efficiency when approaching and formulating advertising strategies. Marketing services have a contemporary purpose dictated by size, distance, cost, scale and convenience. Advertising seeks to address the need to communicate a message for private purposes or for commercial service and to inform and persuade. Advertising is diversified and must therefore be focused on a specific audience.

*Personal selling:* According to Kolb (2006), “[p]ersonal selling is an interpersonal process that involves the seller engaging in some kind of face-to-face or direct contact with prospective consumers in order to persuade them to make a purchase or a booking”. Kolb, (2006:285) indicates that when anyone in the office tells the tourists about what a city can offer that forms part of personal selling.

*Sales promotion:* According to George, (2008), sales promotion is an element of the marketing mix other than advertising, selling, or public relations. Yenship, (2006) indicates that sales

promotion is “a planned and implemented marketing activity that both enhances product or service appeal and changes customer behaviour positively in return for an additional benefit for purchase or participation”. Sales promotion can be anything to do with special offers. This happens when the business has conducted its market research and results in relevant messages being developed for a specific target market.

*Publicity:* According to Kolb, (2006) publicity: “[i]ncludes all the activities designed to build and maintain mutual understanding between a tourism and hospitality company and public.” An example is the Sun International financial sponsorship to the Nelson Mandela Foundation in South Africa.

*E-marketing:* According to Reedy, et. al. (2000), electronic marketing is all the online or electronic-based activities that facilitate the manufacturing of the products according to the customer needs and wants and the selling of the products to the customers. It is the network technology focused on market research, product development, strategies of effectively selling the product to the customers, ways in which the product can be distributed to the customer, keeping the customers’ records, researching the customer satisfaction survey and keeping records of customers’ feedback.

### Forms of E-Marketing

According to Smith and Kotler, (2003), forms of e-marketing include the following:

#### Internet

The World Wide Web (internet) is the software and hardware communication tool that is very critical for the success of the e-marketing inside the company. The internet connects universities, government laboratories, businesses, and individuals around the world. The company can use the internet to send information to customers and customers can immediately reply and purchase the product. The internet domains include the following (Rayport and Jaworski, 2004 and Smith and Chaffey, 2005):

business to consumer (B2C) e-commerce. The companies design websites and load product details that they need to sell directly to the consumer. For example, the pricerunner.com website;

business to business (B2B) e-commerce. This type of electronic selling is normally used by the suppliers to market their products to tourism organisations. Example, the EC21.com website;

customer to customer (C2C) e-commerce. The customers contact each other and exchange information about goods and products. For an example, the ebay.com website; and

customer to business (C2B) e-commerce. Customers can contact the companies with suggestions, questions or also give feedback on their experiences during their involvement with the company. For example, the priceline.com website (Smith and Chaffey, 2005).

### The Case of Tshwane Tourism Area Region.

The Tshwane Municipality is the Capital of South Africa and has fine heritage sites, museums and art galleries. These include the Union Buildings and its spectacular gardens, as well as the Diamond Hill Battlefield, Voortrekker Monument and Freedom Park.

### Problem Statement

The study is geared in finding out the promotional strategies that urban areas like Tshwane Tourism area can implement aimed at taking advantage of the growing tourism globally.

### Research Question

*Main research question:* What are the best strategies that regional tourism areas can apply when promoting their tourism products.

### Sub Research Questions

What are the best strategies that regional tourism areas can apply when advertising their tourism products.;

What are the best strategies that regional tourism areas can apply when using personal selling for their tourism products.;

What are the best strategies that regional tourism areas can apply when using sales promotion for their tourism products and

What are the best strategies that regional tourism areas can apply when using publicity for their tourism products.

## **RESEARCH METHODOLOGY**

### Research Data Collection

For the data collection purposes the following sources were consulted:

- a. South African Tourism Statistics Services
- b. South African Tourism Satellites
- c. South African Tourism Website
- d. Literature on promotion strategies
- e. National Department of Tourism South Africa
- F. Tshwane Tourism websites.

## **RECOMMENDATION AND CONCLUSION**

*The promotion of the Tshwane Tourism area's products:* There are four promotional tools on which the Tshwane Tourism area can base their promotion efforts, namely: advertising, sales promotion, personal selling and publicity.

### Advertising

billboards and brochures are two of the most effective tools that can be used by the Tshwane Tourism area. However, the researcher would like to make the following recommendations within the framework of budget implications:

upgrading of the Tshwane Tourism area website. The Tshwane Tourism area needs to upgrade the current website by updating the database and information about attractions and accommodation;

e-mail marketing (also SMS). The Tshwane Tourism area should also consider using e-mails to promote the Tshwane Tourism area's attractions to the prospective and existing target markets;

radio advertisements. Radio advertising is a relatively expensive method of advertising.

magazines and Newspapers. In terms of newspapers, the option of advertising to the local residents (for weekend-breakaways, the local leisure market and the pensioners' market) in the *Sunday Times*, *Sowetan*, *Pretoria news* should be considered;

brochures. Brochures should be loaded with information like shopping facilities, medical facilities and educational facilities; and

outdoor advertisements. Road side signage is one of the best ways to give directions. Signage should be allocated on the roads of the Tshwane Tourism area to indicate the direction of tourist products, for example next to the road leading to Johannesburg city from the airport.

*Personal selling*: The researcher recommends exhibitions like the annual Tourism Indaba in Durban as a good way of selling the Tshwane Tourism area's products. The researcher would like to add the following recommendations:

- personal visits to retirement villages in the Free State in order to penetrate the pensioners' market;
- personal visits to selected sport clubs/associations for the purpose of attracting sports events;
- personal visits to selected schools for the purpose of attracting sports events;
- personal visits to selected businesses for the purpose of attracting business events and to market the region in general to business communities in the selected target markets; and
- personal visits to selected conference organizers for the purpose of attracting conferences.

### Sales Promotion

Radio jingles and competitions will be good options to consider in order to sell the Tshwane Tourism area's products. However, the following tools are also recommended:

exhibitions at trade shows. The Tshwane Tourism area's officials should visit trade shows like the annual Tourism Indaba in Durban and

exhibitions at selected shopping centers (e.g Menlyn Shopping Center) to create a bigger tourism awareness amongst the local population.

### Publicity

The Tshwane Tourism area should use media releases, press statements and print and electronic media as the preferred method of publicity.

## **CONCLUSION**

The paper focused on the development of a promotional strategy for Urban areas like Tshwane Tourism in South Africa. The implementation of these strategies will ensure that the Urban Tourism areas are able to promote their products efficiently at the same keeping the customer. This study was based on literature review however the researcher further suggest a study that could compare the current Urban tourism studies with the new literature view and its performance.

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# LOCAL COMMUNITY TOURISM DESTINATION EXPERIENCE AS ELECTRONIC CONNECTIVITY

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## ABSTRACT

*The paper focus on the local residents experiences of a tourism destination by means of electronic connectivity. South Africa is one of the countries that attract tourists in major cities like Tshwane area. Tourists activities, such as need for social life, entertainment, curiosity about the destination attraction and family and friends visits, are likely to attract electronic activities and are regarded to be generating income for the tourism destination at the same time. Tourists visit to a destination lead to electronic connectivity experimentation in search for the activities in a destination with adequate facilities and resources for tourism. Questionnaires were distributed amongst the local residents in the Tshwane area. One hundred percent of the questionnaires were returned and data analyses were performed by means of the statistical analyses. The paper further made recommendations and conclusions based on the findings.*

**JEL: M10**

**KEYWORDS:** Local community, Tourism, Information Technology, Destination

## INTRODUCTION

Over the last few decades, the progress in information technology has revolutionized both the global economy and enterprises. The development and application of computerized systems has accelerated rapidly and enabled their use in a wider range of functions and activities. More importantly, the development of powerful personal computers (PCs) in the late 1980s provided individuals with reliable and affordable computing without having to invest in mainframes or mini-computers, which were expensive to acquire and maintain. In addition, the emergence of the Internet towards the end of the twentieth century enabled the networking of computers globally and the access to multimedia information and knowledge sources free of charge. (Buhalis, 2003:2). Information and communication technology (ICT) enhanced the ability of organizations to manage their resources, increase their productivity, communicate their policies and market their offerings, and develop partnerships with all their stakeholders, namely consumers, suppliers, public sector organizations, interest groups. ICT also enabled organizations to expand geographically and coordinate their activities regionally, nationally and globally (Buhalis, 2003:6). The paper views how ICT can be applied within the tourism industry, how the public or consumers can utilise technology more effectively; in addition allow organizations to gain an overall understanding of ICTs and how they can benefit from such technological innovations, which can be classified as: growth, protection, differentiation, management of change and developing trust.

Tourism firms, operate in a business environment where innovation is important for their survival. Globalization of tourism activities, the application of information technologies in tourism firms and the changes in tourism demand and attitudes, all create a dynamic sector where innovation has become of central importance. Innovation in tourism has been in the recent past secondary and capital scarce and for this reason was excluded from the scope of government interest and actions. However, there has been a shift, with European Union leading the way but

also national governments following suite, TOUREG Project: Global SWOT Analysis. Tourism is one of the biggest and fastest growing industries in the world. It has been growing rapidly, is 'exportable' by all countries, and uses large quantities of labour, and a range of skills. Tourism is a major foreign exchange earner for many low-income countries, and was a principal early contributor to foreign exchange

#### South Africa

South Africa's largely semi-arid land of 1.2 million square kilometres is unusually rich in flora and fauna and the country is well known for its large game, including elephant, lion, leopard, rhinoceros and buffalo. It has one of the highest levels of bio-diversity in the world due to the broad range of climate, geology, soil and landscape forms found in South Africa. Some ten per cent of South Africa's land area is conserved (WTTC, 2002:15). The public or consumers can be seen as the driving force in the tourism industry-they purchase the services provided by suppliers. The major suppliers in the tourism industry in South Africa are airlines, hotels, non-hotel tourist accommodation, catering, restaurant and food service, inbound tour operators, outbound tour operators, car rental, coach operators, trains, the conference industry and casinos. Each of these sectors is co-ordinate by organizations that act in the interest of that particular type of supplier as well as the consumer (Lubbe, 2000:30).

#### Gauteng Province

Gauteng, the Place of Gold, is the economic powerhouse of South Africa. It is characterized by a cosmopolitan, multicultural mix of people from all walks of life. The province's unique cultural and social legacy is evident from the many excellent museums, theatres, and cultural precincts and craft markets. The Vaal Dam, which supplies water to most of Gauteng's residents, covers some 300km<sup>2</sup> and is a popular venue for watersport. Numerous resorts line the shore.

The dam also attracts a great diversity of birds (South Africa Yearbook, 2005/06:596). Gauteng offers an amazing array of historical, cultural and natural attractions-Tshwane (Pretoria), Johannesburg, Ekurhuleni (the East Rand), the West Rand, Metsweding (Cullinan) and Sedibeng (Vaal). All these regions are linked by Gauteng's vast and efficient road and rail networks and well developed infrastructure. Africa's most modern international airport (O.R Tambo (Johannesburg) International) is situated in Ekurhuleni- firmly establishing the region as the gateway to the continent (Getting There Tourism Info Pages, 2007:380). The Gauteng ICT sector contributes more than 6% to regional gross domestic product (GDP) and the province is home to more than two-thirds of South Africa's IT companies.

*The City Of Tshwane:* Tshwane is home to Pretoria, the administrative capital and seat of power in South Africa. Pretoria, a stately jacaranda-lined city, is characterized by the dignity and charm of ages past, and the city prides its self with great heritage. Tshwane's eastern suburbs are dominated by the historic Union Buildings, a masterpiece of colonial architecture designed by Sir Herbert Baker and complete in 1913. Pretoria is renowned for its educational facilities, monuments, museums and old buildings (Getting There Tourism Info Pages, 2007:410).

*Problem Statement:* With advances in technology there is a lack for a well-structured ICT in the tourism industry to facilitate the access of tourist information by the users and many organizations lack the funds to constantly upgrade their systems and equipment. Accessing information through internet is an intelligent mean of getting the information, but many times, the information is highly fragmented, on the other hand time consuming and may mislead in the process. With more user-friendly systems and equipment, organizations can motivate employees more effectively and offer consumers quality services and products more efficiently.

## Objectives

*Primary Objectives* The primary objective for this study is to investigate technology used by Tshwane residents to experience tourism services.

*Secondary Objectives:* The secondary objectives for the purpose of this study are:

to identify residents' level of awareness of technology for tourism purposes;  
to determine the type of tourism-related technology used by residents;  
to identify the reasons why residents use tourism technology and,  
to identify the reasons why residents do not use tourism technology.

## **RESEARCH METHODOLOGY**

*Research design:* According to Welman and Kruger (2001), in the tourism context the quantitative approach starts off with theories, hypotheses or research questions about a particular tourism phenomenon. From here the researcher proceeds to gather data from the real-world setting and then analyses the data statistically with a view to support or reject the research question..

*Data collection:* The paper will use a survey research method. Surveys are methods of data collection in which information is gathered through oral or written questioning. The broad area of the survey research encompasses any measurement procedures that involve asking questions of respondents. A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents. Although they are often designed for statistical analysis of the responses, this is not always the case. Questionnaires have advantages over some other types of surveys in that they are cheap, do not require as much effort from the questioner as verbal or telephone surveys, and often have standardized answers that make it simple to compile data. Therefore questionnaires were used to gather data.

*Sampling and population:* Sampling is the means by which subjects or study units from the target population are included in the research project (Sarantakos 2005:152). Sampling is concerned with the selection of a subset of individuals from within a population to estimate characteristics of the whole population. The three main advantages of sampling are that the cost is lower, data collection is faster, and since the data set is smaller it is possible to ensure homogeneity and to improve the accuracy and quality of the data. The population can be defined as including all people or items with the characteristic one wish's to understand. Because there is very rarely enough time or money to gather information from everyone or everything in a population, the goal becomes finding a representative sample (or subset) of that population. The target population is the units in the population that the researcher wishes to target for the study (Neuman 2006:224). For the purpose of the study the total sample for this study is 125 people in the Tshwane area. There was an option to study either all of the study units or participants or only some of the study units or participants. For this study probability sampling method was used because only the residence of Tshwane area will be the participants of the study.

## Data Analysis

Statistical Package for the Social Sciences (SPSS) is a software package that enables researchers to conduct statistical analyses of quantitative data. It is one of the most frequently used software packages for quantitative data analysis. SPSS allows researchers to: Enter and store data, Analyse data using univariate, bivariate and multivariate statistics and inferential statistics, Generate data files, output files and graphics, Print tabular results, Prepare graphs and charts (Jennings 2010:297).

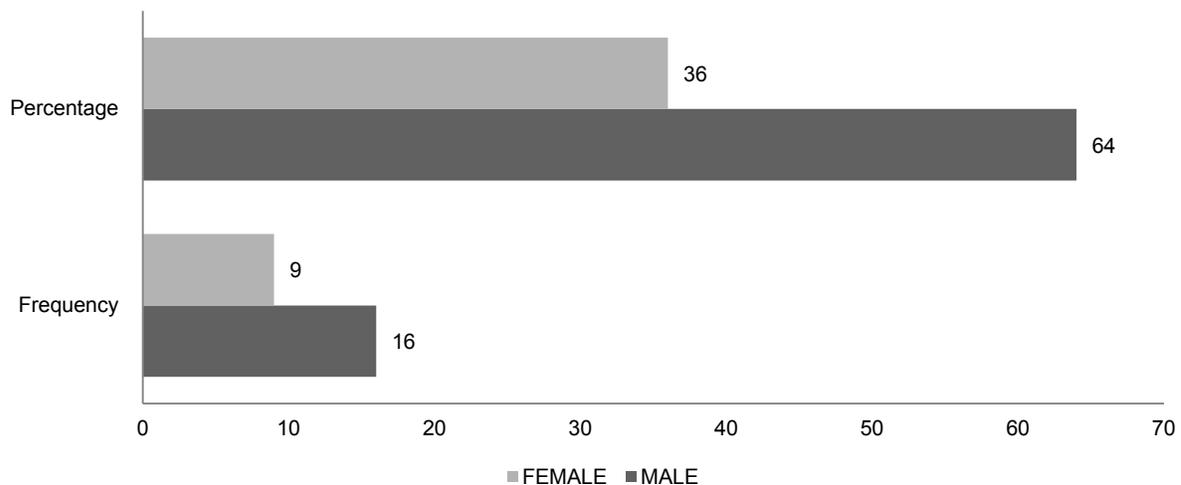
### Research Results and Discussions

The results will be discussed as follows:

#### Gender

Question wanted to know about the gender of the respondents. The gender of the respondents it is important for the study to be able to know the majority of the respondents. Figure 1 indicates the gender of the respondents.

Figure 1: Genders



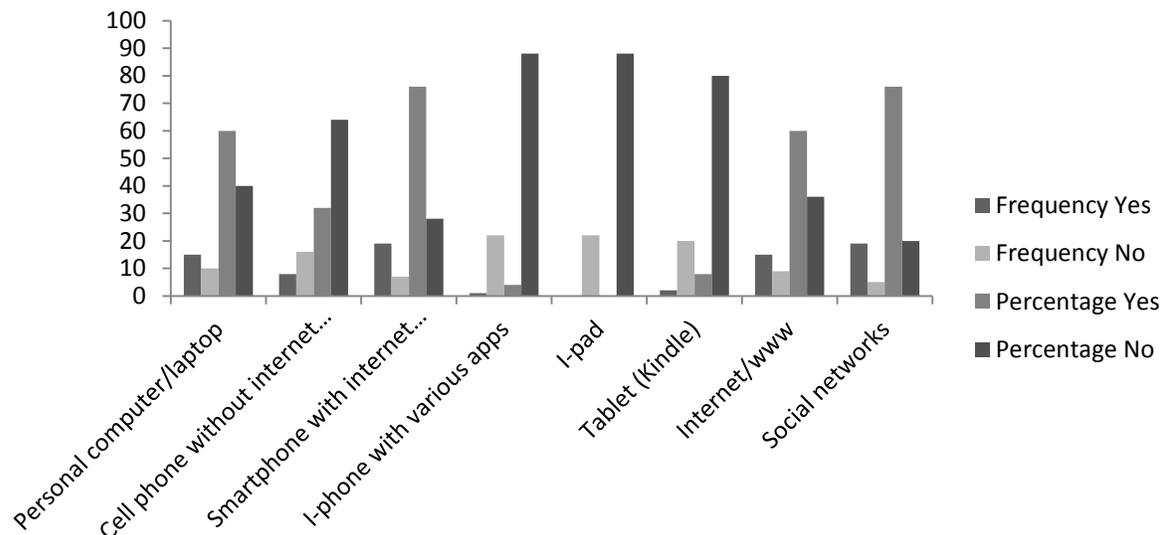
According to Figure 1, sixty-four percent of respondents were male and 36 percent were female. This indicates more male respondents participated in the survey. Majority of the people using technology in Tshwane area are male, the Tshwane Municipality as well as Tshwane Tourism should therefore target males in terms of promoting and marketing tourism products in Tshwane area. Electronic advertising should be utilized to reach more males in the area of Tshwane, to keep people updated as well as get new customers who are in possession of electronic devices that are capable of utilizing the internet/www to obtain tourism-related information.

#### Access to Electronic Hardware

The question asked whether the respondents have access to electronic hardware. Access to electronic hardware is important for the study to be able to understand the different types of electronic hardware accessible to the respondents. Figure 2 indicates access to electronic hardware of respondents.

Figure 2 indicates that 76 percent of the respondents have access to Smartphone with internet connection, while the other 76 percent have access to social networks, 60 percent have access to personal computer/laptop and the other 60 percent have access to the internet/www. Thirty-two percent of the respondents indicated that they have access to cell phone without internet connection, 8 percent have access to tablet (Kindle) and 4 percent have access to I-phone with various apps. Furthermore, indicates that 88 percent of the respondents do not have access to I-phone with various apps, the other 88 percent do not have access to I-pad, while 80% do not have access to Tablet (Kindle). According to the data collected, the majority of respondents have access to electronic hardware include smart phones with internet and social networks, the internet/www as well as personal computer/laptop and majority of respondents do not have access to I-phone with various apps, I-pad, Tablet (Kindle) as well as Cell phone without internet connection. The following are recommendations:

Figure 2: Accesses to Electronic Hardware



tshwane Municipality and Tshwane Tourism should utilise social networks in marketing tourism products to the residence of Tshwane;

due to the majority of residence using smart phones with internet accessibility, Tshwane Tourism and Tshwane Municipality should encourage the residence to use their smart phones to access tourism products through the internet at the same time websites should be compatible for smart phones to access;

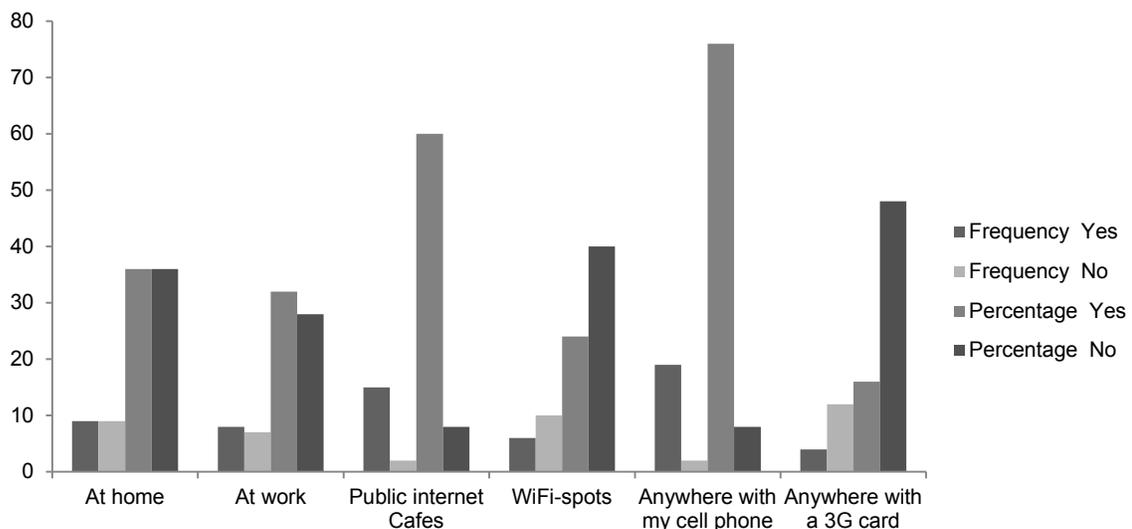
tshwane municipality should provide means of residence accessing electronic hardware especially those in townships by providing internet cafes that residence could access as well as encourage those with personal computer/laptops to utilise these electronic hardware to access information about tourism products within Tshwane and

because the majority of respondents do not have access to I-phone with various apps, I-pad, Tablet (Kindle) as well as Cell phone without internet connection, Tshwane municipality and Tshwane Tourism should encourage these people to utilise public internet cafes as well as internet at the workplace, schools and tertiary institutions to access tourism-related information.

### Access of the Internet/Www

Question asked where the respondents access the internet/www. Knowing where the internet/www is accessed is important for the study to be able to understand the frequent access point of the internet/www by the respondents. Figure 4 indicates the access points of the internet/www by the respondents.

Figure 3: Access of the Internet/WWW



According to Figure 3 seventy-six percent have access points of the internet/www from anywhere with their cell phones and 60 percent of the respondents have access points of the internet/www from public internet cafes. Thirty-six percent of the respondents indicated that they have access of the internet/www at home, 32 percent access the internet/www at work, and 24 percent of the respondents access the internet/www from WiFi-spots, while 16 percent access the internet/www anywhere with a 3G card. Table 3.8 also indicates that 48 percent of the respondents do not have access of the internet/www from anywhere with a 3G card, while 40 percent do not have access of the internet/www from WiFi-spots and 36 percent of the respondents do not have access of the internet/www at home.

residents can access the internet/www anywhere from their cell phones, the Tshwane Municipality and Tshwane Tourism should make accessibility of information easier by utilizing

internet gateways that will be compatible with variety of phones no matter the model of the phone to be able to supply information about the tourism products to the residents of Tshwane;

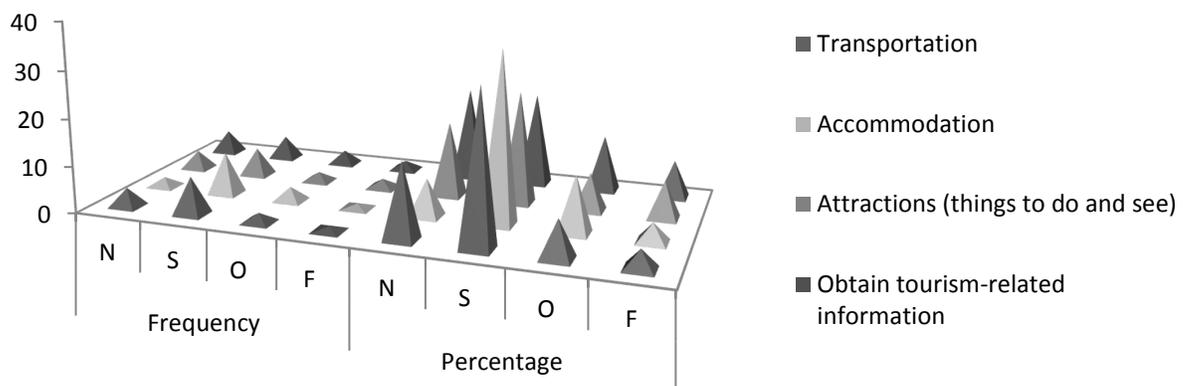
tshwane Municipality should engage with residents with regard to infrastructure developments in terms of having public internet cafes especially in townships where there is a limitation of internet/www accessibility and

the majority of those who are unable to access the internet from anywhere with a 3G and WiFi-spots should be encouraged to utilise the internet/www from their phones, public internet cafes, schools, workplaces and tertiary institutions.

### Use Technologies to Obtain Information

Question asked whether the respondents use technology to obtain information about tourism. Usage of technology to obtain information is important for the study to be able to understand whether the respondents use technology to obtain relevant information with regard to the tourism industry. Figure 4 indicates the usage of technology by the respondents to obtain relevant information:

Figure 4: Use Technologies to Obtain Information



\*N (never), S (seldom), O (often), F (frequently)

According to Figure 4, twenty percent have never used technology to obtain any tourism related information, 16 percent have never used technology to obtain information about transportation and another 16 percent have never used technology to obtain information regarding attractions (things to do and see), and eight percent of the respondents have never used technology to obtain information regarding accommodation.

tshwane Municipality and Tshwane Tourism should make accessibility of tourism-related information easier as well as inform people of the means of accessing the information;

the accommodation sector should also have strategies formulated that will encourage people to use technology to access any information with regard to accommodation and any other related services within the industry as well as tourism-related information and

tshwane Tourism should employ means of providing information regarding attractions (things to do and see) and tourism-related information by utilizing technology as their means of informing people.

## CONCLUSION

This paper is based on the eTourism and destination service experience as electronic connectivity for Tshwane Tourism area in terms of the residence utilizing technology that is at their disposal to access information about tourism services and information. The implementation of these recommendations will assist in formulating strategies by Tshwane Tourism and Tshwane municipality to inform people regarding the use of technology in tourism as well as to have knowledge of their target market with regard to the use of technology within the tourism industry. Furthermore the use of technology will enhance the Tourism area ability to attract more customers and this will result in long term relationships and profitability.

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# CRITICAL PRACTICES FOR INCREASING BUSINESS PROCESS ORIENTATION: CASE STUDY OF 20 COMPANIES

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## ABSTRACT

*Many companies strive to improve their business process orientation; yet it is unclear which practices are most beneficial or critical in each particular case. Often companies are not focusing on critical practices such as Strategic Alliance, Employee Training, and Information Systems. The research empirically evaluates the business process maturity levels of 20 companies by using Skrinjar and Trkman (2012) conceptual framework. On 20 cases, critical processes were identified and people who were part of the critical process were asked to take the cross-sectional survey. 349 usable responses were collected. Results are that out of 20 companies: 16 are on a process maturity level two (means defined process); 3 are on maturity level one (means their processes are ad-hoc) and only 1 company is on maturity level three (means processes are linked). Once the maturity level is known, targeted efforts to improve can be made to improve the critical practices to improve the business orientation for better growth prospects.*

**JEL:** L60

**KEYWORDS:** Business Process Orientation; Critical Practices; Case Studies

## INTRODUCTION

Critical practices, when implemented, have a significant positive effect on improvement in an organization's Business Process Orientation level. Business process management (BPM) can increase the business process orientation (BPO) in the organization. Thus, Critical Practices (CPs) (derived from critical success factors), which are actionable items for managers, may be used to increase BPO levels. In this research, we use the CSFs and CPs identified by Skrinjar and Trkman (2012) to measure the BPO level of the 20 cases. This will also give an idea and understanding of the business process orientation of Pakistani companies. Skrinjar and Trkman identified below five critical success factors and their critical practices:

1. Strategic Alignment
  2. Top management is actively involved in process improvement efforts
  3. Business process goals are derived from and linked to the organization's strategy
  4. Business process improvement is frequently on the agenda of top management meetings
  5. Process changes are communicated to all employees
  6. Employees from different departments feel that the goals of their departments are aligned
2. Performance Measurement
    1. Performance results are used in setting improvement targets
    2. Performance indicators are communicated within the organization on a regular basis
  3. Organizational Structure
    1. The organizational structure supports processes across departments
    2. Process owners are appointed
  4. Information System

1. Information system development is based on business processes (not business functions)
2. Information systems provide relevant management information on the performance of business processes
3. Our organization uses a CRM system
4. A business process management system/suite is used
5. E-procurement, EDI, or another type of SCM is implemented to connect with suppliers
5. Employee Empowerment and Training
  1. People are trained to operate new or changed processes prior to their implementation
  2. Employees view the business as a series of linked processes
  3. Process terms such as input, output, process, and process owners are used in conversations
  4. Policy and strategy are communicated and cascaded throughout the organization

Skrinjar and Trkman (2012) show how the survey scores of these critical practices can be used to measure the four business process maturity levels of the companies according to McCormack and Johnson's Maturity Model (Also see McCormack's work in McCormack et al., 2009). This mapping is explained in the Table 1.

Table 1: Author's Adaptation of Skrinjar and Trkman's (2012) Mapping of BPO Scores to Measure the McCormack and Johnson's Business Process Maturity Level (2001) of Organizations

BPO Scores	Business Process Maturity Level	Name of Maturity Model Level (McCormack and Johnson, 2001)	Description of Model Level
1 to 4	One	Ad-hoc	Temporarily defined processes and traditional organization structure. Processes are defined in flow charts and a formal process to change them has to be followed.
4 to 5.5	Two	Defined	Breakthrough level where processes are linked from end to end
5.5 to 6.5	Three	Linked	Processes are integrated through process and performance management systems and organization structure is majorly based on processes.
6.5 and above	Four	Integrated	

*For example, if a company has a BPO score of 1.53, its business process maturity level is One i.e. Ad-hoc Level which means the company's processes are temporarily defined and it follows a traditional organization structure.*

Once the maturity level is known, targeted efforts to improve can be made. The structure of paper is as follows: section two shows data and methodology used, section three shows analysis and results, followed by the conclusion section.

## DATA AND METHODOLOGY

The objective of this research was to measure the business process maturity level of different companies via the 18 identified critical practices (derived from Critical Success Factors). 20 companies were chosen randomly. These companies are based in Pakistan. Details of company size and industry type are mentioned in columns 4 and 5 of Table 2, respectively. Critical processes of each of these companies were identified that are shown in column 3 of Table 2. Total 400 employees i.e. 25 per company, who were specifically involved in the identified critical process from these 20 companies, were requested to take the survey. 349 responses (refer to column 6 of Table 2 for response details) i.e. 87.25% response rate were received. Two mediums were used for survey data collection: GoogleDocs online form that was emailed. 250 usable responses were received from this channel and 99 hardcopies of survey. Hardcopies were filled in person. Hardcopies were later incorporated to the spreadsheet. This survey was carried out in April-May 2013.

Skrinjar and Trkman's (2012) survey (mentioned in their appendix) containing questions for 53 critical and non-critical practices was floated. However, following their research, only 18 CPs part of the five CSFs mentioned in the introduction section were used to carry out the below analysis.

S no.	Company	Critical Process	Size of company	Industry	No of Survey Samples	BPO CP Averages	BPO Level
1	Construction Technology Training Institute (CTTI)	Admission Process (Operations)	Small	Education	23	3.64	1
2	EFU Life Insurance	Life Insurance Claim	Large	Financial and Insurance Activities	16	4.86	2
3	CSD (Canteen Stores Department)	Inventory Management	Large	Wholesale and Retail Trade	16	5.12	2
4	Pakistan Telecommunication Company Limited	Fiber Cable Cuts	Large	Information and Communication	16	4.99	2
5	Fauji Cereals	Distribution Process	Medium	Manufacturing	16	4.93	2
6	Daewoo Pakistan Express Bus Service	Daewoo Logistics	Large	Transportation and Storage	18	3.97	1
7	Telenor Pakistan	Logistics	Large	Information and Communication	27	4.88	2
8	Muhammadi Flour mills	Supply and Demand	Small	Manufacturing	15	4.86	2
9	Coca Cola, Pakistan	Logistics/supply chain	Large	Manufacturing	16	4.4	2
10	NUST Business School	Security Process	Large	Education	15	4.54	2
11	Olive Garden Restaurant	Catering	Small	Food Service Activities	19	4.13	2
12	Islamabad Police	Logistics	Large	Public Administration and Defense, Compulsory Social Security	17	4.13	2
13	Shell Oil Company	Supply Operations	Large	Transportation and Storage	19	5.69	3
14	State Bank Of Pakistan	Operations	Large	Financial and Insurance Activities	13	5.17	2
15	Pearl Continental Hotel	Front Office Process for New Guests	Large	Accommodation	20	4.69	2
16	AIESEC International Student Body	Recruitment	Large	Student Organization	15	4.95	2
17	Master Pipe Fittings	Production process: molding and mixing	Medium	Manufacturing	12	3.87	1
18	Werrick pharmaceutical	Manufacturing	Medium	Manufacturing	23	4.5	2
19	AH Automation	Manufacturing	Medium	Manufacturing	21	4.81	2
20	Qarshi Industries	Supply Operations	Medium	Manufacturing	12	5.01	2

## ANALYSIS AND RESULTS

Once the survey was collected, 18 CPs questions were filtered out and the responses for each company against these were averaged using MS Excel. These averages were used to calculate the average BPO CP score for each case, which is mentioned in the column 7 of Table 2. Mapping criteria, shown in Table 1 was employed at this stage to find the Business Process Maturity Level of these cases. Mapping result of each case is mentioned in the column 8 of Table 2. These results are summarized below in Table 3. 16 out of 20 i.e. 80% of the companies are on level two i.e. they have defined processes and have a formal procedure to bring in change in the processes

Table 3: Results of This Research Showing 16 Out Of 20 Companies Are On Level Two of Business Process Maturity

Business Process Maturity Level	Name of Maturity Model Level (McCormack and Johnson, 2001)	Out of 20: Number of Companies on Maturity Level	Percentage of Companies in this Level
One	Ad-hoc	3	15
Two	Defined	16	80
Three	Linked	1	5

Four	Integrated	0	0
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## CONCLUDING COMMENTS

This research undertook the task of empirically measuring McCormack and Johnson's (2001) Business Process Maturity Levels of 20 companies. This measurement was based on Skrinjar and Trkman's 2012 conceptual framework. This framework derives the five critical success factors (CSFs) from theory (Trkman, 2010), and based on these five CSFs, identify 18 critical practices. The CPs were surveyed on 349 respondents of the 20 companies and were contained to those who were involved in the critical processes. The survey analysis maps the BPO CP levels from the survey to the maturity levels. 80% companies were found to be on level two of process maturity. This research had many constraints. It was focused on respondents involved in critical processes. A survey without this focus might reveal that companies are focusing on non-critical processes. Case studies with semi-structured interviews from these organizations should be conducted to understand the deeper issues to identify other critical practices and advance the process maturity levels of these companies. A longitudinal case study might also be helpful in this regard. Another constraint is that although, 53 critical and non-critical practices were measured during the survey, but only 18 critical were used in mapping. It will be interesting to factor-in the remaining practices. It seemed during the analysis of survey results that to reach the break-through Level 3: Linked processes, companies are lacking the basic infrastructure and might be focusing on inefficient allocation of resources to non-critical practices. As a next step, future work of this research should be on identifying CPs for each of these companies where they need to focus on improving their process maturity level to improve their business growth

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**BIOGRAPHY**

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# US POST COLD WAR GRAND STRATEGY AND MULTILATERAL NATIONAL INTEGRATION IN EUROPE AND EAST ASIA

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## ABSTRACT

*East Asian liberal intergovernmental integration is unlikely to occur without formal engagement by the United States. An Asian Union is therefore improbable. The European Union model is not transferrable to East Asia in that the former is a multilateral organization that has emerged that can claim authoritatively to speak for Europe. The Cold War context for European liberal intergovernmental integration included US policies constituting the strategy of containment towards the USSR. US incentives to coordinate west European policies towards the Warsaw Pact targeted mid-range power allies. These European nation states were roughly equal in their national power capabilities. The USSR did not have the hard or soft power capabilities to claim irrefutable membership in the same European club. Even traditional Russian allies such as Bulgaria have sought affirmation of their European identity through accession to the EU. A similar US-led containment strategy towards China is unlikely. Creation of a multistate Asian regional organization that will persuasively claim to represent Asia in opposition to China is therefore unfeasible. Potential power disparities between East Asia states will be so significant that China cannot be a pole of opposition against which to construct Asia. Pan-regional integration should rather be Pacific-oriented rather than Asia-focused.*

**JEL:** F5

**KEYWORDS:** European Union, Trans Pacific Partnership, Japan, China, Russia, Bulgaria, East Asia, containment, liberal intergovernmentalism, nationalism

## INTRODUCTION

In Fall 2009, the international media reported Asian agreements to pursue general initiatives for an East Asian-region integration movement with the European Union as its model ("Asian EU" 2009). These reports highlighted the new Japanese prime minister, Yukio Hatoyama, as the resuscitator of this proposal (Mulgan 2009). Disagreements emerged over the envisioned role of the US in Asian integration while China, Japan and South Korea were portrayed to be core prospective members (Brown et al 2009). While debating which state first made such a proposal, various media commentaries viewed the ASEAN states as candidate members of such an envisioned community (e.g. Xu 2009). The Hatoyama government fell in June 2010, and Japan then saw a series of short-lived governments that did not follow up on the Asian Union proposal. Meanwhile, in November 2009, the US President Obama announced his administration's support for the Trans Pacific Partnership (Luce et al 2009). The US joined the TPP negotiations in March 2008, transforming what had been initially a trade pact between Brunei, New Zealand, Chile and Singapore (Trans Pacific Partnership 2013). It is now a prospective agreement that also includes Australia, Canada, Malaysia, Mexico, Peru, Vietnam and Japan. Japan's formal accession to the negotiations in July 2013 under Shinzo Abe surprised some observers (Pilling et al 2013).

The formally-named Trans-Pacific Strategic Economic Partnership Agreement raises the question as to the nature and direction of East Asian integration. An Asian parallel to the European Union is unlikely. US power and commitment have been critical independent variables shaping the EU's integration. They will also be critical in shaping East Asian integration, but more so. China's comparatively much greater hard and soft power capabilities relative to its regional neighbors mean that the US must be a formal leader of Asian integration strategies. China's hard and soft power capabilities mean that China cannot be excluded from Asian integration, like the USSR was excluded from European integration during the Cold War. On the other hand, these same capabilities require US soft and hard power engagement of China to allow for the potential of Pacific regional integration on the basis of liberal intergovernmental initiatives (Buse 2012, 53). US-led strategic containment of the USSR was a critical factor shaping the environment of European integration. US strategic engagement of China will be necessary if not sufficient for Asian integration, meaning that Asian regional integration must be part of a broader Pacific integration orientation.

### European Nations and European Integration

One popular introductory textbook on the European Union labels liberal intergovernmentalism as the predominant theoretical framework for conceptualizing European integration (Dinan 2012, 24). An explanation for the mutual cooperation of nation states within a liberal framework requires an appropriate theory of nationalism to analyze it. The group political psychological approach utilized here, developed by Cottam and Cottam (2001), provides a useful conceptualization of nationalism. It explains this behavior in terms of European Union membership having its foundation in soft power appeal to nationalist public opinion among the peoples of Europe. This soft power appeal derives from European integration appearing to validate the predominant European nations west of Russia as not being under particular national domination. This perceptual assumption prevails significantly due to success in creating persuasive EU institutional safeguards.

These institutional safeguards prevent the coalescence of public perceptions of EU systematic biases favoring the influence of particular nation states over EU policy making processes. It generates this powerful perception of status equality despite obvious cultural, economic and political differences. Cottam and Cottam describe this psychological strategy for integration as promoting "social creativity" in national collective intergroup perception of self and other (2001, 266). Today, Europe is predominantly equated with the European Union (e.g. Jacobs, 2012). The EU has so far avoided mass public perceptual equation of national cultural differences with solid and immutable status hierarchy among its member states. The institutions of European Union policy making help provide these collective perceptual psychological adaptation strategies. They do so despite the wide range in power capabilities among the 28 EU member states (Nugent 2010, 289-306). "[T]here are often no clear lines of authority or hierarchy between the different levels" of EU policy making (Nugent 2010, 291). These institutions are necessary for the economic and political liberalism-based approaches for European cooperation and integration. In sum, liberal intergovernmentalism in Europe has its basis in the mainstream predominant view among the respective national publics that they differ in their relative power capabilities. Yet they are not under national domination by one or an alliance of other nations. Maintenance of this prevailing perception is necessary for European integration to proceed.

The Cold War conflict from the late 1940s until the early 1990s supported this social creativity collective perceptual psychological approach. The Cold War conflict supported social creativity insofar as west European nations more or less shared a common adversary, i.e. the enemy of my

enemy is my friend. The decline and end of the Cold War generated additional challenges for liberal intergovernmentalism. EU Economic and Monetary Union chose to build more heavily on economic and governmental bureaucratic vested interests to continue the integration approach. The shared perceived challenge from Russia continues (“How do you solve a problem like Russia?” 2013).

### Challenges to East Asian Liberal Intergovernmentalism

Liberal intergovernmentalism for social creativity strategies in Asia faces particular challenges that have been less prominent in Europe. The power potential base differential between China and the rest of Asia is the most important factor (Cottam et al 1978). China’s globally superlative power potential base is evident for all to see. European nations are roughly comparable in power capability. This awareness stems from the number of costly failures to establish hegemony over Europe by a European state since the Treaty of Westphalia in 1648. Moreover, unlike the predominance of comparatively homogenous nation states in Europe, a number of states in Asia are not nation states. Their populations consist of multiethnic communities within more or less arbitrarily created state territorial boundaries drawn by former European imperial powers. China, Japan and Russia are exceptions, not the rule. The existence of nations as state political communities represented by their respective governmental apparatuses underpins European liberal intergovernmentalism. In Asia, China has 20% of the world’s population, 94% of whom belong to the Han ethnic group (Levinson 1998, viii). They tend to view themselves as members of a political community thousands of years old despite great cultural diversity within the Han core group (Cottam and Cottam 2001, 83-84). Other such national groups are comparatively few: Japan, Vietnam, Korea (still bifurcated) and Russia. India and Pakistan are also in the multiethnic category.

The assumption of relative equal power capabilities is harder to maintain cognitively and perceptually in Asia. Comparisons are made between the rise of China and the rise of Imperial Germany beginning in the late 19<sup>th</sup> century in terms of significance for international peace and stability (Liao 2010; Evans-Pritchard 2013). Germany was surrounded by other acknowledged Great Powers on its borders. China, on the other hand, is in effect a civilization pretending to be a state according to the oft-repeated observation of Lucian W. Pye (Zhang 2011, Pye 1990). Its humiliation by Japan and the European powers is explained as occurring during a comparatively brief period within the millennia of history during which China was paramount. This hostility to imperialism became a defining feature of modern Chinese nation-state identity (Cottam and Cottam 2001, 84).

In sum, scholars debate over whether or not US hegemony has been necessary to create a permissive environment for postwar European integration (Schmidt 2008, 272-73). For East Asia, for liberal intergovernmentalism to succeed, it is less likely to be effective if led by the East Asian actors themselves. This political context of much greater state power inequality makes US regional leadership a necessary, but not sufficient condition, for it to occur. US leadership can override the security dilemma in Asia and provide the national security public goods that will allow the serious possibility for liberal intergovernmentalism (Dong 2013). Germany’s defeat in two world wars established that Germany did not have the power capability to integrate Europe within an imperial status hierarchy with Germany at the pinnacle. That the Chinese authorities of a developed nation state would be convinced that they are not the naturally preeminent power in

Asia, solely by the power capabilities of only its own neighbors, is unlikely. The comparatively overwhelming power capability base of China in East Asia makes prospective Cold War-type containment of a belligerent Chinese government especially problematic. The Chinese authorities have achieved relatively intensive integration into the global capitalist economy in comparison with the USSR. These facts make the US adoption of an accommodation strategy more likely (e.g. Currie 2009).

## CONCLUSION

China began to move towards a de facto alliance with the US at the midway point of the Cold War. Unlike NATO, the hub-and-spoke security system that the US created with its clients and allies in Asia avoided the creation of an anti-Chinese club of states (Cha 2010). It avoided the US allies' horizontal integration around this *raison d'être*. The consequences today include greater potential for integration of China into an evolving Pacific regional security and economic system in partnership with the US. The capacity to avoid promoting national social creativity and social mobility in Asia on the basis of Chinese-US rivalry is therefore greater than during the Cold War in regard to the USSR.

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# “THE YOUNG AND THE RESTLESS”: GRAPPLING WITH THE YOUNG CHINESE CONSUMER’S MINDSET

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## ABSTRACT

*China will boast a population of almost 500-million young people under age 30 by 2015. The sheer size of the Chinese youth market and young people’s discretionary income make this market one of the most sought-after in the world. The status and continuing development of Chinese youth culture is especially interesting to marketers and scholars worldwide. Recent media reports depict Chinese youth as “restless,” and as experiencing an internal psychological conflict between “private selves” and “public selves,” between “private identity” and “public identity” (Griffiths, 2012). Few studies have provided analysis of the causes of this seemingly “bi-polar” psychological state. The paper explores this situation by delving into the “core” values of Chinese tradition in the context of China’s contemporary socioeconomic realities—focusing on the paradoxical, conflicting, and even opposing cultural values that are rooted in China’s past and present. Among the dilemmas are “standing out and fitting in,” “individual freedom and society’s demands,” and “personal aspirations and limited opportunities.” This paper will demonstrate that the “restlessness” of contemporary Chinese youth is the logical outcome of feeling trapped and directionless at the crossroads of the culture’s unshakable Confucian values and group orientation, and the ever-shifting trends in individual consumerism that China is embracing.*

**JEL:** M31, M37, M38

**KEYWORDS:** China, Advertising, Global Marketing, Youth

## INTRODUCTION: THE RISE OF CHINESE YOUTH CULTURE

The past three decades in China have witnessed the most rapid changes in society and the most drastic adjustments in its social structure. Consumption has become one driving force behind the country’s economic development. Having been banned for almost three decades, Chinese commercial advertising was resumed in the wake of the country’s economic reforms that started in late 1978. Since the ideological debates in the early 1980s on the “shoulds” and “should nots” in the so-called Chinese “socialist consumer advertising” advocated by the Chinese government, the advertising industry in China has grown to become the world’s second largest after the United States, in terms of ad spending. With the changes in societal values, Chinese masses, particularly young people, follow their own paths to pursue their dreams of happiness and success in different fields, from business to sports, from fashion design to entertainment, investing new meanings in their sense of self. Collectively, they have ushered in a multi-faceted new Chinese identity. In taking on this new identity, Chinese youth perhaps are one of the most fascinating groups, in terms of their cultural characteristics and their social, economic, and political impact on Chinese society, and they have attracted studies by scholars and business professionals both in China and abroad (Cingcade, 2008, Sun and Wang, 2010, Xi and Xia, 2006, and Jing Wang, 2005). The significance of the impact of Chinese youth culture on society is multi-dimensional, but most prominently seen in the following three areas: First is the vibrant Chinese youth market.

Currently, in the explosive growth of consumption, 400 million Chinese teenagers and young adults who were born in the 1980s and 1990s have stood out as targeted groups for global marketers. Approximately a third of these 400 million young people are urban and are from households with relatively high income. It is reported that China will boast a population of almost 500 million people under 30 by 2015 (Bergstrom, 2012). The sheer size of the Chinese youth market and young people's discretionary income make this market one of the most sought-after in the world.

Second is the complexity of the Chinese youth culture. Penetrating the gigantic Chinese youth market requires insights and knowledge of the youth culture. The first generations of Chinese young people have experienced the country's unprecedented economic boom, open markets, and capitalism (with "Chinese characteristics"). Similar to young people in Japan, South Korea, and the United States, these Chinese young people grew up drinking Coca Cola, listening to Rock and Roll, watching Hollywood movies, and wearing blue jeans. In other words, to many people, contemporary Chinese youth are "westernized." But close studies reveal that there is no easy equation between the Chinese youth culture and that in other Westernized countries. Chinese young people may look and act like their foreign brothers and sisters and share certain cultural values, but as shall be shown later in the paper, Chinese youth, at heart, are still *Chinese*. Situated at the crossroads between Western modernity and Chinese traditions, Chinese youth culture provides insights for understanding trends and dynamics in the global youth culture. This young Chinese market demographic is exerting, and will continue to exert in the foreseeable future, a powerful influence in shaping global business and marketing strategies.

The third area of impact is the significance of Chinese youth culture in shaping Chinese society, now and in the future. In 2010, nearly 30 percent of the 550 million industrial workers in China are under 30 (Malcolm Moore, 2011). The sheer size of the Chinese youth workforce is affecting Chinese society as a whole and shaping the direction of Chinese economic development. Currently, China is reported to have about 150 million migrant workers. They build China's glittering skylines, clean restaurants and clubs frequented by the newly rich, and sew fashions sold around the world. Among them, an estimated 100 million-plus were born after 1980 (Cingcade, 2008).

Chinese youth's contributions to the country's economy, however, are far beyond the construction and the service sectors. It is well known that the Chinese youth population is savvy in technology. Internet users in China increased from 33.7 million to 513 million at the beginning of 2012. Among them, 256 million were young people (Bergstrom, 2012). Being the main force of employment in science and technology, contemporary Chinese youth have become the backbone of scientific and technological industry, high-tech enterprises, information network and e-commerce, and other new economic domains, playing a more and more important role in China's economic development and in its social advancement. The present study is intended to facilitate further understanding of Chinese youth culture by highlighting the characteristics of Chinese youth culture observed in existing scholarship. Following that, the paper will closely examine the mindset of contemporary Chinese youth in the complex interplay between the persisting values of Chinese tradition and the realities of a society going through rapid changes.

### A Shift In Chinese Cultural Values

Let us first take a brief overview of the characteristics of contemporary Chinese youth as highlighted by the work of contemporary scholars and business professionals. In 1979, as a step toward population control, the Chinese government enforced a policy limiting families to one

child per family. This policy is known as the “one-child policy,” and this only child was later nicknamed “little emperor,” or *xiao haungdi* in Chinese. The little emperors grew up to become the first generation of consumers in China’s market economy following the country’s economic reforms. The book *Advertising to Children in China* begins with a vivid description of the shopping behavior of contemporary Chinese “little emperors” depicted in a drawing by a nine-year-old when he was asked to draw what comes to his mind when he thinks about going shopping:

*The youngster’s drawing shows him stepping boldly up to the toy counter of a department store with a five-yuan note in his hand. It’s his money, and he is attracted to the sign above the salesperson that reads, “Ship models on sale.” The sign to his right beckons him with “Welcome. Visit Our Store.” What this youngster is saying in his drawing is that he has money and he wants to spend it, in this case, on play items (Chan and McNeal, 2004).*

What the authors of the book try to tell the reader here is that Chinese youngsters today have the privilege to spend their “own” money on their “own wants and needs.” The “one-child policy” makes Chinese youth of special value in China’s consumerism. One survey shows that being the focal point of Chinese families with the structure of 4-2-1—one child, two parents, and four grandparents, this only child constitutes a large share of contemporary Chinese families’ consumption, resulting in a shift in China’s cultural values from traditional values to the values of a modern consumer society (Sun and Wang, 2010).

A 2008 survey conducted by a group of business professors, headed by King-Metters and Metters, shows significant changes in the degree to which individuals are integrated into groups, as compared with the findings of the study of different cultures conducted by Geert Hofstede some twenty five years before. The result in Hofstede’s research showed Chinese cultures were very collectivist in the 1980s, while the recent survey by King-Metters and Metters indicates that China today is very individualist. In addition, the King-Metters and Metters survey also shows striking difference in “power-distance,” a cultural trend used by Hofstede to measure “the extent to which the less powerful people accept and expect that power is distributed unequally.” The power-distance in China today is scored in the King-Metters and Metters survey about the same in the United States (King-Metters and Metters, 2008). The increasing value in individualism and individuality is seen particularly in China’s post-1980 generations.

Similar to young people in the countries influenced by the West, contemporary Chinese youth are generally characterized as being “open,” “free,” and “individual.” To them, life is about “me.” Different from the older generations in China, they often say “I” instead of “we.” Self-realization is one salient characteristic of the new “Me Generation.” The 1996 national survey of youth by Chinese Youth and Children Research Center reveals that 77.5 percent of the youth consider the realization of self-value as their life goal. The sentiments of “what I want, what I like, and who I am” are rising among Chinese young people. They ooze confidence and a sense of superiority. They want to live their life according to their own ideas and dare to pursue success, excellence, and new things. Youngsters engage the world in new ways and pursue a “good life.” They search for personal fulfillment, enjoying a lifestyle their parents could not have imagined. The sense of individuality and self-consciousness of this highly “liberated” young generation is acutely reflected in the expressions of “personal taste,” “personal expression,” and “personal identity” (*shihe wo, zhanxian wo, wo jiu shi wo*) that are popular among contemporary Chinese youth. (Guo Jinjin, 2006)

### “The Young and The Restless”: the Complexity of the Young Chinese Consumer’s Mindset

Yet, underneath the façade of being open, free, and individualistic, recent media reports depict Chinese youth as “restless” and as experiencing an internal psychological conflict between “private selves” and “public selves,” between “private identity” and “public identity” (Griffithis, 2012). While the phenomenon of “restlessness” among Chinese young consumers has been noted in general, few studies have provided in-depth analysis of the causes of this phenomenon. The present study delves into the “core” structures of Chinese traditional beliefs and values in the context of contemporary social-economic realities, and will demonstrate, in the sections to follow, that Chinese young people’s “restlessness” can be explained by the paradoxical, conflicting, and, sometimes, even opposing cultural values deeply rooted in Chinese tradition and its current realities. Among the dilemmas facing Chinese youth are “standing out and fitting in,” “individual freedom and society’s demands,” and “soaring aspirations and limited opportunities.”

#### “Standing Out and Fitting In”

In an advertisement published in *Modern Advertising* titled “Just Want to Stand Out,” a doggerel is printed on the T-shirt over a young man’s robust body. Faceless, the young body, however, is full of life and energy, with a flock of thick black hair anxiously growing out from the collar of the T-shirt. The doggerel reads:

*Just Want to Stand Out!  
Use your head, night after night.  
Apply yourself, head down, buried between your shoulders.  
Creativity trampled, you bow your head, with secret hate.  
Are you willing to capitulate forever?  
Are you willing to work yourself until your head turns gray?  
Come, seize the opportunity to hold your head high,  
While you are still young.*

Young and eager to emerge, the image and the doggerel advertisement capture the mentality of contemporary Chinese young people and their psychic need to seek identity. According to Jib Fowles, most advertisements can be understood as having two orders of content. “The first is the appeal to deep-running drives in the minds of consumers.” The second is information regarding the goods or service being sold—such as the product’s name, its manufacturer, and its functions. Fowles asserts that by giving form to people’s deep-lying desires, and by picturing states of being that individuals privately yearns for, advertisers have the best chance of arresting attention and affecting communication (Fowles, 1998). Successful advertising plays with a product’s “emotional” functions to the consumer, by associating commodities with feelings and emotions that the Chinese consumer finds attractive.

In anticipation of emerging customer needs, smart marketers search for the soul of Chinese young consumers in order to sell their products by interweaving the actual and the imagined and perpetuating the myth that consumption would make one’s dreams come true. Feeding on the eagerness of Chinese youth to “stand out,” contemporary Chinese advertising offers a world of success through consumption: The product is depicted as a symbol of wealth and status. The advertisement assures the audience that purchasing the product would bring power and self-worth and would provide a navigational guide for the voyage from the torturous present to the ideal

future. Chinese love to win and admire big winners. Climbing society's ladder to the top is the ultimate goal in life for contemporary Chinese, particularly for Chinese young people, at all social economic levels. Yet, seeking advancement in society and being successful is by no means a new aspiration for Chinese.

In fact, success and advancement in society have been a primary drive for Chinese under Confucianism, and a noble calling by the government under Mao Zedong's regime. However, the definitions and concepts of "success" have undergone changes over Chinese history. In Confucianism, being successful means mastering Confucian classics and passing civil service to secure a position at the imperial court. Communist ideology advocates adhering to Communist doctrines to serve the people and the country. Since the economic reforms, mandated by Deng Xiaoping's proclamation to "let some people prosper first," acquisition of wealth has become the newest and most worthwhile pursuit for Chinese men and women. Being held back for decades by Mao's dictatorship, contemporary Chinese are eager to become the first in the brave new world of material wealth. Despite the changes in the definitions of success, seeking to become established in society is a primary purpose in life—this Chinese characteristic remains unchanged. Desire for attainment and a sense of urgency depicted in the "Just want to stand out" doggerel mentioned earlier is echoed in the famous Confucius accounts of the sage's progress and attainment as man: "At fifteen, I set my heart on learning; at thirty, I stood firm; at forty, I had no doubts; at fifty I understood the Decree of Heaven; ..." (*The Analects*, Book II). Likewise, life's purposefulness and urgency are expressed in Mao Zedong's *ci* poem composed in 1963: "Ten thousand years are too long. Seize the day, seize the hour." What merits attention, however, is that the desire to "stand out" is not all we see in Chinese youth's psychic search for identity and success. In his article "What the Chinese Want?" Tom Doctoroff, the North Asia director and Greater China CEO for J. Walter Thompson, succinctly points out that Chinese individuals "are driven by an ever-present conflict between standing out and fitting in, between ambition and regimentation" (Doctoroff, 2012). Chinese youth show a strong sense of belonging and social acceptance while seeking individuality from their peers. Research based on advertisements in the Chinese version of *International Advertising*, 2007-2009 by my Chinese visual culture class in 2009 found that the three most frequently appealed desires to Chinese during this period were: need for prominence or achievements, need for affiliation, and need for security.

This phenomenon of seeking belongings is evidenced in Chinese youth's fanaticism in joining clubs and online shopping. Cultural clubs have mushroomed in today's China. Music clubs are particularly popular. However, as Jing Wang has pointed out, the majority of Chinese youth see music primarily as an entertainment rather than as a vehicle for serious self-expression. Music club culture flourishes in China's first and second tiers of cities because young people use clubs as a networking venue where they party for fun and for "a quick accumulation of human capital" (Jing Wang, 2005). Online shopping is another new phenomenon in contemporary Chinese consumer culture, with about 300 million new shopping choices online. For Chinese youth, exploring online marketplace goes beyond the practical need to cut through the clutter in making purchase decisions. Online shopping is an emotional need to fit in and feel that one's choices connect one to the right group of people, even as one tries to stand out with a style of his/her own. For young consumers in China, "the starting point for shopping is shifting from advertising, brands, and retailers ... to people" (Caplan and Yu, 2012).

While the attribute of being ambitious and competitive is a Confucian virtue mandated by society, Chinese people, on the other hand, consider another set of Confucian ideals also of the utmost importance—harmony in society and human relationships, being humble, and conformity. Confucius defined human relationships as "Ruler-Subject, Father-Son, Husband-Wife, Big

Brother-Younger Brother, and Friend-Friend.” In these Five Relationships, the senior and the male set rules for the junior and the female, while the junior and the female must respect the senior and male, and must be obedient. In other words, Chinese are social beings and must know their places in society, their boundaries and duties, and must co-exist with each other in harmony. As the Japanese say that “the nail that sticks out gets hammered down,” the Chinese wisdom says “birds at the head of the pack get shot down.”

Daoism is another school of philosophy in China and has significant influence on the Chinese way of life. The phenomenon of Chinese young people feeling impelled to go with the flow could be explained in the Daoist idea of non-action, or *wuwei*. Daoism believes that the ultimate Way of the Universe is to follow the course of Nature. “Water travels in its own way when it arrives at the head of the bridge.” Forcing things to happen will destroy the balance in Nature and will be catastrophic. In Jing Wang’s study, Jian Cui, the idol of Chinese *linglei* youth, or society’s radical outcasts, contradicts himself during the interview, saying “... Too much self-exposure is not good. I believe in an old Chinese saying, ‘whenever water comes, there is a channel for it,’ after he has expressed his desire to become an established researcher on music. Another young music fanatic sees himself in a similar way, saying “Those who are content are happy. I don’t like big ups and downs.” Still another wants to learn “how to position himself in the middle for perfect balance” (Jing Wang, 2005). Being small is virtuous and beautiful. “My humble self,” or “my humble surname” are expressions commonly used by Chinese to refer to themselves, even by the imperial emperors and Mao Zedong.

### Individual Freedom and Society’s Demands

Closer examinations of China’s reality today would show that new paths are hard to break. One daunting challenge for Chinese young people is how to balance their individual ambitions with their sense of family responsibilities and society’s demands. Tom Doctoroff has pointed out, “[Chinese] individuals have no identity apart from obligations to, and acknowledgement by, others” (Doctoroff, 2012). In pursuing success and self-satisfaction, China’s individuals cannot shake off regimented social structures. Ambitions are intertwined with individuals’ irrevocable responsibilities to family and society. Contemporary Chinese—man, woman, old, and young—are, as ever before, under enormous pressure to bring honor to the family, or *guangzong yaozu* (glorify the ancestors). This Chinese “characteristic” has not changed. Parents are mandated to provide their children a bright future. A survey carried out by the Economic Situation Monitoring Center under the National Bureau of Statistics in 2001 revealed that education had become a significant part of household expenses, consisting of 10 percent of a Chinese family total household expenses. Education consumption has become a new hot spot for Chinese household investment (Xi and Xia, 2006). Little emperors and princesses are scared of being a disappointment to their families when they grew up.

When China’s little emperors grow up, they eventually have to face challenges in the real world. The *Frontline*’s film *Young and Restless in China* tells the story of the emotional dilemma of a young market executive who comes from an affluent Beijing family. This successful business woman tells the interviewer that for years, she has struggled to find herself, to move out of the shadow of her parents, and to sort out who she is and what her values are. Her parents are renowned scholars and put pressure on her to succeed academically. She recalls that the atmosphere at home was so oppressive that when she was applying to college she only chose ones

outside of Beijing. College is the opportunity to liberate herself and she could finally be herself (*Young and Restless in China*, 2008).

At Marietta College where I teach, many international students from China feel equally oppressed, even though they are thousands of miles away from home. Quite a number of them come to Marietta College to fulfill their parents' dreams. The family provides financial support for the young person's education. The students choose their major and their career based on their parents' wishes. One student told me that his heart was with the humanities, but, to please his parents, he majored in accounting, then switched to finance, then to international business—only to feel miserable. Recently, he decided to follow his heart and declared his major in Asian Studies, but without his parents' knowledge. A number of female Chinese students at Marietta College are depressed because they are under pressure to drop out of college before they receive a college degree, and return home to get married to help with their family business.

To an extent, education for young Chinese women is a double-edged sword. Girls still are distinctly second-class citizens, particularly in rural areas. When families with limited resources have to make a decision about which child to be sent to school, it is always the son, because, traditionally, when young women marry, they leave their natal families to live with their husbands' families. Young girls are expected to sacrifice their own interests to support their family. Many women who do hold higher education degrees face another kind of dilemma: they are difficult to marry, because most Chinese men do not want to marry a “strong woman,” or *nü qiangren*. To put it in another way: many Chinese young women have their lives complicated several ways: First, they are facing the pressure (like their brothers) to be successful and to bring honor to their families. Second, in family decisions, they are more likely to be asked to make sacrifices and give the opportunities of education to their brothers, in the name of the family interest. Third, those who do get the chance to become educated, face the danger of becoming “unmarriageable,” which is equally unacceptable by China's norms today.

According to Confucianism, filial piety is the root of all virtues. However, taking care of aging elderlies has become increasingly challenging for Chinese young people. Aging population is another pressing problem in China and will have significant impact on Chinese youth, urban or rural. China is aging rapidly, largely due to the “one-child policy” enforced by the Chinese government since 1979. It is reported that by 2030, China will have more people over 65 than the entire population of the United States. China joined the world's aging countries in late 1990s, with those over 60 reaching 126 million, accounting for 10 percent of the country's population. It is predicted that by 2020, the percentage of China's senior population will rise to 11.8 percent. In 1990, the percentage of the Chinese working population caring for the aged was 13.7 percent; in 2000, it rose to 15.6 percent; in 2025, it is estimated to grow up to 19.46 percent; and by 2050, 48.49 percent. In other words, the per capita burden has risen from 20 to 25 percent in the past to the present 50 percent; and will rise to 100 percent by 2050 (Xi and Xia, 2006). As a release from the pressure cooker of daily life, Chinese young people spend more time online than youth in many other countries. Marketers use products as relief of anxiety.

Emotions are evoked in advertisements to offer the consumer a world of imagination, a utopia, or a world of spiritual transcendence and freedom from anxieties. Li Ning Corporation positions sports as relaxation, not a platform for competition. In their TV commercials, text floats across the screen: “Goodbye fatigue, goodbye toil, fear and fat...Yesterday's worries are over” (Doctoroff, 2005, p. 69). Pizza Hut's ad asserts that Pizza Hut provides the number-one place for pastimes and for entertainment. Starbucks promotes the idea of its coffeehouse as a Third Place, or *di san kongjian*. This *di san kongjian* position plays with the word *kong* in Buddhism, which

means “emptiness.” The Buddhist “emptiness” invokes detachment or being free from desires or worries. Thus the Third-Space motif is aimed to create peace and tranquility: a cup of Starbucks coffee drunk *in situ* will liberate your spirit from the mundane. In short, Chinese younger generations are highly restricted by the price of the new paths to success in their pursuit of material rewards, facing pressures in an increasingly competitive society.

### Soaring Aspirations and Limited Resources

With the importation of Western-style advertising and foreign goods to China, life for the Chinese has been a dizzying whirl. China’s economic miracle since the 1980s has been widely acknowledged. China’s new middle-class consumers have enough disposable income to purchase non-essential goods. In other words, they can afford to make purchases based on what they “want,” not just on what they “need.” Emotions and attitudes of the men and women seek the Western Other as China’s possible alternative future. During the 1990s, China’s elites liked to gather on the Bund in Shanghai for Western food and at outdoor café’s, bistros, and boutiques that had a foreign cachet, and did not hesitate to show off their newly acquired products of Western brands, such as Armani and Louis Vuiton.

With the liberation of retail law, China’s luxury market has ballooned to more than US\$2 billion in annual sales in the first decade of the twenty-first century, with 20 percent annual growth through 2008. Major luxury retailers, such as LVMH Louis Vuitton Moët Hennessy and Prada Group NV operate their own stores in China. A 300,000-square-foot Saks store started its operations in the historic waterfront Bund district of Shanghai in 2008. All these, says a report in *The Wall Street Journal* represent “a wave of development in China’s luxury sector—rich Chinese are seeking a greater appreciation of what their newly minted wealth can bring” (Ernst & Young, 2006).

The phenomenon of excessive and competitive consumption, or *dou fu* in Chinese, can be explained by the Chinese belief in the role of luxury spending in social construction and class distinction. Consumption in post-Mao China does not sound as derogatory as it does in the West. It symbolizes modernity. Acquisition and consuming material goods *tastefully* have become an intrinsic part of modern living and a validation of one’s high social standing in China. To a certain extent, youth are encouraged to demonstrate their role as consumers. As previously explained, the 4-2-1 family structure has resulted in the current situation that six family members indulge over the only child in the consumption of luxury goods. Thanks to China’s booming economy over the past decades, the post-80s were given a broader spectrum of choice than their parents could have ever imagined possible. As China is transforming itself from a production-centered communist society to a capitalist consumer society, youth are encouraged to explore definitions of modern *Chinese-ness* by demonstrating their capabilities in consumption. When private cars, real estate, and luxury brands become available, youth are quick to claim them as their own status markers. Those commercial goods offer golden opportunities for marketers to explore ways in navigating young Chinese consumers in their move to the psychic haven of consumption, and to ensure that the marketers are in the driver’s seat in Chinese youth’s “Consumer’s Happy Express Train” (*xiaofeiqun de xingfu banche*). Commercial advertisements further validate Chinese youth’s belief that immediate success and luxury are consummated with goods and labels. In his book *Foreign Advertising in China*, Jian Wang describes a visual confrontation of an “upscale” and “cool” Hennessy brandy commercial displayed in downtown Beijing:

*Displayed on the billboard are three “heroes”—a Caucasian man, a Caucasian woman, and a Hennessy bottle set against the backdrop of a peaceful blue sea. The dark-suited man, glass in hand, is posed in the middle of the background. In the left foreground, barely visible in the scene, the woman is showing only a shoulder draped in a beautiful scarf. On the right is the big Hennessy bottle, with its shape and texture occupying almost a quarter of the billboard space. Between the back and the front is a row of Greco-Roman arches. The ad caption written in Chinese characters reads, “Hennessy. The original X.O.” (Jian Wang, 2000).*

However, excessive consumption collides head-on with China’s tradition of frugality and with China’s reality today: not everyone can afford the price of success. The surreal world of tranquility, luxury, sophistication presented in the Hennessy commercial is a dream land for millions of Chinese. To be more accurate, it is a land that is beyond the imagination for ordinary Chinese men and women. While many Chinese are benefiting from the country’s booming economy, many are not. China’s highly competitive, consumption-driven environment inevitably forces many to the bottom. A Gallop survey shows that while Chinese buyers are many, and incomes are rising, most citizens remain too poor to purchase what they want. China today has the world’s widest chasm of “haves” and “have-nots.” Unlike their lucky 10 percent middle-class cousins, 1.2 billion out of the 1.3 billion Chinese lead a modest life, struggling through sweat and toil to cover just the basics at the time of the survey (McEwen, et.al. 2006). Underneath the façade of glory, freedom, and happiness portrayed in contemporary Chinese advertisements, there is tension between big dreams and lack of opportunities.

A typical fairy tale conclusion is “... and they all lived happily ever after.” The happy-ending conclusion of the modern Chinese fairy tale, however, remains to be seen. China’s reality seems to allude to another type of fairy tale—the Cinderella story. When the midnight clock chimes, the coach will give way to a pumpkin; the beautiful princess in elegant attire will be dressed in rags and return to scrubbing floors on her hands and knees. A mirror image of the desire for the best and fear of the worst in the contemporary Chinese youth psyche is seen in the picture of a mirror image displayed on the *NPR Morning Edition* web site, depicting a young saleswoman showing a luxury apartment on the suburb of Shanghai. The picture juxtaposes a washing basin decorated with 24-carat gold in front of a mirror and a mirror reflection of an expressionless saleswoman in modest clothing staring at the basin. What is reflected in the mirror is not just the sales woman and the basin, but a glimpse of the disparity between the rich and the poor that is the reality in China today. Developers invested US\$24 billion in residential housing in the first quarter of 2006, but only 3 percent of that was spent on low-income housing, as reported in the *NPR Morning Edition* report (Lim, 2006). The housing market in China today is not catering to the masses, but to the privileged few. This is illustrated in the caption on a billboard advertisement for Tomson Riviera Apartments that I passed in the heart of Shanghai’s prestigious Lujiazui financial district, which tempts the observers to join “the elite and own a [Tomson Riviera] apartment.”

## CONCLUSION

It has been argued that “it is necessary to distinguish elements of a culture that are central and invisible (e.g., cultural values) from those that are peripheral and visible (e.g., behaviors) because the former are likely to be more resistant to change” (Rosenthaland and Feldman, 1992). In other words, a culture’s “core” values and its individual’s cultural identity may be less likely to change

than the individual's behavior, such as his or her hobbies, taste in food and fashion, or consumption.

As illustrated in the present study, in contemporary China, aspirations are growing. Opportunities are limited. How to survive in a very competitive society preoccupies the Chinese mind. But the anxiety that contemporary Chinese are experiencing goes beyond the fierce competition in society. In this brave new world, millions of contemporary Chinese find that their privileges, values, education, work ethics—and the honor that they used to find in their lives and behaviors—are disappearing. Under these circumstances, all segments of Chinese society have been “restless”—struggling to find a new identity that will provide a new source of societal and personal stability and a new source of societal and personal purpose. The Chinese youth segment of society has experienced this restlessness primarily as a struggle to define their larger social role (“public identity”) and to define their individual selves (“private identity”). China's “one-child policy”—under which, typically, six adults become the economic and social underpinnings for the launch of each new child into the society—has provided the impetus for the creation of contemporary Chinese youth culture. Chinese youth culture is grounded along two dimensions: the search for personal expression of individual identity, and the need to find one's place in the larger society—“standing out” and “fitting in.”

The dynamic created by the interaction of these two forces at work on the psyche of young Chinese has enabled a shift in cultural values among Chinese youth, away from traditional Confucian and Maoist values toward the values of a modern consumer society: knowing one's social position by what one can afford to display, and knowing one's self by the consumer products one *chooses* to acquire. This has resulted in a phenomenon in which Chinese young people find that while they relinquish some behavioral elements of their cultural origin with increasing acculturation to the Western consumerism, the “essence” of Chinese culture, or Confucianism, as represented in such characteristics as filial piety, family, and conformity persists over time. Often, they feel their individual desires are being overshadowed in their real-life situations and their voices are being silenced. Chinese youth's “core” Confucian self demands Chinese young consumers be “collectivist” rather than “individualist,” and “interdependent” rather than “independent.” International consumer-goods companies—and more recently, their Chinese domestic counterparts—have recognized this psychic state in the Chinese youth demographic, and increasingly, have been focused on exploiting it. The lessons learned in the Chinese consumer market will be applied, with appropriate modifications, to other developing markets as well.

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# MICROFINANCE AND POVERTY REDUCTION IN GHANA: EVIDENCE FROM POLICY BENEFICIARIES

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## ABSTRACT

*Poverty is a concept that applies to all humans and more seriously people in the developing world. The deadly effect of poverty on the poor people necessitated a worldwide research into ways of reducing its impact. An important tool in fighting poverty is microfinance which has gain prominence over the last few decades in countries hardly hit by the menace. Studies have shown that microfinance has chalked certain successes regarding poverty reduction. Other school of taught argue that microfinance has not had the much touted impact. This study ascertained the impact of microfinance on poverty reduction in Ghana. The study employed economic and social variables such as individual income, household growth, access to education, housing and participation in social and religious activities as benchmarks for measuring the impact. Questionnaires were administered to 60 customers and beneficiaries of microfinance products of two major microfinance institutions in Ghana; Opportunity International Savings and Loans Ltd. and Sinapi Aba Savings and Loans Company Ltd. The study found a positive relationship between microfinance and the benchmark variables and recommended training for beneficiaries to ensure efficient use of funds and the creation of sound political and economic environment so microenterprises can thrive.*

**JEL:** O1, O2

**KEYWORDS:** Microfinance, Poverty Reduction, Impact Assessment, Ghana

## INTRODUCTION

Poverty has become an albatross hanging on the necks of most countries and individual households on the globe especially in developing countries. About one billion people globally live in households with per capita incomes of less than one dollar per day (Morduch, 1999). The grave economic and social impact unleashed on the poor in developing countries led to the keen interest on the part of donors, policy makers and practitioners working hard to expand access of the poor to microfinance. Even though, microfinance disburse small amounts, if properly harnessed can have knock-on effect and contribute significantly to the wellbeing of the poor. Microfinance can increase investment among the poor and hence, empower them economically. Currently, the focus of microfinance is no longer on credit for investment in micro enterprises but the attention of the entire microfinance community is on the diverse needs of clients, the broader financial ecosystem and the transformational nature of technology (World Bank Handbook on Microfinance, 2013). The objective of microfinance is not only providing credit for the poor to fight poverty but it is to create institutions that will deliver financial services to the poor who are ignored by the conventional commercial banks (Otero, 1999).

In Africa and other developing countries microfinance institutions (MFIs) are seen as the main source of finance for microenterprises (Anyanwu, 2004). In Ghana, microfinance institutions came up to fill a gap created by the refusal of the traditional commercial banks to give credit to microenterprises. While traditional commercial banks provided credit based on collaterals, microfinance institutions (MFIs) provide credit to the poor who do not provide collaterals. Adjei, (2011) observed that for most micro and small entrepreneurs in Ghana the lack of access to financial services is a critical constraint to the expansion of viable micro enterprises. According to Aryeetey, (1994, 1996) only six percent of the population have access to formal financial services with majority of the population denied access. Interestingly, about 91% of the economically active of the population in Ghana is employed in the informal sector (UNDP 2007), ironically it is this active and major part of the population that is denied credit. Given the devastating effect of poverty on the people of Ghana, successive governments since the 1980s have introduced medium-term national development policy framework to direct the implementation of development plans in sectors and districts aimed at reducing poverty and improving the social wellbeing of the people. There was the Economic Recovery Program (ERP) introduced in 1983 and backed by specific programs such as the Program of Action to Mitigate the Social Cost of Adjustment (PAMSCAD) and the Ghana Vision 2020. These programs were, however, unsuccessful (Asenso-Okyere et al, 1993). Further on, the Ghana Poverty Reduction Strategy (GPRS I, 2003-2005) was formulated to enable Ghana to benefit from a significant measure of debt relief under the Highly Indebted Poor Country (HIPC) and to position the country in an improved macroeconomic environment to address critical issues of poverty on an emergency basis. Under GPRS I, special social programs were put in place targeted at the vulnerable and the excluded. (IMF Report on GHANA July 2012). With respect to this, the GPRS I reflected a policy framework that was directed primarily at achieving the anti-poverty objectives of the UN's Millennium Development Goals (MDGs).

The success of this social intervention program was mixed results on the impact of policy interventions to reduce poverty. These included service delivery constrains and the persistence of regional differences in the distribution of key outcomes in the health and educational sectors. Against this background the GPRS II was adopted and implemented over the period 2006 and 2009 with emphasis on growth as a means to accelerate poverty reduction and to eliminate the worst manifestation of poverty, social deprivation and economic injustice, from Ghanaian society (IMF, 2012). Following the GPRS II, the government introduced the Ghana Shared Growth and Development Agenda (GSGDA 2010-2013) to achieve a sustain macroeconomic stability while placing the economy on a higher path of shared growth, and poverty reduction. All these steps were attempts by the government of Ghana to fight poverty which has rendered 28.5% of the Ghanaian population poor and live below the poverty line (World Bank Report, 2006). Most of the poor are found in the informal sector characterized by lack of access to credit, which cripples the development and growth of that sector of the Ghanaian economy. IMF May, 2003 country report observed that weaknesses in the financial sector that restrict financing opportunities for productive private investment are a particular impediment to business expansion in Ghana.

Microfinance is, therefore, seen as a financially sustainable instrument capable of providing capital for and ensuring growth and sustainability in the private informal sector ignored by traditional commercial banks. Microfinance in Ghana is, however, plague with a lot of challenges; poor recovery rate, lack of capital for sustainability, inadequate credit delivery and management, inability to reach the vulnerable and the marginalized, regulation and supervision problems as well as high turnover of MFI staff. As to whether microfinance has been able to reduce poverty among the beneficiaries of its products is the cap of this study. Social and

economic variables that will be employed include individual income, household growth, and access to education, housing as well as participation in social and religious activities.

### Objectives of the Study

1. To assess the role of Microfinance Institutions in reducing poverty in Ghana.
2. To examine how the beneficiaries use the lending facilities.
3. To ascertain how microfinance products affect income levels, education and family growth of beneficiaries.
4. To make recommendation for effective delivery of microfinance products and services in Ghana.

### Research Questions

1. What role do MFI's play in poverty reduction in Ghana?
2. How do beneficiaries use microfinance facilities?
3. Is there a significant relationship between microfinance and income levels, education and family growth of beneficiaries?
4. Are the expectations of the poor met through microfinance interventions in Ghana?

## **LITERATURE REVIEW**

According to Oterro (1999), microfinance is the provision of financial services to low-income poor and very poor self-employed people. To Ledgerwood (1999), these financial services are not limited to savings and credit but include other financial services such as insurance and payment services. Robinson (2001) defined microfinance as the supply of loans, savings and other basic financial services to the poor. To Irobi (2008), microfinance developed as an economic development model intended to benefit the low-income part of the society, both men and women. Schreiner and Colombet (2001) defined microfinance as the attempt to improve access to small deposits and small loans for poor household neglected by banks. Thus microfinance is the provision of financial services such as credit, savings, and insurance to the poor who cannot access such services from the formal financial sector. Microfinance has been credited with improving other financial outcomes including savings and the accumulation of assets as well as non-financial outcomes such as health, food security, nutrition, education, women's empowerment, housing, job creation and social cohesion (Afrane, 2002; Barnes, 1996; Barnes and Keogh, 1999; Beck, Demirguc-kunt, & Levine, 2004; Hietalahti & Linden, 2006; Hossain & Knight, 2008; Odell, 2010).

Poverty is a concept that applies to all humans and more seriously people in the developing world. The deadly effect of poverty on the poor people has necessitated a worldwide research into ways of reducing its impact. Basically, poverty is defined as the deprivation of basic necessities of life such as food, shelter, accommodation, and clothing. At a UN Summit on social development 'the Copenhagen Declaration' (1995) poverty was described as a condition characterized by severe deprivation of basic human needs including food, safe drinking water, sanitation facilities, health, shelter, education and information. To the (World Bank, 2002), a person is said to be poor when his or her consumption level falls below the poverty line of \$1 per day. Narayan et al (2000) identified poverty as being complex and interwoven, including a material lack and need for shelter, assets, money and often characterized by hunger, pain, discomfort, exhaustion, social exclusion, vulnerability, powerlessness and low-esteem. In Ghana,

poverty is identified as a composite of both personal and community life situations where on the personal level, poverty is reflected in an inability to gain access to basic community services (Batse et al 1999, Nsiah-Gyabaah, (1998). The Ghana Living Standards Survey (GLSS) of 2005 to 2006 defines poverty using an economic index, where the poor are seen as those "subsisting on a per capita income of less than two thirds of the national average" (Ghana Statistical Service, 2006).

Studies on poverty levels in Ghana reveal that poverty is multidimensional (Nkum and Ghartey, 2000) and vary from rural to urban people, the young and the old as well as men and women. To the rural people poverty means lack of food, insecurity, infertility, unable to participate in social activities while urban dwellers see poverty as lack of employment, inadequate social services, lack of capital as well as lack of skills training (Appiah, 1999, Nkum & Ghartey, 2000). Men in Ghana associate poverty with lack of material assets, whereas for women, poverty is defined as food insecurity. The young in Ghana consider the ability to generate an income as the most important asset, whereas older men cite as most important the status connected to a traditional agricultural lifestyle (Ghana, 1995).

Morduch (2002) carried out a study on microfinance and poverty reduction using independent variables such as assets, education, microcredit, family size and income of household as dependent variable. The study employed the Consultative Group to Assist the Poor (CGAP) poverty assessment tools. The findings revealed a positive impact of microfinance on poverty reduction. According to Littlefield, Morduch and Hashemi (2003) there have been increases in income and assets, and decreases in vulnerability of microfinance clients. They made reference to projects in India, Indonesia, and Uganda that have been able to reduce poverty among the poor and improve their general wellbeing.

Asemelash (2002) in Ethiopia confirmed a positive impact of microfinance on beneficiaries as compared to non-beneficiaries. He showed that microfinance has impacted positively income, asset building, and access to schools and medical facilities in the study area. Goldberg (2005) observed that with the introduction of microfinance in Bangladesh, the poor no longer remained as poor. Mawa (2008) confirmed that microfinance is an innovative step towards alleviating poverty. In Ghana, evidence exists on the positive impact of microfinance and generally on women empowerment, increase in respect and decision rights within the family as well as increased self-esteem (Cheston and Kulhn, (2002). To other writers, microfinance is a poverty alleviating tool, though it cannot solve the problem of poverty overnight. Brownstein, Fleck, Shetty, Sorensen, & Vadgama (2007). Siddiqi (2008) was not sure whether microfinance has a positive or negative impact.

## **DATA AND METHODOLOGY**

The research design employed in the study was the descriptive research with particular reference to the case study method. The study was conducted to ascertain the impact of microfinance products on beneficiaries of such lending facilities in the Sekondi-Takoradi Metropolis of the Western Region of Ghana. The population consisted of beneficiaries of microfinance products from two major microfinance institutions- Sinapi Aba Savings and Loans Company and Opportunity International Ghana Company Ltd operating in the metropolis. Opportunity International Ghana Ltd was chosen because of its strategic location in the area; it is branched at the Market Circle close to the market with a lot of the market women and petty traders as its customer base. Again, it is one of the world's largest microfinance organizations with a very large

client base. Sinapi Aba Savings and Loans Company previously Sinapi Aba Trust is also a microfinance institution noted for providing lending services to poverty communities in Ghana.

A sample size of 60 beneficiaries was selected based on purposeful sampling technique with the help of operation officers of the microfinance institutions. This helped to ensure effective coverage and reduce time spent and cost as well. The main instrument used for gathering data was a structured questionnaire titled ‘‘Microfinance and Poverty Reduction in Ghana; Evidence from Policy Beneficiaries.’’ The questions were structured with the objectives of the study in mind. It consisted of items that generated data for answering the research question. The questionnaire had three sections; Section A covered the demographic information, Section B captured questions on type, purpose, size, duration and motivation of the facility. Section C concentrated on the impact of microfinance on specific social and economic variables such as income levels, education, family growth as well as participation in social and religious activities among beneficiaries. Validity of the questionnaire was confirmed by relying on the comments of two experience experts. The reliability of the questionnaire was confirmed through the inter-rater reliability method. The demographic information of the respondents is presented in Table 1.

Table 1: Demographic Information of Respondents

VARIABLES	CATEGORY	FREQUENCY	PERCENTAGE (%)	FREQUENCY	PERCENTAGE (%)
Gender	Males	12	40	5	16.7
	Females	18	60	25	83.3%
Educational Level	Junior High School	19	63.3	16	53.3
	Senior High School	5	16.7	10	33.3
	Higher National Diploma	2	6.7	4	13.4
	Bachelors	4	13.3	-	-
	Master	-	-	-	-
Occupation/ Profession	Petty Traders	13	43.3	18	60
	Market Women	8	26.7	7	23.4
	Farmers / Fishermen	2	6.7	1	3.3
	Transport Owners	3	10	1	3.3
	Teachers.	4	13.3	3	10
Age	21 – 30yrs	4	13.3	2	6.7
	31 – 40 Yrs	16	53.3	11	36.6
	41 – 50yrs	7	23.4	10	33.3
	51 – 60yrs	3	10	7	23.4

*This table shows the demographic information of the respondents of the two microfinance institutions. On the left are those of Sinapi Aba Savings and Loans Company Ltd and on the extreme right are those of Opportunity International Savings and Loans Company Ltd.*

## RESULTS AND DISCUSSION (SINAPI ABA SAVINGS AND LOANS COMPANY LTD.)

### Purpose of Loan

When the respondents were asked of the purpose of the loan, 53% of the respondents reported business expansion and 37% said they contracted the loan to start their businesses. The remaining 10% used the loan for paying school fees of their children. This shows that a larger portion of the respondents depended on micro finance for business start-ups and expansion. Hence, their very survival depended on microfinance. This re-echoes the importance of microfinance to the vulnerable and the poor who cannot access funds from the traditional commercial banks.

Table 2: Purpose of Loan

PURPOSE	FREQUENCY	PERCENTAGE
Start a business	11	37
Expand a business	16	53
Pay school fees	3	10
Pay house rent	-	-
Family upkeep & growth	-	-
<b>TOTAL</b>	<b>30</b>	<b>100%</b>

Benchmark Variables: Education, Income Level, Family Growth, Asset-Housing, Level of Participation in Social & Religious Activities.

The study found an improvement in the level of education and the general skill level of respondents and family after microfinance. 80% of the respondents confirmed this. The remaining 20%, however, said there were no changes in the education and general skill level for themselves and family after microfinance. None recorded a decrease in educational level and general skill level of respondents and family. Most of the respondents reported no change in their level of participation in social and religious activities after accessing microfinance. 83% of the respondents confirmed this. The respondent said that even though they access microfinance it has not impacted their level of participation in social and religious activities. Further, most of the respondents said they belong to one or two religious and social organizations and that their membership was not triggered by micro finance. 5 respondents representing 17%, however, said their level of participation in social and religious activities improved after microfinance. None of the respondents recorded a decrease in the level of social and religious participation. 28 out of the 30 respondents reported of an improvement in family growth rate after micro finance. This represents 93% of the total respondents. With regard to the specific areas of growth within the family, 47% recorded improvement in family health, 26.5% each reported improvement in housing as well as food and security. None of the respondents reported improvement in security. Table 3 further shows changes in income after the respondents accessed microfinance. 21 out of the 30 respondents representing 70% of the respondents confirmed an increase in their income levels after accessing microfinance. The remaining 30% said that their income levels did not change even after accessing microfinance. None of them recorded a reduction in their income. This data confirms the positive relationship between micro finance and income levels as found by Morduch (2003). With asset-housing, respondents were asked of changes in asset-housing after accessing microfinance. 23 out of 30 respondents reported an increased asset-housing. This represents 70% while 7 respondents reported no change in asset-housing.

Table 3: Impact of Microfinance on the Benchmark Variables

VARIABLE	SINAPI ABA SAVINGS & LOANS COMPANY LTD	OPPORTUNITY INTERNATIONAL SAVINGS & LOANS COMPANY LTD
	%CHANGE/AFTER MICROFINANCE	% CHANGE AFTER MICROFINANCE
Income level	70% (↑)	80% (↑)
Education and general skill level	80% (↑)	87% (↑)
Level of participation in social and religious activities	17% (↑)	10% (↑)
Family growth	93% (↑)	90% (↑)
Asset housing	77% (↑)	47% (↑)

*This table shows the changes that occurred to benchmark variables of the beneficiaries. On the left are those of the beneficiaries of Sinapi Aba Savings and Loans Company Ltd. and on the right are those of Opportunity International Savings and Loans Company Ltd.*

## Results and Discussion (Opportunity International Savings and Loans Company Ltd.)

### Purpose of Loan

Table 4: Purpose of Loan

PURPOSE	FREQUENCY	PERCENTAGE
Start a business	2	7
Expand a business	27	90
Pay school fees	-	-
Pay house rent	-	-
Family upkeep & growth	1	3
<b>TOTAL</b>	<b>30</b>	<b>100%</b>

*The table shows how the respondents use the loans they borrowed from Opportunity International Savings and Loans Company Limited.*

It is interesting to note that 27 out of the 30 respondents representing 90% reported contracting the loan to expand their businesses while the 7% confirmed that they took the loan to start a business. The remaining 3% said the micro credit was used for family up keep and growth. This data confirms the importance of micro finance in helping to build and sustain businesses of the less privileged and acts as a livelihood to their very survival.

### Benchmark Variables: Education, Income Level, Family Growth, Asset-Housing, Level of Participation in Social & Religious Activities

Table 3 shows changes to the income levels of respondents after accessing micro finance. 24 of the respondents representing 80% reported an increase in their income levels after micro finance. The remaining 20% confirmed no change in their income levels after microfinance. None of the respondent reported a reduction in their income levels. This data confirm the positive correlation between microfinance and income levels. The study reported an improvement in education and general skill level of respondents and family after microfinance. 26 out of the 30 respondents representing 87% confirmed this. 13% of the respondents reported no change in education and general skill level while none recorded a reduction. 90% of the respondents reported no change in their level of participation in social and religious activities. They confirmed that even though they belong to social and religious organizations, their membership was not triggered by access to micro finance. The remaining 10%, however, said their participation in social and religious activities improved after accessing micro finance.

27 out of the 30 respondents reported on improvement in the rate of family growth. This represented 90%. The remaining 10% reported no change in family growth. On the specific areas of family growth 43% reported accommodation and another 43% reported improvement in family health while 7% recorded improvement in food and another 7% reporting nutrition and security. The respondents further reported a relationship between microfinance and asset-housing. 16 of the respondents representing 53% reported no change in asset-housing whilst 47% reported increased asset-housing. The data revealed that even though the respondents access micro finance, a large portion of the loans go into businesses and family upkeep and not housing.

### General Scenario

Generally, it came out that microfinance impacts positively on all the variables apart from the level of participation in religious and social activities which was triggered by other factors and not microfinance. These findings are consistent with what Asemelash (2002), Littlefield Murdugh & Hashmi (2003), Mawa (2008), found. Again, majority of the respondents reported that their expectations were met and they were satisfied with the efforts of the microfinance institutions. They, however, asked for expansion in the amount given to them by the MFI's. It is important to mention that future studies should look at expanding the sample size to give way for generalization of the results and consider how other institutions such as the Church, Municipal and District Assemblies and the Capital Market could play a role in poverty reduction.

## CONCLUSION AND RECOMMENDATIONS

The population that access microfinance improves in income levels, skills and educational level, family growth as well as asset-housing. There is a general improvement in the lives of beneficiaries of microfinance products. Respondents reported improvements in the benchmark variables and a reduction in poverty level. The potential of microfinance in reducing poverty was glaring. To sustain microfinance and make it effective and fulfilling, the following recommendations are made.

*Education and training should be provided for the microfinance beneficiaries on how to efficiently utilize the funds.*

*Interest charged on the microfinance products should be reduced.*

*Management and staff of microfinance institutions must be given the needed training and education to help build and strengthen the skill, competencies and abilities for effective service delivery.*

*Efforts should be made to reach the poor who are the target of microfinance policies and programs.*

*Furthermore, since the poor do not have collaterals, management and staff should make available to them tailor-made unsecured products.*

*Beneficiaries of microfinance products must be given a longer duration to give them enough room to generate future income out of the borrowed money. Beneficiaries should not be asked to pay back in the middle of the business. Government should endeavor to create sound political and economic environment for smooth operations and performance. Without such an environment, no business will thrive. Borrowers need sound economic environment to make a return on their borrowed funds so they can pay back.*

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# FINANCIAL PERFORMANCE OF FOREIGN OIL COMPANIES IN THE KURDISTAN REGION OF IRAQ

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## ABSTRACT

*This research seeks to explore the financial performance of foreign oil companies taking part in oil production projects in the Kurdistan region of Iraq. This region benefits from huge oil reserves and this attracts foreign oil companies from around the world. Since 2004, 48 companies have entered the region, of which 40 are actively taking part in oil exploration and production projects. Four big international oil companies have recently signed contracts with the Kurdistan Regional Government and started operations there. Five foreign companies were examined based upon three financial ratios: Return on Capital Employed (ROCE), Return on Assets (ROA), and Return on Equity (ROE). WesternZagros is performing the best based on ROCE, this company also ranks third and fifth based on ROA and ROE respectively. Whereas DNO is best on ROA and ROE ratios which comes in the first rank on both of them, and ranks second on ROCE. The results of this study will be of interest to the boards of directors and decision makers in other oil companies (domestic or foreign) who are planning to invest in the Kurdistan oil industry but are not thoroughly aware of its risks and profits.*

**JEL:** M400

**KEYWORDS:** ROCE, ROA, ROE, Financial assessment, Oil companies, The Kurdistan Region of Iraq

## INTRODUCTION

This study examines the financial performance of international oil companies investing and operating in the oil industry in Kurdistan Region of Iraq. Oil industry is one of the main industries in the world particularly in the Middle East; Iraq ranks top in terms of enormous oil production in the world. Kurdistan as an autonomy region which is located in the northern part of Iraq in the Middle East has approximately 50% of undiscovered oil in Iraq. Oil company managers and geologists have estimated between 10 to 45 billion oil reserves for the region which equals to total oil resources projected for Nigeria and Libya. The region is also rich in different mineral resources including Steel, Iron, Copper, Zinc, Lead, Pyrite, Silver, Gold, etc. (Kurdistan Board of Investment, 2012), but oil and gas industry is playing a key role in Kurdistan region of Iraq (genelenergy, 2011).

A number of studies have tried to evaluate the performance of international oil companies operating in different areas of the world with respect to their financial and investment operations (Thompson *et al.*, 1996; Han & Wang, 1998; Marcel & Mitchell, 2006; Osmundsen *et al.*, 2006). Few reports have examined oil companies in Kurdistan region and no study has the coverage of the current study. In a research, three international oil companies including Vast Exploration Inc., Langford Energy Inc., and ShaMaran Petroleum Corp. were studied (Wylie, 2010). In another study, five companies operating in Kurdistan including Heritage Oil, Niko Resources, Talisman Energy, Vast Exploration and WesternZagros were examined, but they only presented a

description of the company, its managerial team, operations, and the costs and risks of operations (Peters et al., 2009) and no study evaluated financial performance of the companies. Oil industries are mainly evaluated by financial indicators like Return on Average Capital Employed (RoACE), Return on Equity (ROE), Return of Assets (ROA), working interest, gross profit, production growth, and tax rates (Osmundsen, Asch, & Mohn, 2004).

This study mainly aims to inform oil policy makers, administrators, and local and foreign companies and any authorities interested in oil industry progression in Kurdistan. The results will also help foreign oil companies' managers to make a decision to take part in future oil investment plans in Kurdistan region. Furthermore, this study plays its role as a means to attract other companies around the world which is one of the purposes of the regional government to develop foreign investment in Kurdistan. To achieve the research objectives, some research questions are concerned to answer as follows:

*Which countries or continents of the world are predominantly taking part in oil production projects in Kurdistan?*

*How have the foreign oil companies financially performed in Kurdistan since their entry to the region?*

*Which company(ies) are performing better in terms of financial ratios explored in Question 2 over the all years examined?*

## **LITERATURE REVIEW**

A number of studies have examined the performance of oil companies from different aspects. Marcel and Mitchell (2006) investigated the operations of five oil titans in the Middle East. Oil titans are five countries including Saudi Aramco, Kuwait Petroleum Corp., the National Iranian Oil Co., Sonatrach of Algeria, and the Abu Dhabi National Oil Co. producing one quarter of the world's oil and hold half of the world's oil and gas reserves. They did 120 interviews with company executives and managers and found a number of great trends in these companies' strategy. They yield insight into how state-owned oil firms are striking a balance between their national mission and their commercial needs.

In another study, fourteen international oil and gas firms were explored to seek for econometric relations between market appraisal and simple financial and operational indices. The study concluded that the company appraisal is mainly explained by the oil price, production and reserve replacement (Osmundsen *et al.*, 2006). Thompson *et al.* (1996) also investigated fourteen major oil companies in US from 1980-1991 and analysed their efficiency and profitability. The study showed 21% inefficiency in the findings and a profit potential was found for the downside risk indicators.

Magnan and Cormier (2002) showed that in Canadian oil and gas companies, the managerial advantages for earnings management can be affected by the intensity of external controlling. A number of studies have addressed the National Oil Companies (NOCs) and tried to examine them from different perspectives. Using macro-level data, Victor (2007) analysed oil and gas companies to compare the performance of NOCs with International Oil Companies (IOCs) including the global majors. The results of his study revealed that NOCs have great flaws in their performance and their performance is affected by government-dictated strategies which differ from IOCs. So, he concluded that the operations by NOCs are far less efficiently than by IOCs. He reported that a large amount of oil in NOCs territory is dead and ineffective. However, his

study showed that some NOCs can perform rather as efficient as large OICs. In another study, Eller, Hartly and Medlock (2011) examined the efficiency of NOCs vs. OICs and came to this result that NOCs are less efficient than OICs. They claim that much of differences between these companies are owing to the different structural and institutional characteristics of the companies.

A number of studies examined the interactions between different factors playing a role in the oil industry. For instance, Saleem and Rehman (2011) examined the influence of three different liquidity factors on profitability. The three factors include Return on Assets (ROA), Return on Investment (ROI), and Return on Equity (ROE). The findings of their study showed that there is a significant relationship between ROA and profitability in oil and gas companies in Pakistan. Chen and Lee (1993) examined the association between financial ratios and the endurance of oil firms. Using survival analysis, they came to this result that liquidity ratio, leverage ratio, operating cash flows, success in exploration, age, and size are significantly affecting the corporate endurance.

Taheri Fard (2011) examined the effective factors on the market value of five major oil companies. Market value is an important indicator in oil and gas industry. The profit and oil and gas reserves of oil companies effectively influence the market value. The results of Taheri Fard's study showed that oil and gas reserves of international oil companies are more effectively influencing market value than the oil and gas profit. Victor (2007) also examined the market value of NOCs and IOCs as a function of the total production, the company income and the company labour force, and came to this result that the size of labour force has no effect on the company market value. In their study, Talevski and Lima (2009) examined a national oil company in Brazil to measure its potential to create shareholders' value and stock fair value by the end of 2008.

Oil and gas companies have multidimensional performance, with earnings, cash flows and changes in reserves. Quirin, Berry and O'Bryan (2000) explored oil companies based on fundamental variables including cash flows, production efficiency, stock price appreciation potential, and growth. They identified nine fundamental signals as being instrumental during the equity valuation process. Misund, Osmundsen and Asche (2007) have also examined a number of oil companies in terms of structural shift in their valuation. They mentioned that financial figures such as net income, cash flows and accruals, and operational measures such as the size of oil and gas reserves have become more important in the equity valuation process for oil and gas companies during the 1990s and are instrumental in explaining this structural shift.

#### Studies within Kurdistan Region

A report by Wylie (2010) explored national oil companies and three foreign companies in Kurdistan. Three oil companies examined are Vast Exploration Inc., Langford Energy Inc., and ShaMaran Petroleum Corp. Vast's main exploration is located in Qara Dagh Block. Vast has a 37% non-operated working interest in the Block and is liable for 46.25% of the initial exploration costs and 37% of total development costs. Langford Energy Company operates only in Chia Surkh block and possesses 40% of working interest in this block. ShaMaran Petroleum Corporation has operations in three blocks in Kurdistan. This company has a great working interest in Pulkhana block. Peters *et al.* (2009) provided an overview of five companies operating in Kurdistan including Heritage Oil, Niko Resources, Talisman Energy, Vast Exploration and WesternZagros. For each company, they presented a description of the company, its managerial team, the blocks it has operations in, and the costs and risks of operations. As can be seen, no previous study tried to compare the financial performance of foreign oil companies in Kurdistan

with respect to the foremost financial indicators. Bearing in mind the limitations of prior research works and the gaps in the area, this study will address this issue to provide a wider overview of the performance of foreign oil companies in Kurdistan region of Iraq.

## METHODOLOGY

This study is an empirical study and aims to assess a number of foreign companies investing in oil industry in Kurdistan region of Iraq. The companies' websites found to be the best sources of information.

According to a recent report, currently 40 companies are operating in oil and gas industry in Kurdistan which almost all of them are international oil companies. Four companies providing comprehensive information and statistics of their operations in Kurdistan were selected. In this study, secondary data was used including companies' official websites, annual reports, KRG website, and some other financial databases were investigated. To calculate three financial ratios including ROA, ROE, and ROCE, the formulae below were used:

*Return on Assets (ROA)*: According to Johnston and Johnston (2006), Return on Assets gauges the profits that a company gain in relation to its total assets, it is calculated as follows:

$$ROA = \frac{\text{Net Income}}{\text{Total assets}}$$

*Return on Equity (ROE)*: ROE reveals the profit attributable to the amount invested by the owners of the business and it measures a firm's efficiency at generating profits from every pound of net assets, and shows how well a company employs investment pound to generate earnings growth (Alexander & Nobes, 2010). It is calculated as follows:

$$ROE = \frac{\text{Net income}}{\text{Shareholder's equity}}$$

*Return on Capital Employed (ROCE)*: Atrill and McLaney (2008) described ROCE ratio as a "fundamental measure of business performance". This ratio implies the relationship between the operating profit generated by the business and the long-term capital invested in the business. ROCE is calculated as follow:

$$ROCE = \frac{\text{EBIT}}{\text{Equity} + \text{Non} - \text{Current Liabilities}}$$

## RESULT AND DISCUSSION

1. Which countries or continents of the world are predominantly taking part in oil production projects in Kurdistan? The foreign oil companies taking part in oil and gas projects in Kurdistan were identified. Based on the findings, 48 foreign companies are active in the region. As shown in Figure 1, the majority of companies are from the United States. The second-most active companies are Canadian. Oil companies from the United Kingdom and Turkey are also actively investing in the oil industry in Kurdistan.

Table 1: Foreign Oil Companies Investing in Kurdistan Region of Iraq

row	company	originality	row	company	originality	row	company	originality	row	company	originality
1	addax	china	11	gkp	u.k	21	new age	uk	31	reliance energy	india
2	afren	africa	12	heritage oil	u.k	22	niko	canada	32	repsol	spain
3	chevron*	u.s.a	13	hess	u.s.a	23	oil search	australia	33	shamaram	canada
4	dno	norway	14	hillwood	u.s.a	24	omv	austria	34	sterling	u.k
5	exxonmobil	u.s.a	15	hunt oil	u.s.a	25	oryx	malta	35	talisman	canada
6	gas plus khalakan	uk- turkey	16	komet group	moldova	26	perenco	france	36	keystone	u.s.a
7	gazprom	russia	17	knoc	south korea	27	pet oil	turkey	37	total	france
8	genel energy	turkey	18	marathon	u.s.a	28	petroceltic int.	ireland	38	ttopco	turkey-china
9	general exploration partners	u.s.a- canada	19	mol	hungary	29	petroquest	turkey	39	vast	canada
10	groundstar	canada	20	murphy	u.s.a	30	prime natural	u.s.a	40	westernzag ros	canada

The name and originality of those companies which invest in oil exploration and development in the region and have signed contracts with Kurdistan regional government to work in one or more blocks \*The companies in grey have very recently entered into KRG. Sources: (The oil and gas year, 2012; Amon, 2011; The websites of the companies)

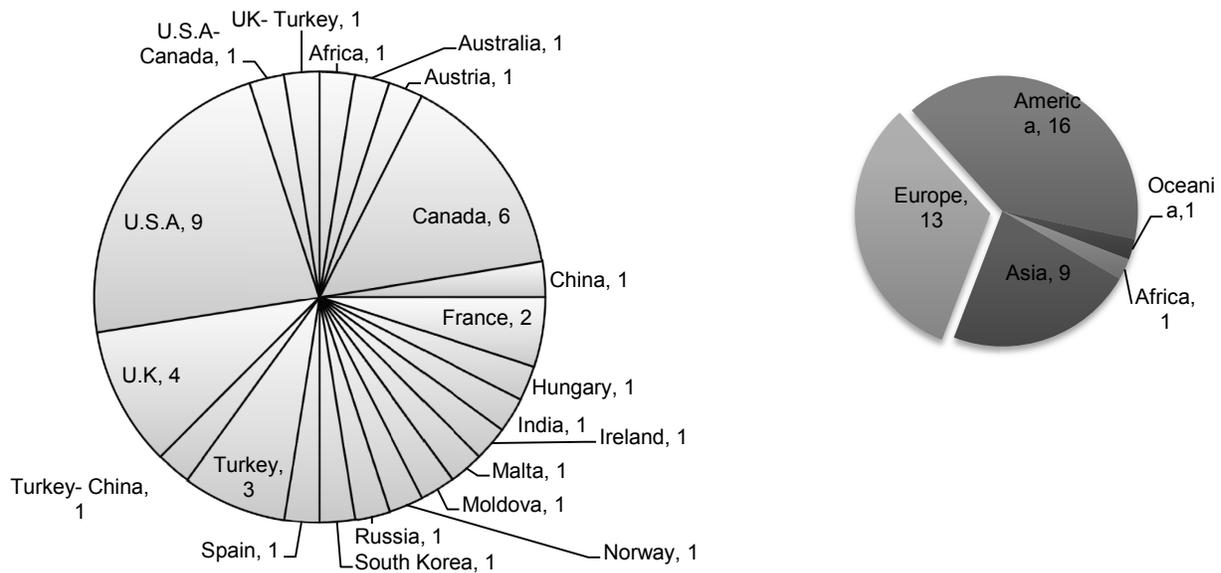
From a continental perspective, the majority of oil companies are from North America and Europe (Figure 2). The 48 identified countries are not all engaged in oil exploration and operation activities. 8 companies are only involved in research projects and geological investigations of the oil industry in Kurdistan and also a few companies are exclusively working in gas explorations. The other 40 companies are investing in oil exploration and development in the region and have signed contracts with KRG to work in one or more blocks (See Table 1). It should be noted that some companies among the 40 investing companies are among the top ten companies of the world (Table 2). Exxon Mobil, Chevron, Total, and Gazprom are the four top companies of the world that have very recently taken part in oil drilling projects in Kurdistan. The other 36 companies are smaller oil companies from around the world, the majority of which have entered into the region since 2007 (Kayalar, 2012).

Table 2: The Top 10 Oil Companies in The World- 2011 Rank

Rank	Company	Market Cap \$US billion
1	ExxonMobil	406.3
2	PetroChina	276.6
3	Royal Dutch Shell	234.6
4	Chevron	211.9
5	Petrobras	156.3
6	BP	135.5
7	Gazprom	122.6
8	TOTAL	121
9	Sinopec	97.4
10	ConocoPhillips	96.8

Four companies among the 40 which are investing in the oil sector in the Kurdistan region are among the top ten companies of the world-2011 rank, Source: PFC Energy (2012)

Figure 1: Investing Countries and Their Number of Companies in Kurdistan Region Figure 2: Investing Continents and Their Number of Companies in Kurdistan Region



This figure shows the investing countries and their number of companies in the Kurdistan region. This figure shows the investing continents and their number of companies in the Kurdistan region.

How have the foreign oil companies financially performed in Kurdistan since their entry to the region?

To answer this question, the authors collected data from the companies' annual reports. The entry date of companies to the Kurdistan oil industry is not uniform and different companies signed contracts with the KRG in different years. To assess the financial performance of each company, the total years of its presence in the region were taken into account. Three ratios including Return on Capital Employed (ROCE), Return on Assets (ROA), and Return on Equity (ROE) were gauged and their results were discussed.

**Korean National Oil Corporation (KNOC):** Return on Capital Employed (ROCE): This is the most powerful ratio for investors, most of whom take ROCE into account before purchasing shares. Over the five years of operations in Kurdistan, the ROCE had major fluctuations but declined overall by 12% between 2007 and 2011. The main reasons for decreased ROCE are high liabilities and a decline in revenue. However, the ROCE increased by 37% from 2010 to 2011 which is a good indication that the company is heading to the right direction. The main reason for increased ROCE in 2011 is increased profit before tax by 71% in 2011; in the same period equity has increased by 6%, but increasing non-current liabilities had a major impact on increasing ROCE in 2011. As can be seen in the balance sheet, the non-current liabilities have increased by 43% in 2011 compared to 2010 and the main reasons are long-term increasing trade and non-current financial liabilities. It is sometimes necessary for the company to rely on long-term debits to improve its long-term assets or expansion and increasing long-term trade helps the company's cash flow if they have a decent contract with a lower interest rate (Table 3).

**Return on Assets (ROA):** The main purpose of this ratio is to evaluate how profitable KNOC is and how often their assets have been used to generate income; the higher the ROA, the more profitable the company. The ROA for 2011 is very small; between 2007 and 2011 the ROA declined by 122% which is not a good indication for investors and shareholders. Nevertheless, the profit before income tax increased by 208% in 2011, and the total assets increased by 21%. The

main factor making loss between 2007 and 2011 is that the unpaid income tax expenses paid one year in arrears. On the other hand, the company is in a good financial position with revenue growing sharply over the past three years; the increase in fuel price over the past few years has greatly helped KNOC to generate more profits. Furthermore, in the long term KNOC will increase the value of total assets which will make the company more resistant to liability (Table 3).

**Return on Equity (ROE):** The ROE sharply dropped between 2007 and 2011 almost from 3.56% to 1.41%. However between 2010 and 2011 this ratio declined by 2574% and neither the board nor the shareholders were satisfied with this result. The main factor in decreased ROE is the loss after tax and the main reason for this loss is a 317% increase in income tax expenses in 2011. Usually investors look at the ROE ratio to evaluate a company's income and equity; they do not look at the balance sheet in more detail. However, although the profit before tax and equity to shareholders both increased in 2011, there are some other factors negatively affecting the ROE (Table 3).

Table 3: Financial Ratios for KNOC

Ratios	ROCE	ROA	ROE
2007	4.30%	2.19%	3.56%
2008	5.44%	1.53%	2.66%
2009	3.83%	2.46%	5.01%
2010	2.76%	0.022%	0.057%
2011	3.77%	(0.48%)	(1.41%)

*This table shows the rate of financial ratios of the KNOC company (Source: Korean national oil corporation, 2007; 2008; 2009; 2010; 2011)*

**DNO: Return on Capital Employed (ROCE):** The ROCE sharply increased by 324% between 2004 and 2011. The main reason for this increase in ROCE was increased operation profits, although the non-current liabilities declined by 19% at the same time. The outcome certainly makes the company very attractive for new investors and will make its market value increase further in following years. The main ratio that new investors planning to purchase a company's shares take into consideration is ROCE. As found here, the ROCE of DNO in 2011 brings high confidence and reputation for the company (Table 4).

**Return on Assets (ROA):** DNO has gradually expanded its operations in Kurdistan since 2004. The ROA for DNO climbed sharply between 2004 and 2011 from 0.97% to 13%. The main factor behind the increased ROA is the increased net profit after tax. In 2010, the company made a big loss but they managed to recover the loss in 2011. This is a good indication for the investors and shareholders and it is pushing market capacity to grow further. According to the company's annual report in 2011, the board of directors is expecting the growth to continue, particularly their activity in Kurdistan is going to be the main operation for the company in the coming year (Table 4).

**Return on Equity (ROE):** ROE for DNO puts the company in a healthy financial position between 2004 and 2011 and it has sharply increased from 2.05 to 30.30%. The increase in ROE is noticeable between 2010 and 2011. The weak ROE in 2010 was due to the poor net loss after tax. Despite the weak ROE in 2010, the value of shareholders' equity increased in 2011 by 2.3%.

Shareholders can expect a good return in the coming years because DNO has started its operations in a new field in Kurdistan. The operation will lead to increased revenue from 2012 onwards (Table 4).

Table 4: Financial Ratios for DNO

Ratios	ROCE	ROA	ROE
2004	4.08%	0.97%	2.05%
2005	6.25%	10.03%	30.90%
2006	10.47%	1.85%	8.43%
2007	10.76%	19.96%	41.50%
2008	0.197%	(17.6%)	(42.5%)
2009	(4.32%)	(6.13%)	(17.07%)
2010	3.8%	(5.2%)	(13.4%)
2011	17.3%	13%	30.30%

This table shows the rate of financial ratios of the DNO company (Source: DNO, 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)

*Sterling Energy*: Return on Capital Employed (ROCE): ROCE indicates the efficiency and profitability of the company's capital. The ROCE for Sterling Energy kept growing for a second consecutive year and climbed by 60% between 2007 and 2011. The main reason for such a sharp growth is the increase in the operating profit and increased value of shareholders' equity, combined with decreased value of non-current liabilities. Sterling Energy had a small ROCE in 2008 and early 2009 due to the sharp decline in revenue and the increase in the cost of production. However, the company is getting ready to fully operate in the region and the board of directors is very optimistic about increasing net profits in the coming years (Table 5).

*Return on Assets (ROA)*: ROA for Sterling Energy increased sharply from 0.36% to 12.20% between 2007 and 2011. The main factors associated with increased ROA are the increased net profit after tax, which climbed by 215% between 2007 and 2011. It is a positive sign for current shareholders and new investors. Moreover, it helps the company's market value to grow further when the company is using their assets to generate revenue (Table 5).

*Return on Equity (ROE)*: ROE has also sharply increased by 1882% from 2007 to 2011. The main factor positively affecting this increase is the increased profit after tax. When the profit after tax grows continuously, it helps the company to stabilize for a long term. This kind of return to owners and shareholders will give high confidence to the board of directors and improve the relationship between the board members and the shareholders' committee. Moreover, it will positively affect the market value of the company (Table 5).

Table 5: Financial Ratios for Sterling Energy

Ratios	ROCE	ROA	ROE
2007	7.46%	(0.36%)	(0.80%)
2008	(471.19%)	(39.30%)	(91.59%)
2009	(26.96%)	(153.51%)	(229.73%)
2010	6.14%	3.84%	6.10%
2011	11.91%	12.20%	15.86%

This table shows the rate of financial ratios of the Sterling Energy company (Source: Sterling Energy, 2007; 2008; 2009; 2010; 2011)

*Gulf Keystone Petroleum (GKP): Return on Capital Employed (ROCE):* The ROCE significantly increased by 54% from 2007 to 2011 and caused a great loss to the company. Since the ROCE for this company is a very small proportion, it is not clear whether the company is using its resources to generate enough profits. New investors use capital employed to measure the total resources that a business has available, although it is not perfect measurement. For example, a business might lease or hire much of its production capacity (machinery, buildings, etc.) which would not be included as assets in the balance sheet (Table 6).

*Return on Assets (ROA):* The ROA for Gulf Keystone is not a very positive return for current shareholders or new investors. The main reason for the company's loss between 2007 and 2011 is limited activity but Gulf Keystone will fully operate in Kurdistan in the next years and the board of directors is optimistic about a quick recovery from loss. However the company managed to recover by 46% from 2007 and 2011, which is a relief for current shareholders and the board (Table 6). *Return on Equity (ROE):* The ROE has fluctuated over the past few years but the overall result shows a 54% increase from 2007 to 2011. The decreased ROA is due to a loss after tax (Table 6).

Table 6: Financial ratios for Gulf Keystone Petroleum

Ratios	ROCE	ROA	ROE
2007	(25.62%)	(17.37%)	(22.31%)
2008	(43.60%)	(37.22%)	(48.23%)
2009	(130.76%)	(82.03%)	(139.37%)
2010	(2.76%)	(0.48%)	(1.41%)
2011	(11.8%)	(9.26%)	(10.3%)

*This table shows the rate of financial ratios of the Gulf Keystone Petroleum company (Source: Gulf Keystone Petroleum, 2007; 2008; 2009; 2010; 2011)*

*WesternZagros: Return on Capital Employed (ROCE):* The ROCE ratio improved between 2006 and 2011, increasing by 93%. However, it is still in a negative position and this is not attractive for current shareholders or future investors. Although the operating profit also increased by 20% between 2010 and 2011, the company is still attempting to recover from the heavy loss they made when they first started their operations (Table 7).

*Return on Assets (ROA):* Despite the loss between 2006 and 2011, the ROA increased by 92% during this period. The result is promising but the company is not able to make any profits after tax. WesternZagros is trying to expand its activities in Kurdistan, so it keeps expanding its assets; these have been increased by 35% between 2006 and 2011 while the net loss has reduced by 14%. WesternZagros is only operating in Kurdistan and the heavy loss does not mean that the company is not performing well. In reality, the major loss has resulted from the cost of research and zero revenue because the company is not fully operating in the region yet (Table 7).

*Return on Equity (ROE):* Return on Equity increased by 100% between 2006 and 2011. On one hand, it is a good indication for the current shareholders and future investors who intend to purchase shares from the company. On the other hand, it is not very promising for the company regardless of the increasing value of shareholders; equity by 38% between 2010 and 2011. Actually, this ratio is not very reliable but it should be noted that the company is still seeking to expand its drilling operations in Kurdistan (Table 7).

Table 7: Financial Ratios for WesternZagros

Ratios	ROCE	ROA	ROE
2006	(38.30%)	(38.24%)	(658.81%)
2007	(6.69%)	(6.48%)	(6.69%)
2008	2.68%	(4.14%)	(4.47%)
2009	3.06	(2.27%)	(2.46%)
2010	(3.18%)	(2.4%)	(2.65%)
2011	(2.76%)	(2.02%)	(2.28%)

*This table shows the rate of financial ratios of the WesternZagros company (Source: WesternZagros, 2006; 2007; 2008; 2009; 2010; 2011)*

Which company(ies) are performing better in terms of financial ratios explored in Question 2 over the all years examined? To answer the third research question, the financial ratios were averaged through all years of operations for each company. As shown in Table 8, WesterZagros is performing the best based on ROCE, this company also ranks third and fifth based on ROA and ROE respectively. Whereas DNO is best on ROA and ROE ratios which comes in the first rank on both of them, and ranks second on ROCE. As table 8 is showing, DNO and KNOC come in second and third rank on ROCE and first and second rank on ROA and ROE respectively. On the other hand Gulf Keystone and Sterling rank fourth and fifth on ROCE, and third and fourth on each ROA and ROE respectively.

Table 8: Comparing Companies Based on Their Ratios

Company	ROCE (Avg%)	Company	ROA (Avg %)	Company	ROE (Avg%)
WesternZagros	42.96	DNO	2.11	DNO	5.03
DNO	6.07	KNOC	1.14	KNOC	1.98
KNOC	4.02	WesternZagros	-9.26	Gulf Keystone	-44.32
Gulf Keystone	-42.91	Gulf Keystone	-29.27	Sterling	-60.03
Sterling	-94.53	Sterling	-35.43	WesternZagros	-112.89

*This table is showing comparing each company to others based on their ratios including ROCE, ROA and ROE*

## CONCLUDING COMMENTS

The current research examined the performance of five foreign companies operating in oil industry in Kurdistan region of Iraq. Based on the results, 40 companies have oil exploration projects in Kurdistan of which 4 companies have recently joined. The new comers including Exxon Mobil, Total, Chevron, and Gazprom are among big oil companies in the world. Geographically, the companies are mainly from USA, UK, Canada, and Turkey (North America and Europe regions). Five companies were examined financially based on three financial ratios including ROA, ROE, and ROCE. Financial ratios shed light on the relationships between individual values and how a company performed in the past, and will perform in the future. The ratios used in this study to evaluate the financial performance of the companies show that some companies successfully achieved their mission and have started their operations in Kurdistan.

The current research could not take those big companies recently arrived to the region into consideration as no annual reports were available to scrutinize. Therefore, further studies are needed to include the new comers and investigate their performance in compare with the other existed companies in Kurdistan. Moreover, their performance can be compared with their performance in other countries.

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# INFLUENCE OF COLLECTIVIST AND INDIVIDUALIST CULTURAL ORIENTATION AND REGULATORY CONSTRUAL FIT ON BRAND ATTITUDES

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## ABSTRACT

*This research studies how the relationship between cultural orientation and construal level of the message will influence brand attitudes. We also examine the mediation role of engagement in this relationship. The results show that collectivist (individualist) participants had more favorable brand attitudes toward low-level (high-level) construal messages. Our experiment also showed that the relationship between cultural orientation and construal level of the message was mediated by engagement.*

**KEYWORDS:** Regulatory focus theory, Construal level theory, collectivist/individualist cultural orientation, regulatory fit, engagement

## INTRODUCTION

Globalization has impacted the US consumer market making it a complex, melting-pot of consumers with distinct cultural orientations. Existing studies focused on cultural orientation show that cultural orientation significantly influences consumers' persuasion processes (Aaker and Maheswaran 1997) and emotional patterns (Markus and Kitayama 1994). However, most individualism and collectivism research involves comparisons of cross-cultural individuals (Coon and Kemmelmeier 2001). Currently, a disproportionate number of studies focus on the influence that differences in cultural orientations of individuals of the same society has on evaluations of marketing messages.

## LITERATURE REVIEW

Individualist and collectivist orientations are linked to the conceptions people have of the self (Markus and Kitayama 1991). Collectivist-oriented people use more low-level construal, concrete self-descriptions (e.g., brother, student) when describing the self; compared to individualist-oriented people who use more high-level construal, abstract descriptions (e.g., kind, honest) (Trafimow, Triandis, and Goto 1991). Additionally, low-level construal messages were rated higher by collectivist-oriented people than individualist-oriented people (Morris and Peng 1994). In this study, we focus on determining whether participants who review a message featuring information construed at a level that fits their cultural orientation have more positive brand attitudes in relation to those who review a nonfit message. Therefore, we hypothesize:

***H1:** Consumers with a dominant collectivist orientation will have more favorable brand attitudes when exposed to a low-level construal message versus a high-level construal message, while those with a dominant individualist orientation will have more favorable brand attitudes when exposed to a high-level construal message versus a low-level construal message.*

Important for this study is the fit from construal hypothesis, which revolves around the notion that engagement increases when the level of construal of messages matches the person's regulatory focus. As a result, the increase in engagement is responsible for more positive brand attitudes. More specifically, for this study, we examine the role that engagement plays in the effect of cultural orientation and construal level fit on brand attitudes. Thus, we hypothesize:

**H2:** *The mentioned effects in H1 will be mediated by engagement*

## DATA AND METHODOLOGY

In this experiment, we examined the evaluation of a brand portrayed in a high- and low-level message. The high- (low-level) construal of the two advertising messages was manipulated by using either abstract (concrete) copy. A 2 (cultural orientation: collectivist vs. individualist) x 2 (construal level: high vs. low) between-subjects design was used. In this study, cultural orientation was measured and construal level was manipulated in the advertisement messages. In total, 353 undergraduate students from a large southwestern university participated in the study in exchange for extra-credit. Online surveys were used. Participants were randomly assigned to either the high- or low-construal advertisement. After exposure to the ad, participants responded to questions related to their brand attitude, cultural orientation, engagement experienced during evaluation of the ad as well as demographic questions.

## RESULTS AND DISCUSSION

Two-way ANOVAs (analyses of variance) were used to examine the hypothesis for the brand attitude dependent variable. The degrees of freedom of the reported ANOVAs were 1, 349. Results of a 2 (cultural orientation) x 2 (construal level) ANOVA revealed that the main effect of construal level was not significant ( $F = 2.5, p > .10$ ), but the main effect of cultural orientation was significant ( $F = 5.1, p < .05$ ). This main effect was supported by the two-way interaction. As predicted, the cultural orientation x construal level interaction was significant,  $F_{brand\ attitude} = 8.72, p < .01, \chi^2 = .99$ . As a result, H1 is supported. Next, we examined the role of engagement mediating the effect of fit on brand attitude. We found that the mean indirect effect from the bootstrap process was significant ( $a \times b = .0623$ ). The bias-corrected confidence interval (CI) of the bootstrapping mediation test did not include zero ( $CI_{95\%} = .0081, .1249; N = 353; 10,000$  re-samples). The unstandardized regression coefficients are ( $a = .1130, p < .05; b = .5511, p < .001; c = .0663, p > .05$ ). Because  $c$  is not significant, we find support for indirect-only mediation effect of construal fit on brand attitudes through engagement (Zhao, Lynch, and Chen, 2010, p. 204).

## CONCLUDING REMARKS

This study highlights the strategy of segmenting consumers by collectivist or individualist cultural orientation. Studying how collectivist- and individualist-oriented people respond to high- vs. low-level construal messages will aid marketers in identifying the most effective marketing techniques to target the collectivist and individualist consumer market segments.

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# JOB BURNOUT AND THRIVING IN CHINESE PUBLIC SECTOR

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## ABSTRACT

*Chinese public sector is a very large hierarchy system. Many employees in public sector haven't higher identification and belongings, and this paper is trying to discuss and solve this problem. This paper suggests the job thriving from the positive psychology perspective, and as a way to overcome the job burnout; and analyzes the occupation strength as one important element of occupation thriving.*

**KEYWORDS:** Job burnout, job thriving, Chinese public sector

## INTRODUCTION

Chinese public sector is a very large hierarchy system. It includes not only the central and local government employees but also those affiliated public institutions and enterprises such as schools, hospitals, banks, trade associations etc... The institution which the writer of this paper belongs to is a public research university, also a typical public sector. The writer has interviewed several colleagues recently; I ask them like "Do you wish your children will do the same occupation like you in the future?" This question is designed like this: seemingly we ask the respondents' job expectation on their children. Actually, we want to investigate their job satisfaction, identification and belonging. The relationship is like this: if the respondent has higher identification and belonging to his/her job, and gain job satisfaction, then he/she is more likely to expect his/her children to engage in the same occupation.

So, through this indirect way we could get the respondents' real ideas about the identification and belonging to their jobs (Of course, we could also directly ask the respondents "do you have higher identification and belongings to your job?. Whether strangers or colleagues the respondents are, we don't think they will tell the real answer. So we adopt this indirect circuitous way to interview them.) Except for several colleagues give the positive answer (These colleagues, based on my personal observation, usually performed very well at work, and have extraordinarily teaching performance.), most people give the negative response. When I ask why, answers mainly focus on "high pressure, and low income" [US scholars Rumbley, Pacheco, and Altbach have made a 28 cross countries survey; Chinese college teachers who have just entered the job earn the least salaries among those countries, which is about 259 US dollars per month adjusted through PPP (purchasing power parity).] Maybe this is an only accidental finding.

After that, the writer made two investigations in two different public sectors. The first one is a tax department in Beijing; in April this year we ask about 50 managerial personnel the same question "Do you wish your children will do the same occupation like you in the future?", about 80% of the respondents made the negative answer, and some made no answers. When ask why, it's same like "high pressure, and low income". The second survey is done on April 11 this year. 50 core teachers from primary schools in Dandong city Liaoning province are asked the same question. Except for 2 teachers, others gave the negative answer, and when ask why, it is also same like above. Through these two investigations and one interview we find that there are problems in the salary system in Chinese public sector. Lower salary couldn't afford most of the living needs, and this forces the employees in public sector have to find other ways to increase their income. The reform of salary system in Chinese public sector is not the focal point of this paper; the writer will discuss it in another article. Another finding through these investigations is the job burnout in

public sectors. Many employees in public sector haven't higher identification and belongings, and this paper is trying to discuss and solve this problem. The rest of the paper consists of 4 parts: the second section will review the literatures about job burnout in Chinese public sector. The third section suggests the job thriving from the positive psychology perspective, and this is a way to overcome the job burnout; the fourth section analyzes the occupation strength as one important element of occupation thriving. The fifth section sums up.

#### Literature Review: Job Burnout in Chinese Public Sector

The following part will review the literatures about job burnout in Chinese public sector. Which papers have made and what findings we have known. Wang weihua(2008) has made a survey on 339 government employees in Tianjin city in China, and found most of the respondents appeared medium degree of job burnout. And suggests improving the problem through personal, organizational and social level. ZHANG Hong-xia and CUI Ning (2009) investigated 150 college teachers in Tianjin University of Science and Technology, and found the emotional exhaustion has appeared. They suggest relieving and preventing job burnout through social, university's and teacher's ways. Pan xiaohua(2011) studied the job burnout of nurse, and recommended relieving it through organizational environment, social environment and personal ways. To sum up, the above researches about job burnout in public sector in china suggest some methods to relieve the problems. These methods may make people who are burnout normal, but it won't unleash their potentials and make excellent performance.

#### Positive Psychology Perspective: Job Thriving

Professor Martin Seligman believes that traditional psychology has put too much attention on psychological diseases, and less on how to fulfill people's potentials and make people work and live prosperously. As to the job burnout, the writer believes we should take the same way. Many studies on job burnout could relieve the problem, but it won't unleash their potentials and make excellent performance. Following the thinking model of positive psychology, the writer believes that we should find the answer from the opposite side of job burnout, which are ideas of job thriving.

Firstly, let's take a look at positive organization behavior's some points about thriving. Spreitzer et al. (2005) suggest that vitality and learning are two essential components of thriving. Vitality refers to the positive feeling of having energy available, reflecting feelings of aliveness. and learning means individual acquire knowledge and skills, meantime apply these knowledge and skills. So thriving registers the joint sense of vitality and learning, and it includes two sides, the affective factor of psychological experience and cognitive factor. According to Spreitzer et al.'s definition of thriving, the writer believes that job thriving means learning with vitality in some occupation. It is not thriving when someone has vitality without learning in his work. Likewise, either when someone learns without vitality. It is common employees learn without vitality in Chinese public sector. For example, there are lots of meetings in public sector to learn documents from superior government; it is common employees doze off, or play cell phone, absence of mindedness in these meetings.

Then how to make employees in public sector more vigorous? Generally, there are several ways: first, from individual level, you need to improve in body strength, emotional energy and cognitive activity. Then, the leader of the public sector should adopt democratic style, and it is helpful to fulfill the potentials of subordinates. Third, the character of the work should be designed as autonomy, completeness, feedback; the tasks needs diversified skills and should be valuable and meaningful. Last, trust and higher cohesion based on values could engender more job vitality.

### Job Strength And Thriving

Besides job vitality and learning, the writer suggests job thriving has another important element, which is job strength. In order to achieve job thriving, from internal side it is necessary to learn with vitality; moreover from external side to exert the certain job strength for different jobs. Job strength means comparing with other jobs what advantages specific job has. For example, teachers' strength is its working time freely, and about three months holiday (In China, there usually are one month winter holiday and two months summer holiday in primary schools, secondary schools and colleges etc.) When analyzing the job strength, we will indicate the respondents write down three outstanding advantages comparing with other jobs. And then we will discuss together how to bring every advantage into play, with what methods, and what factors will hinder the play, how to overcome. For instance, teachers' strength is winter and summer holidays, if teachers continue to work instead of relaxing on holidays then the strength is sacrificed. Why is that? One reason maybe the low income. And another important reason is that teachers can't really enjoy the pleasure of leisure. For example, many leisure ways like self-help travelling, scuba diving, rafting, snorkeling, ski and so on which need skills that is not every teacher has. So the balance of work and life is broken, teachers become busy like other jobs in China. The ideas of job strength are put forward not very long time ago, so subsequent empirical and case studies are encouraged.

### Summary

Through two surveys and one interview, this article suggests job burnout in Chinese public sector. Most studies on job burnout in Chinese public sector raise corresponding solutions for the job burnout. And from positive psychology perspective the writer proposes the opposite of job burnout, which is job thriving. How to realize job thriving are discussed from job vitality, job learning and job strength.

More and more related empirical and case studies are needed and encouraged in the future.

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# SOCIAL RESPONSIBILITY IN LATIN AMERICAN BUSINESS SCHOOLS: A TOPIC OF REAL INTEREST

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## ABSTRACT

*The concept Social Responsibility has long been investigated and applied in the corporate sphere, but today, is starting to be considered of real interest to latin american business schools. Universities play an important role as channels to knowledge and link between community and business organizations. Today universities collaborate with society not only by being responsible for knowledge transfer, but also, for human and professional education under universal ethical values. Therefore, this work objective is to make a bibliometric analysis of major magazines on the studies related to social responsibility in universities, to analyze productivity levels and know if there is a real interest in the subject between the major research topics in the field of the scientific community. The results suggest that the social responsibility in universities is a subject of great and increasing interest in scientific communities at internationals level*

**JEL:** L14, L15, M14

**KEYWORD:** Social responsibility, University, bibliometric analysis, Research

## INTRODUCTION

Today the "socially responsible" label has become an competitiveness indicator to companies struggling in international markets. The theme of social responsibility is becoming more important both at the corporate and educational levels. Investigations levels has been increasing, but still they are no deep enough, and it is necessary to differentiate between the study of Social Responsibility and the degree of awareness and commitment that higher education institutions have shown on the subject. Universities seek to form men and women of integrity, Remolina (2003), which are able to provide professional services under ethical and humanistic criteria, with solidarity and service excellence. It seems simple, but it is not easy to achieve, therefore, universities are bound, by the society and non-governmental organizations, to implement principles of Social Responsibility in the different key processes each day: training, research and extension. Within the analyzed literature we found contributions in where the action field of universities is being expanded in terms of sustainable development (Segalas, Ferrer-Balas , Svanström, Lundqvist, & Mulder, 2009); the integration of social responsibility concept to professionals, making an impact in education level, which includes ethical and social values (Bampton & Maclagan, 2005); some launches related to SRU initiatives (Lukman & Glavič, 2007); (Van Weenen, 2000) and those focused on the environment (Atakan & Eker, 2007; Hammond & Churchman, 2008); education commitment to peace seeking (Salgado, 2004).

Universities are considered as main elements to, meet the requirements of production, social needs, with an active role on the society transformation (Parra, 2010; Pérez et al., 2003), identify the human capital and social capital as a key pieces to reduce poverty and injustice, that despite

the advances in science and economic development, are still present (Kliksberg, 2005); focusing in social virtue and how to manage the operations involving economic, environmental and social sustainability; search for respect on moral values, beyond any particular interests, (Argandona, 2009); a commitment of university organizations to the society in which they interact (Aguirre, Pelekais, & Peace, 2012; Carneiro, 2004; Guédez, 2006), among others. However, universities have not received sufficient attention in the scientific field, which, generates the need to analyze the social and environmental impacts as well as the role that it should take within society and the risks involved when it sends professionals lacking of social values to the labor market, and the need of a preparation for their development in the globalized environments in which they develop in companies. This shows our interest in investigate the existing theoretical fundamentals, and to achieve this we are running a bibliometric analysis on the theoretical development of the social responsibility in universities, to measure its activity and scientific repercussion

## REVIEW OF LITERATURE

Social responsibility has its origin in the United States, in the wake of the Vietnam war in the late fifties. It grows on importance to the business world from the nineties when already abundant literature on the theme appears, where some authors speak of four components of social responsibility: the legal liability, ethical responsibility, economic and finally philanthropic responsibilities. (Fontaneda, Camino, Mariscal, & Jesús, 2007). At present times there is a growing interest in corporate social responsibility, so it is possible find a multitude of initiatives such as: the promotion of the Global Pact by the UN, in Spain the ASEPAM (Spanish Association of the Global Pact), the development of the ISO-26000 (guide to management of business social responsibility), Social Accountability 800 Standard (Code of socially responsible behavior), the publication of the green paper of the Social Responsibility of the

European Council of Lisbon), the CRE (Association of Spanish companies), the white paper of the social responsibility, which contains 60 appearances of experts, among others Corporate social responsibility must be defined in terms of what the company is, where the social value is identified by taking into account the factors of improvement or deterioration in the peoples decision quality (the ethical dimension), the creation of better conditions, or at least not worse for future generations (environmental dimension) and conflicts, cooperation or the power in society and their consequences on the present and future generations (social dimension). Therefore, it should be addressed in terms of value creation and approach to the concept of social responsibility: origin and evolution. (Kochan & Osterwalder, 1994)

Ana Díaz de Iparraguirre (2008) defines it as the joint action of the whole company (workers, managers and owners) aware of the role that it has as business unit that creates value, and that survives in a space that is lucrative. From this definition Iparraguirre highlights several features to limit the concept of Social Responsibility in Universities:

- Social Responsibility appears when the organization becomes aware of his environment and the impact that generates in it.
- Become aware not only of the economic but the ethical concerns.
- The collective action of the organization where respond to the demands and needs of those affected.
- The definition of what is good and what is not, and should be left to do, depending on the dialog between the concerned and affected by the organization services

Iparraguirre identifies the evolution that the companies have had to suffer to move from a

philanthropic movement to a real social responsibility, it is now the turn of the universities to set aside their social projection and play the role of active players in the process of social responsibility parting from training within the University. The University, according to Morin et al (2003), from a holistic view should try to articulate the various parts that comprise it, as a project of social promotion of ethical principles and sustainable and equitable social development for the responsible production and transmission of knowledge and the training of teachers and citizens equally responsible. The University along the history has played a very important role in the process of transmission of knowledge and collaboration as a link between society and business. The Lisbon European Council (2000) makes the observation that the University should play a role not only of transmitting knowledge source to facilitate the professional development but also the ethical progress, the realization of its staff, and the solidary linking with the general interests of any nation. That is why it is of great importance the comprehensive training and the social commitment in the execution of the role of the University within the processes of university level education that contribute to sustainable development, now called Social Responsibility in universities (SRU). For Remolina (2003) it is important that universities provide professional services under ethical and humanistic criteria, of solidarity and service excellence.

It seems simple, but it is not easy to achieve, therefore the universities each day are bound by the society and non-governmental organizations to implement principles of Social Responsibility in the different key processes: training, research and extension. For Aguirre et al (2012) universities in their internal and external dimensions must generate social responsibility as institutional commitment, not as an indicator framed in the governmental political principles, since such it should be an interpretation of the action and strategic voluntary attitude with their people, to ensure the competitiveness of significant quantitative facts, allowing ideas exchanging, integration of values, behaviors, and the internalize of social needs both internal and external.

## **METHODOLOGY**

The methodology used is a descriptive and retrospective bibliometric analysis, conducted through the analysis of the number of published articles in different magazines registered in the database and in ISI Web of Knowledge database. Bibliometrics consists in the application of mathematical and statistical methods to measure quantitative and qualitative changes that occur in the scientific literature ((Suriñach, Duque, Royuela, & Ramos, 2002). Flores et al., (2004) Defines bibliometrics as a "tool that lets you develop a set of indicators referring specifically to the production of a scientific discipline, providing, in this way, a basis for discussion to estimate the degree of consolidation and development of the it". The bibliometric analyzes allow us to improve the electronic access to the repositories of scholarly publications through a greater number of databases. (De Bakker, Groenewegen, & Den Hond, 2005).

We included in this analysis only original articles, that is, only those that provided their own results that had not been previously published. To start the investigation requires select and examine the indexes that allow conclusions on the situation in accordance with the proposals set out in the literature (Agudelo, Bretón-López, & Buela-Casal, 2004; Flores et al., 2004; Pérez et al., 2003).

The articles were obtained from the database Web of Knowledge of the ISI( The Institute for Scientific Information) that was founded by Eugene Garfield in 1960 and acquired by Thomson (Thompson Reuters) one of the largest companies in information. ISI maintains Web of Knowledge, a platform based on web technology and formed by a wide collection of bibliographic databases, citations and references of scientific publications of any discipline of knowledge, both, scientific and technological, humanistic sociological. (Salvadores Santamaría,

2012) For each material we took the number of authors per article, the nationality of the authors, quantity of bibliographical references, year of publication of articles, type of work performed. First we proceeded to look for those scientific journals that might relate to the area of knowledge, to this end, we used the virtual library of the Instituto Tecnológico de Estudios Superiores de Monterrey, in which are included the following databases: EBSCO and ProQuest. The next step was to include in the search engine of the virtual library those words, which could facilitate the search for scientific journals that addressed in its publication the university social responsibility. In this case, the search terms used were: "University Social Responsibility" "Business Ethics" "University" "Social Responsibility" "Survey of School" "Higher Education", teaching and research. It was subsequently analyzed the editorial line of the magazine.

For this reason, our search enabled us to find a comprehensive listing of potential scientific journals, of which, we select those that, by the characteristics of its editorial line, will be adjusted with more precision to what we're looking for, i.e. scientific journals that include in their volumes of publication work of university social responsibility. The main electronic journals found were the following: Revista Internacional Administracion y Finanzas, Revista d'Économie Financière, Revue Management et Avenir, Revue Reancause du Marketing, Decisions Marketing, Review of Management & Economic, Business Ethics Quarterly, Academy of Management Learning & Education, Business Ethics Quarterly, Business Ethics: A European Review, Higher Education Policy, Journal of Studies in International Education, British Journal of Educational Technology, Research in Higher Education, Strategic Finance, Journal of Marketing Management, International Advances in Economic Research, Journal of Financial Service Professionals, Journal of Management Development, Journal of Property Management, Journal of Advertising, Journal of Marketing Research, Administrative Science Quarterly,

Kiplinger's Personal Finance, Communications of the ACM, Academic of Management Learning & Education, Journal of Financial Planning, Journal of Product Innovation Management, Strategic Finance, Economics of Innovation & New Technology, Russia & FSU General News, Financial Accountability & Management, Region Formation & Development Studies, International Journal of Technology Management & Sustainable Development, Advances in Management, Academy of Educational Leadership Journal. The analysis of the database ISI Web of Science Social Science Citation Index, in the branch of the social sciences, allowed us to know which magazines of those identified in the digital library of the ITESM are included in the ISI database, and therefore, are considered high-impact journals based in JCR (Journal Citation Report). For this purpose, the scientific journals of greater impact are: Business Ethics Quarterly, Business Ethics: A European Review, Journal of Business Ethics, Research in Higher Education, Research papers in Education, Revista Española Pedagógica. Finally, once identified and selected the scientific journals object of analysis, the selection of those that might relate to the university social responsibility is based on an analysis of the titles, keywords and summaries provided by them. Of the 325 titles that resulted from the search using the key words already mentioned, we reviewed the introduction, results and conclusions earning a total of 100 articles that describe the practices of study

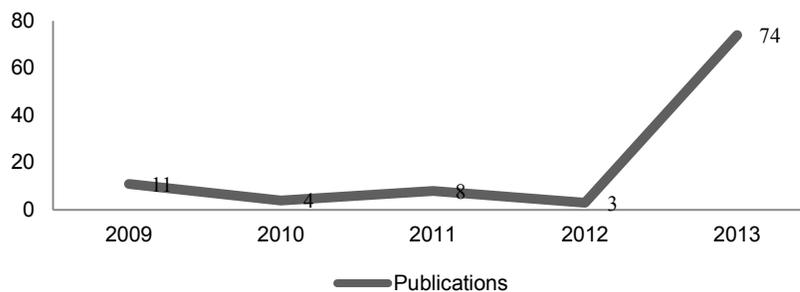
## RESULTS

A literature review was performed on the topic investigated, with a purpose to identify background of studies in University Social Responsibility. As a result we were able to see a growing development of the theoretical research in this area; however, in the ISI we could not find any bibliometric studies referred to the subject that will analyze the behavior of the scientific production in this area, which fundamentals the need for this type of study. The

bibliometric study identified 325 titles published in the ISI database during the period 2009 to 2013; 100 of them addressed University Social Responsibility at different levels in a straightforward manner. A literature review showed us an increase in the theoretical investigations in the field in 2013 as we can observe in the Figure 1, however no bibliometric study was found referred to this topic that analyzed the need for performing this type of study.

Among the most prominent countries within the scientific production on the subject, we find USA with 30 articles, followed by England with 10 articles, Canada with 9, Spain with 7 and Turkey with 6 (figure 3). In a second block, with 5 articles, we find Australia, Malaysia and South Africa. In contrast with the level of publications by developed countries we find Latin America with only 10 articles, which represents 0.10 % of the total number of publications.

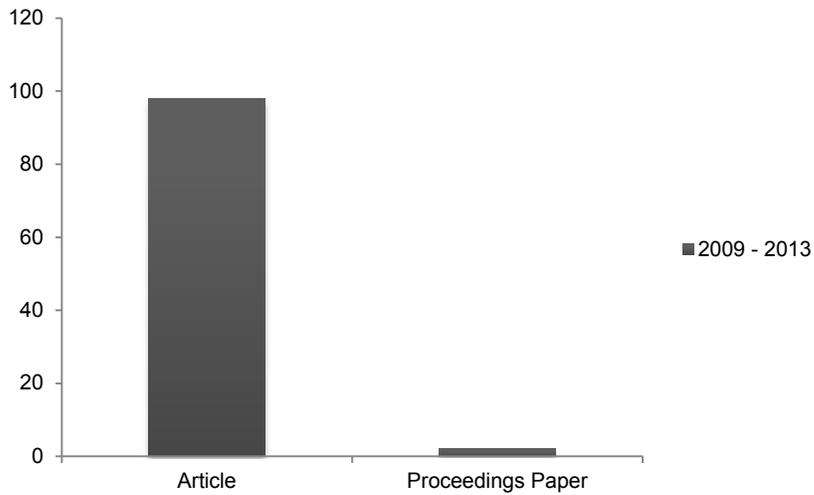
Figure 1: % Publications Per Year (2009 – 2013)



*Source: Own development*

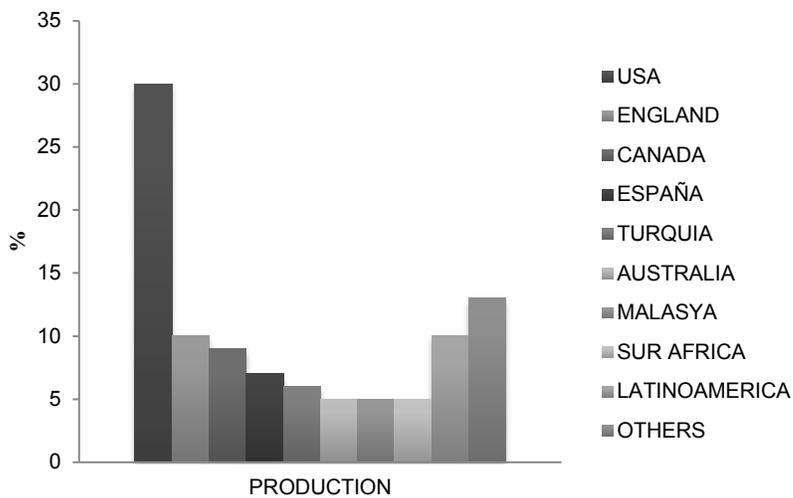
Figure 2 shows the distribution of papers according to the type of document, where the Journal Magazine is equivalent to 98 %.

Figure 2: Type of Documents Evaluated



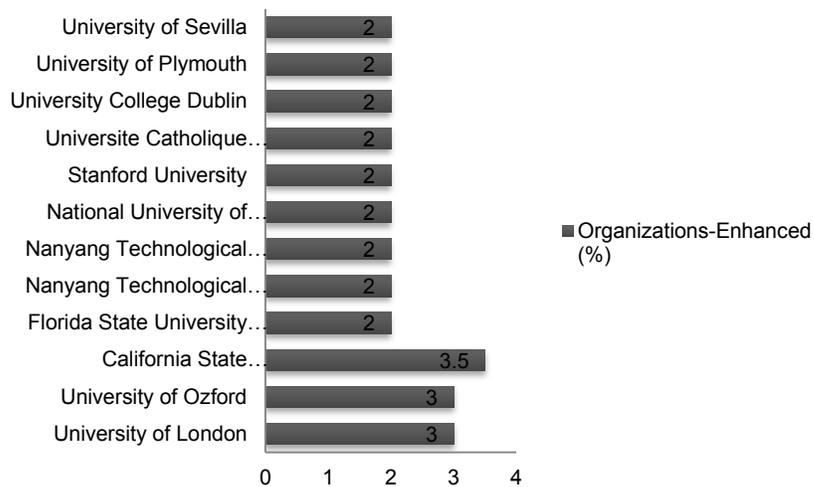
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Figure 3: Distribution of Articles on Social Responsibility University (2009 - 2013)



Source: Own development

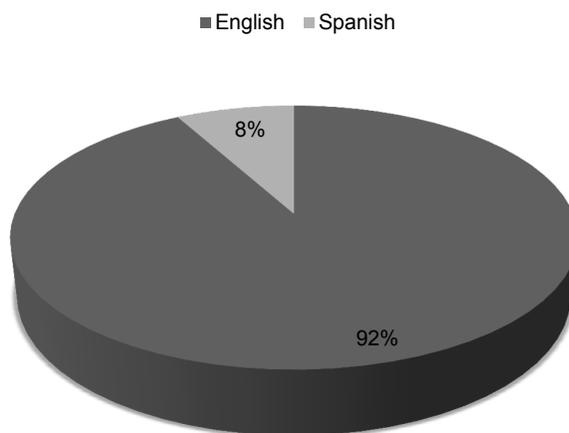
Figure 4: Productivity by Institutions (2009 - 2013)



*Source: Own development*

Figure 4 illustrates the productivity of the institutions on the subject within the indicated period, where the most representative were California State University, University of Oxford and the University of London. The indicator of productivity by institution is consistent with the predominant language is English in 92 %. (Figure 5)

Figure 5: Publications Per Language (2009 - 2013)



*Source: Own development*

The papers were cited 308 times of which 307 were not self-citations, that is to say, that the same author is referenced with other subsequent works. In summary, the average number of citations per article is 3.08. Another index is the h-index that tells us the number of publications containing more than 20 events, which in this study was 8.

## CONCLUSIONS

From a scientific or research point of view, there is a clear upward trend in regard to the volume of scientific papers published on the university social responsibility, thus confirming the stipulated by López, J & Sanchez, M. (2009). It is noted that only have 100 registered jobs of a total of 10,000 publications that compose it, being the level of theoretical and experimental research in the topic still low.

Of the 380 authors recorded only 2.08 % of them collaborate intra-institutional while their level of inter-institutional collaboration is almost zero. The Price Index tells us that the percentage of references used with at least 5 years of age is 4; we confirmed that there are very few publications on the subject. The indicator h-index confirms to us that the references used in average in each article are 8 being low to the importance of the issue raised in the present.

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# PATHS TO INSPIRE DEVELOPMENT OF A KNOWLEDGE-BASED INDUSTRY IN THE TRANSITIONAL ECONOMY

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## ABSTRACT

*This paper examines how intangible assets and cross-regional differences affect the revenue of the knowledge-based activities. A multilayer perceptron (MLP) analysis was conducted for 11 information technology activities in the Republic of Croatia for the period between 2002 and 2007 comprising 1.062 data. R&D expenditure, intellectual property rights, goodwill, other unclassified intangible assets and regions predict the change in revenues. The results show that the intangible assets and regional differences explain variations in revenues. The best predictor of the activity's revenue performance is the value of activity's intellectual property rights. The unit of analysis is the information technology activity within a county which limits the firm specific comparisons. Future research should incorporate firm level comparisons and a panel analysis in order to confirm the relationships provided by the MLP analysis. The findings suggest the strong impact of formal intellectual property rights protection by portraying regional discrepancies. These findings enable fostering innovation in the knowledge-based IT sector thereby providing recommendations for the developments of other sectors. This is especially meaningful for countries such as the Republic of Croatia, a new EU member state, which is experiencing continuous economic transition and which companies perceive formal intellectual property protection as less significant.*

**JEL:** C45, O31, O32, O34, O43, P31

**KEYWORDS:** Intangible assets, Intellectual property rights, Regional development, Information Technology

## INTRODUCTION

A country's economic development rests on the entrepreneurial potential of its companies. An entrepreneurial mind causes innovation and technological change (Schumpeter, 1934) leading to a short-term lock-in value within their regions of occurrence. Schumpeter asserted on the role of institutions as facilitators of entrepreneurship wherein the short-term effect is the result of the increased competition coming from the adoption of innovations by the companies' rivals and imitators. A company must continuously innovate in order to achieve the competitive advantage given in its value added products and services. In this paper the illustration of the IT sector's activity is done to describe the relationships between the determinants of its regional economic development given in the IT sector. The paper portrays the possible linkages and their strength between the value of the IT activities' intangible assets and their impact on the sales revenue.

## LITERATURE REVIEW

Schumpeter (1934) posed a premise that the innovation is driven by large companies. The drive is explained in their higher portion of resources and capital necessary to invest into research and development. If entrepreneurship is viewed from the behavioural perspective (Mcquaid, 2002),

then it can lead to a variety of implications for policies which promote entrepreneurship of all companies' sizes.

Many studies assert onto a regional support for innovation and entrepreneurship (Dick and Payne, 2005), the agglomeration effects and the influence of clusters at the regional level (Collinson, 2010), state aid programmes for innovation and technology, and the role of the regions regarding adoptions of a necessary legislative framework (Rolfo and Calabrese, 2003). It can be stated that regional social capital originates from the embeddedness of companies into regional networks of social relationships in which beneficial collaboration is fostered by catalyst norms, values and customs. As innovation is increasingly considered a network effort, embeddedness and intangible assets help in explaining how and why networks of innovating companies are successful (Rutten and Boekema, 2007).

The common way of introducing new technology pursues purchasing new machines and equipment to reduce costs and improve quality of production processes (Rolfo and Calabrese, 2003), while companies' intangible assets determine how effective regional innovation networks function. McQuaid (2002) states that the established entrepreneurial culture is embedded into locations. This notion is often pointed out when referring to the European clusters and the collaboration pattern of companies within it. If Schumpeter's notions on innovation are translated into different units of observation such as regional contexts of the counties, it would suggest that bigger counties, according to the sales revenue of the IT sector companies, have higher R&D expenditures which lead to higher innovations observed in the value of their intellectual property rights (IPRs). Although global knowledge networks might render the regional environment less important, Tödting, Grillitsch and Höglinger (2012) argue for the spatial effect of innovation activities founded in their patterns of knowledge relationships.

Previous studies show that information and communication technology industries cluster geographically and have spatially clustered growth rates according to the innovating regions (in terms of patents) with a special reference to the concentration in larger urban areas (Maurseth and Frank, 2009). On the other hand, Tödting, Grillitsch and Höglinger (2012) found that that company location had less direct effect on ICT innovation by examining 110 ICT companies in three Austrian regions according to the extent they use particular knowledge sources from regional, national and international level and to what extent their innovativeness can be explained by the knowledge sourcing pattern and their location. Bramwell, Nelles and Wolfe (2008) studied the ICT cluster in Canada and found that many inter-firm linkages are non-local and that extra-firm institutional supports, such as the local university and industry association, are critical in sustaining and strengthening the cluster providing more support for the role of local and global knowledge flows and learning processes and the interaction effect of civic capital and local institutions for development of local economy. Hence, differences in regional social capital given in their intangible assets explain regional differences in economic development (Rutten and Boekema, 2007) where standards tend to be crucial for the creation of new industries and markets for novel ICT products and services (Williams et al., 2011). This research acknowledges a given assumptions and furthers them by examining the influence of R&D expenditures, IPRs and other intangible assets on the IT sectors' activities' sales revenues in the Republic of Croatia.

## DATA AND METHODOLOGY

This research examines the link between intangible assets of IT sector companies of all sizes in the Republic of Croatia according to the type of the IT activity, region and time. The data for the IT sector are multi-dimensional. They are cross-sectional for a specific year for the period between 2002 and 2007. The data for this study is obtained from the Croatian Financial Agency.

There was a total of 1.062 multi-dimensional data on the companies' IT activity observed in the regions. Croatian IT sector comprises eleven different IT activities according to the National Classification of Activities: computer and equipment manufacturing, computer wholesale, peripheral and programming equipment (software), retail of computers and office equipment, leasing of office machines and other equipment (including computers), hardware consulting, software publication, other consulting services and software sourcing, data mining, database construction and management, office equipment and computer maintenance, and other similar computing activities (Croatian Statistical Bureau, 2011). The unit of observation is the IT sector's activity within a NUTS II region, where each county belongs to a specific NUTS II region. NUTS II stands for the Nomenclature of Territorial Units for Statistics (NUTS) of the European Union based on the existing national administrative subdivisions divided according to the size of population that serves as a framework for the European Union's Structural Fund endowments. From 1<sup>st</sup> January 2013 there are 2 NUTS II regions in the Republic of Croatia: Continental Croatia and Adriatic Croatia. Continental Croatia comprises 14 counties, and is situated in the Northern part of Croatia. Adriatic Croatia contains 7 counties, and is located on the coastal front of the Adriatic Sea. The analysis is made according to the NUTS II classifications.

The research explores the neural network structures of perceived predictors, company's intangible assets and NUTS II regions, on the sales revenues of the IT activities within a county. For this purpose, the Multilayer perceptron analysis was conducted. Radial Basis Function analysis was also performed. Insignificant differences were found between the two. Hence, the paper illustrates the Multilayer perceptron analysis' results (MLP). MLP uses feedforward architecture composed of non-linear data modelling tools which consist of input and output layers plus one hidden layer. The data are divided into training (an estimation set), testing (used to prevent the overtraining set), and holdout sets (used to independently assess the final network).

Predictors in our MLP model include intangible assets as covariates and NUTS II regions as factors. Intangible assets are: Research and development expenditure (in the model: *R&D projects*), Concession rights, patents, commodity and service brands (in the model: *IPR*), Goodwill (in the model: *Goodwill*) and other intangible assets (in the model: *Other unclassified intangible assets*). The dependant variable is sales revenue of particular IT activity according to a year and a county. The values of intangible assets and revenues were observed in Croatian kunas (HRK). The data was standardized in order to minimize variations between different predictors and a dependant variable. The analysis controlled for the regional differences according to counties and the variations in IT activities. The following section presents the descriptive results and the results of the MLP analysis.

## EMPIRICAL RESULTS

The analysis incorporated IT sector companies of all sizes in the Republic of Croatia according to the type of the IT activity, regional context and time. 1.062 multi-dimensional data were obtained for the period between 2002 and 2007 comprising 11 IT activities and 21 counties within two NUTS II regions.

Internal descriptive analysis showed huge variations in the time-series change in values among R&D projects, IPRs and companies' goodwill according to a particular NUTS region. The time-series variation in values among R&D projects, IPRs and companies' goodwill are reduced by standardizing data. Hence, four predictors (R&D expenditure, IPR, Goodwill, Other intangible assets) and one dependent variable (Sales revenue) were standardized in order to define neural network structures by performing a multilayer perceptron analysis. Table 1 shows the descriptive statistics of the standardized values used in the analysis. Variables NUTS II, counties and IT

activity are nominal, and the time in years is the ordinal variable. The values of R&D projects, IPRs, goodwill, other intangible assets and sales revenues are scale variables.

The MLP analysis results are displayed for all years in order to draw valid conclusions set for the future panel analysis (Appendix A). Approximately, 70% of cases were assigned to the training sample, and 30% to the testing sample with the choice of the records done in a random manner. No data were excluded from the analysis. The analysis comprised 1 hidden layer with 4 neurons to prevent overtraining and better network visibility and increase the computational efficiency (Haykin, 1998), while a hyperbolic tangent activation function is used for both hidden and output layers. The average overall relative errors are fairly constant across the training (0.02; 0.15; 0.09; 0.03; 0.20; and 0.10) and testing (0.37; 0.98; 0.89; 0.27; 0.41; and 1.38) samples from 2002 until 2007 respectively. Hence the models are not over-trained and the future cases' error given by the network should be close to the reported errors. The yearly linear regressions between predicted and observed values are made to confirm their validity (Figure 1). It shows that the predictors, intangible assets' values and counties, explain the observed differences in revenues. The estimated equations are displayed in the Table 2 and given in Figure 2.

Table 1: Descriptive Statistics of Standardized Predictors

	N	Minimum	Maximum	Mean	Standard deviation
R&D projects	1062	-0.16	11.86	0	1
IPR	1062	-0.07	23.39	0	1
Goodwill	1062	-0.04	32.41	0	1
Other intangible assets	1062	-0.21	13.98	0	1
Sales revenue	1062	-0.20	14.47	0	1

Source: FINA, Authors' calculation.

Table 2: Estimated Yearly Regressions

Year	Estimated regression	R <sup>2</sup>	Intercept	Standardized beta
2002	$y = -0.03 + 0.81 x$	0.90	-0.03	0.81
2003	$y = -0.06 + 0.83 x$	0.82	-0.06	0.83
2004	$y = -0.05 + 0.84 x$	0.83	-0.05	0.84
2005	$y = -0.01 + 0.94 x$	0.96	-0.01	0.94
2006	$y = -0.03 + 0.48 x$	0.74	-0.03	0.48
2007	$y = -0.03 + 0.92 x$	0.90	-0.03	0.92
<b>Average</b>		<b>0.86</b>	<b>-0.04</b>	<b>0.79</b>

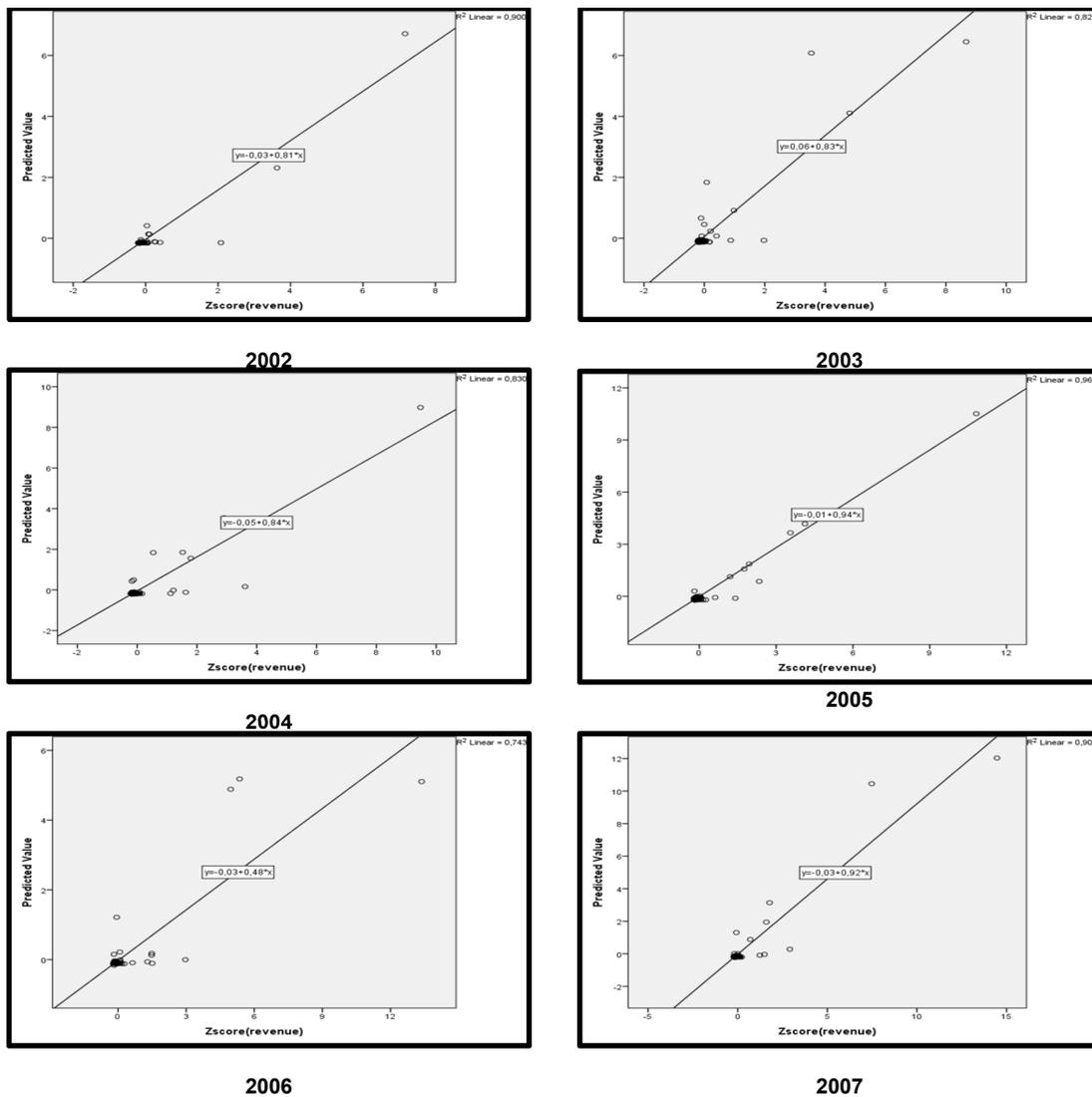
Finally, the MLP analysis shows the importance of the independent variable in predicting the observed or dependant variable (Figure 2). It is a sensitivity analysis done by measuring the extent to which the network's model predicted value modifications for altered values of the independent variable (Haykin, 1998). Figure 3 illustrates the highest importance of IPRs for all given years, while smaller importance is given to companies' goodwill, R&D projects and other intangible assets.

## DISCUSSION AND CONCLUSION

After 2002 the Croatian IT industry exhibited several negative trends such as the fall in value of the R&D projects' expenditures and a decrease in investment in telecommunications. Conversely, the positive trends included the growth of the goodwill of IT companies, constant growth of sales, number of employed in the sector and number of companies. These trends could be explained in deliverance of various strategies for the IT sector after 2002 and their institutional enforcement.

“The strategy for development of broadband internet access in the Republic of Croatia until 2008” aimed to decrease the lag in the broadband Internet access’ usage with the European Union member states. The strategy is being extended for the period between 2011 until 2015. In 2007 the program eCROATIA was based on the similar program of the European Union attempting to modernize public services such as public governance, education and healthcare. Hence, it can be stated that after 2002 the Republic of Croatia has continuously worked on the IT modernization in order to adjust to norms and technologies of the European Union and enhance its economy in trying to make it more efficient and competitive with the European Unions’. Particular lags exist due to lack of IT support in the public administration as well as the lack of IT literacy of low-skilled workers. “The Global Information Technology Report 2010-2011” illustrates the national IT sector’s competitiveness index, whereby Croatian IT performance continuously falls compared to other nations’. Nevertheless, the lack of market structure seems to be recognized by constant furthering of the given set of IT strategies.

Figure 1: Predicted Values on the Observed Charts

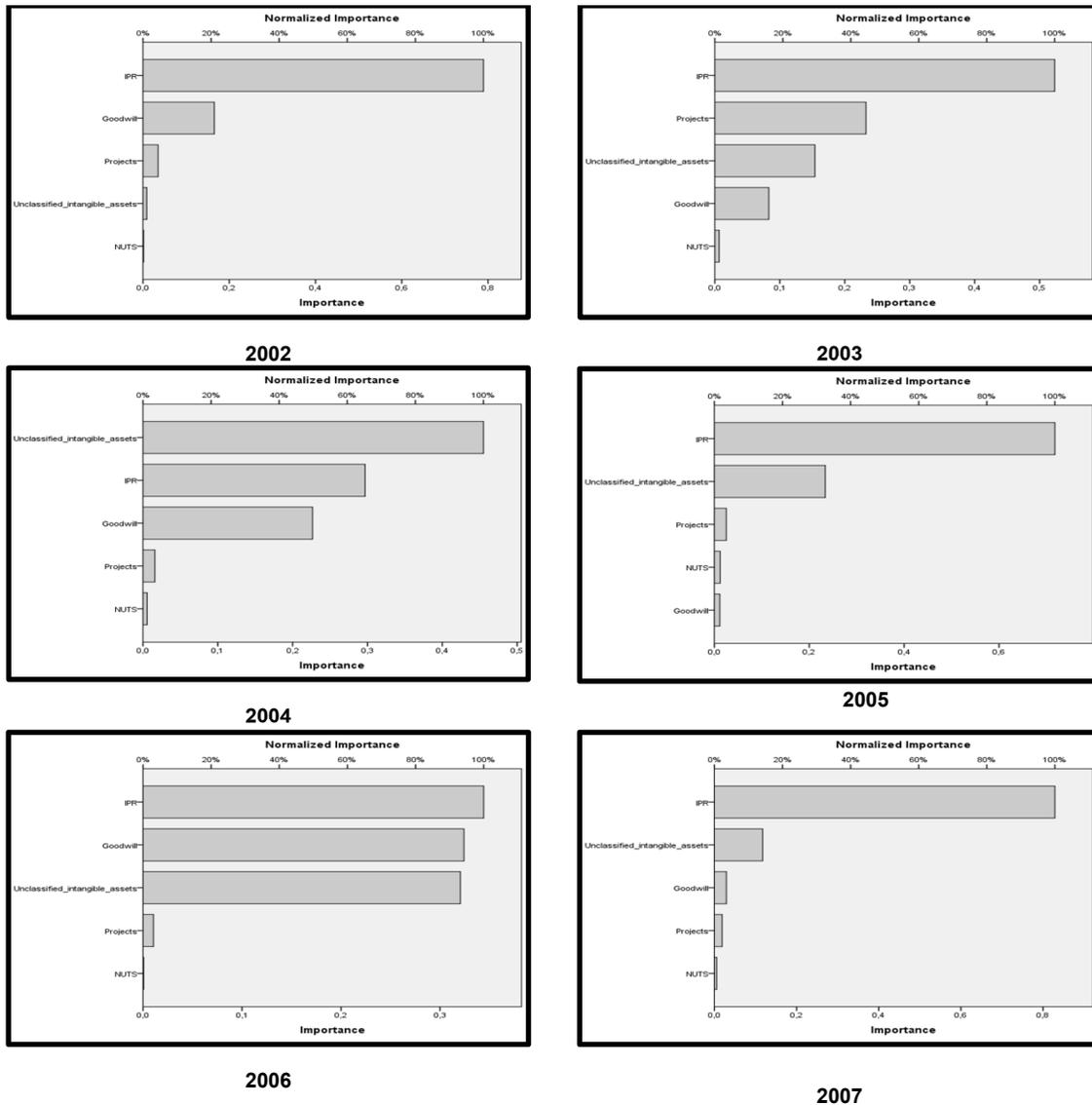


Source: FINA, author's calculation.

The empirical analysis in this paper has shown the importance of high-technology intangible assets for the regional sales performance in the Republic of Croatia as about 86% of the variations in data are explained by the analysis. The most important observed positive intangible asset was the value of intellectual property rights, followed by the value of goodwill, R&D projects and other intangible assets. The positive effect of intellectual property rights on the regional activity's sales revenue mark a plausible finding which relates successful innovation to higher added values captured by the rise in sales revenues. Although IT sector is led by efficiency increase, standardisation and task-orientation, it seems that it cannot evade the external isomorphic pressures bound by regional and professional activities' specificities. Moreover, the study aligns to the Maurseth and Frank's paper (2009) in illustrating that the values of the IT activities are more pronounced in the higher urban areas pointing to a significance of particular geographical clusters. The paper recognizes the drawback evident in differentiates the link between R&D project expenditures and IPRs generated by a company which could originate from acquiring technology. However, the nature of the obtained financial data could not account for this

difference. The technology transfer and adoption which marked the transition process of the Central and Eastern European countries managed to successfully transcend into the rise in sales revenues in the IT sector regardless of the source of its initial productivity increase, from the sound technology adoption or the fall in the employment in the sector.

Figure 2: Independent Variable Importance



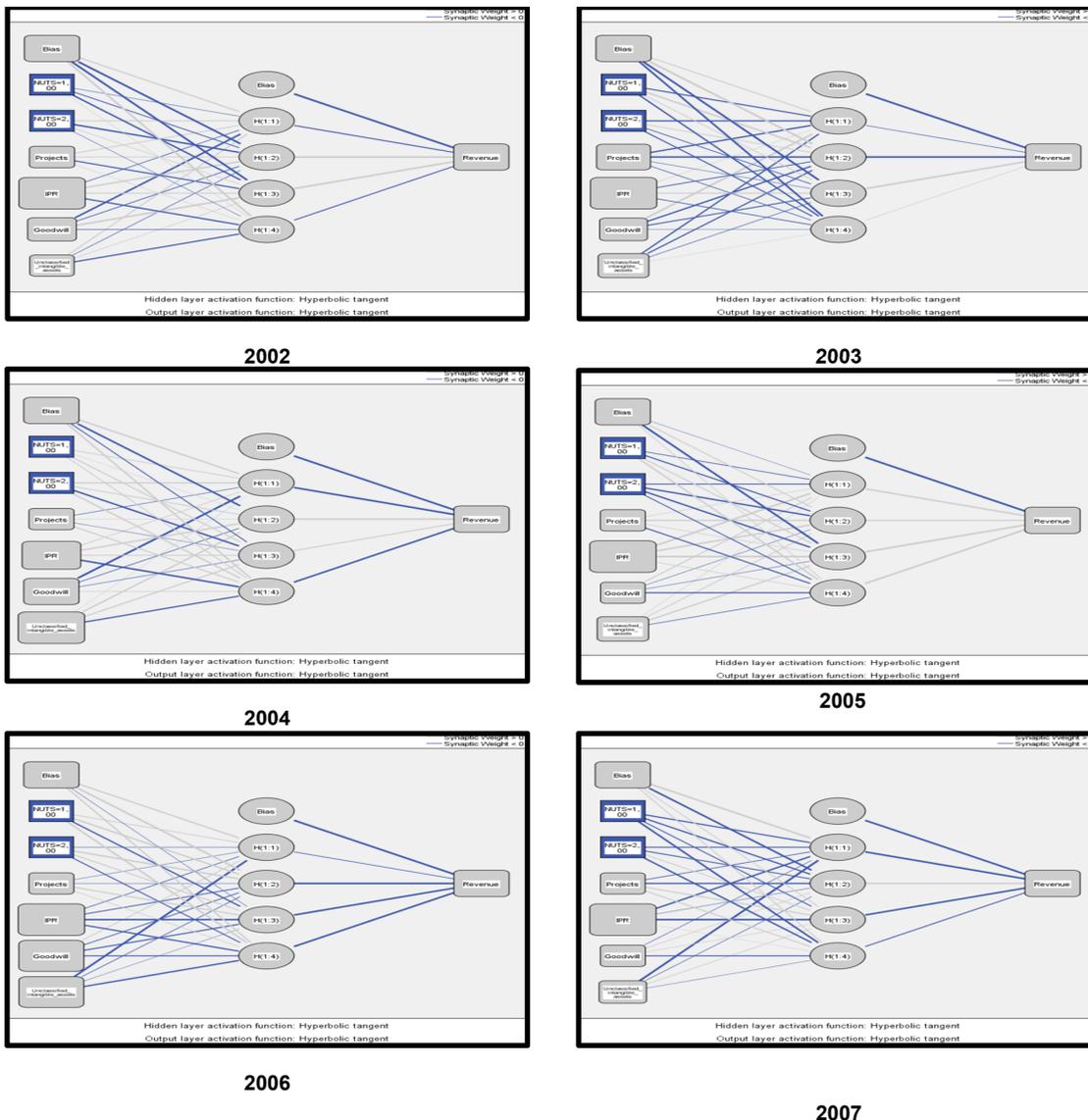
Source: FINA, author's calculation.

Finally, the IT sector and regions could profit from rearranging the regional institutional limitations often accentuated as administrative hurdles and excess bureaucracy damping every entrepreneurial aspiration including the regional institutional changes. The institutional changes and the environment that facilitates translation of R&D expenditures into innovations and consequently profit opportunities, should be the environment fostered by a strong knowledge network ties that allow the companies to easily integrate and focus their strategy towards global

innovation networks while preserving regional support for their innovative practices in within region collaboration. This remains to be an ambitious task within the international, national and regional contexts asking for the emergence of efficient innovation systems found on the triple-helix networks and open innovation structures which effects are to be evaluated in the subsequent periods.

**APPENDIX**

Appendix A: Network Diagrams



Source: FINA, author's calculation.

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# THE POSSIBILITY OF DEVELOPMENT OF FINANCIAL INDICATORS AT HIGHER EDUCATION INSTITUTIONS – CROATIAN CONTEXT

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## ABSTRACT

*This paper presents development of financial indicators at higher education institutions in the Republic of Croatia and assesses the contribution of financial indicators for performance measurement. We examine relevant literature as well as current accounting systems of Croatian higher education institutions. Based on information that we obtained from financial statements of 33 public higher education institutions we develop financial indicators that can be calculated under existing systems. The results show that it is not possible to develop whole set of financial indicators because there is a lack of accounting information especially cost information. The authors argue that although financial indicators are extremely important part of performance measurement system, there are significant problems with its practical development. Therefore, authors propose changes that need to be done in order to develop quality financial indicators at Croatian higher education institutions and those suggestions can be also useful for all countries that are trying to improve performance management in higher education.*

**JEL:** I23, M41

**KEYWORDS:** Financial Indicators, Higher Education Institutions, The Republic of Croatia

## INTRODUCTION

Higher education institutions (further in the paper HEIs) in the Republic of Croatia are mainly budgetary users (102 HEIs from total 135 HEIs are budgetary users) whose main objective is efficient and effective providing of higher education services while minimizing costs. However, Croatian higher education sector is presently facing with financial and institutional reforms because budgetary resources are reducing on the one side while on the other side we have increased demands for quality. So, there is a big problem of unbalance between available financial resources and financial need of HEIs. Even though HEIs are mostly non-profit organization they should introduce financial indicators from business sector in the area of effective management. In that context, the need for development of financial but also nonfinancial indicators, that would improve financial management and quality (Cullen et al, 2003) and would enable implementation of university strategy (Comaniciu, Bunescu, 2010) in higher education's system, seems logical and necessary but still there is no legal requirement for performance measurement not just at HEIs but also at whole public sector institutions in the Republic of Croatia.

So, in a view of the fact that Croatian HEIs are now facing severe financial and structural changes and that there is a need for reform, we think that HEIs in the Republic of Croatia firstly need to develop set of financial indicators that could improve lump sum allocation and introduce

performance measurement in the higher education system. Countries forerunner of the idea of measuring performance in higher education systems that already have well developed performance measurement system in all public sector entities are Australia and the United Kingdom (Vašiček, Budimir, Letinić, 2007). So, it is important to investigate good practice of these countries as well as existing accounting system as a base for possible development of financial indicators in the Republic of Croatia.

In this paper, we focus on key financial indicators at HEIs as an essential part of performance measurement system. Firstly, we examine relevant literature that deals with development of financial indicators in Australia and United Kingdom. Based on obtained data, we tried to develop set of financial indicators for Croatian HEIs by using basic financial statements of constituents of University of Zagreb. The paper closes with some concluding comments in which we propose changes that are necessary for development of quality set of financial indicators and improvement of financial management at HEIs in the Republic of Croatia.

## LIERATURE REVIEW

Performance measurement in the higher education systems includes the set of financial and nonfinancial indicators (Budimir, 2010). While financial indicators put focus on financial structure of HEIs, nonfinancial indicators are connected with customers, internal processes, learning and growth. Even though for performance measurement of education services it is necessary to develop both, financial and nonfinancial indicators, we think that in the case were performance measurement system is not developed at all, like at Croatian HEIs, that it is necessary to start with development of financial indicators. Because of that, in this paper we examine exiting set of financial indicators in countries like Australia and United Kingdom that among first started with its development.

The concept of indicators at HEIs in Australia is well established and consists from five groups of indicators (Department of Education, Science and Training, 2001): student indicators, staff indicators, finance indicators, research indicators and outcome indicators. For the purpose of this paper focus is just on key financial indicators which consists from (Department of Education, Science and Training, 2001, 2005): operating revenues as a share of total income %, operating expenses as a share of total expenses %, salaries and salary related costs as a share of total expenses %, remuneration per employee, expenses per equivalent full-time student units, by library expenses /other academic support services/student services, earned income as percentage of total income %.

Performance indicators in the United Kingdom provide comparative data on the performance of institutions in widening participation, student retention, learning and teaching outcomes, research output and employment of graduates. They cover publicly-funded higher education institutions in the UK. They are intended as an objective and consistent set of measures of how a higher education institution is performing. According to HESA (Higher Education Statistics Agency in UK) the indicators are calculated using both financial and nonfinancial information.

HESA (2009) listed on its web site key financial indicators for HEIs: total income in £000s, percentage ratio of total funding body grants to total income, percentage ratio of recurrent teaching grants from funding bodies for HE provision to total income, percentage ratio of recurrent research grants from funding bodies for HE provision to total income, percentage ratio of recurrent (other) grants from funding bodies for HE provision to total income, percentage ratio of total funding body grants for HE provision to total income, percentage ratio of tuition fees and

education contracts to total income, percentage ratio of full-time home/EU student fees to total income, percentage ratio of non-EU the course fees to total income, percentage ratio of income from research grants and contracts to total income, percentage ratio of department for business, innovation and skills research council grants and contracts to total income, percentage ratio of UK industry, commerce and public corporations research grants and contracts to total income, percentage ratio of EU research grants and contracts to total income, percentage ratio of other income to total income, percentage ratio of total endowment and investment income to total income, percentage ratio of contribution from research grants and contracts to research grants and contracts income, ratio of current assets to current liabilities, ratio of liquid assets to current liabilities, days ratio of total general funds to total expenditure, days ratio of total general funds to total expenditure (excluding pension reserve and pension cost adjustment), days of current income (excluding funding body grants for the provision) represented by debtors, percentage ratio of total staff costs to total income, percentage ratio of total net cash inflow from operating activities to total income, gearing ratio, percentage ratio of premises repairs and maintenance to total expenditure, percentage ratio of interest and other finance costs to total income. From the presented indicators it can be concluded that the UK has well developed system of financial indicators that can be very useful for its development in the Republic of Croatia.

## METODOLOGY

Research about possibility of development financial indicators in the higher education system in the Republic of Croatia was conducted through data from basic financial statements of 33 constituents University of Zagreb which is the largest and the oldest University in Republic of Croatia. Public HEIs are disclosing balance sheet, report about revenues and receipts, expenses and expenditures and all mentioned statements are prepared on modified accrual basis. Modified accrual basis implies narrowed scope of provided information, especially costs information considering that there is no information about depreciation costs, which is directly reflected on calculation of financial indicators.

The data which were analyzed are from basic financial statements for 2011. Using the data, we tried to calculate the most significant financial indicators for Croatian HEIs which we propose based on review of key financial indicators in Australia and UK. Afterwards, we grouped by areas obtained financial indicators for the 15 biggest constitutes according to student's number and we calculated mean and standard deviation for every area of the University. The indicators that we tried to calculate are presented in the table below as well as formula for its calculation.

Table 1: Proposed Financial Indicators For University of Zagreb

FINANCIAL INDICATORS	FORMULA
total costs per student	direct+indirect costs/ number of students
total cost per graduated student	direct+indirect costs / number of graduated students
total cost of study	direct+indirect costs of courses
total burden of teaching staff	number of hours per teacher
average years of using equipment and other asset	average time of usage of equipment and other asset
average usage of library services	number of issued book per students
average cost of teaching staff	salary costs of teaching staff/ number of teaching staff
average cost of administration	salary costs of administration/number of administration staff
capital costs per student	capital costs/ number of students
percentage ratio of capital expenses in total expenses	capital costs / total expenses
percentage ratio of revenues from tuition in total revenues	tuition revenues/ total own resources
percentage ratio of revenues from state budget in total revenues	revenues from state budget/ total revenues
economy of total business	total revenues/ total expenses
gearing ratio	total liabilities / total asset
percentage ratio of interest expenses in the total expenses	financial expenses/ total expenses
percentage ratio expenses for employees in the total expenses	expenses for employees/ total expenses
percentage ratio of material expenses in the total expenses	material expenses/ total expenses

Source: Authors

## RESULTS AND DISCUSSIONS

Calculated financial indicators for 15 constituents (Faculty of Science, Faculty of Electrical Engineering and Computing, Faculty of Chemical Engineering and Technology, Faculty of Transport and Traffic Science, Faculty of Mechanical Engineering and Naval Architecture, School of Medicine, School of Dental Medicine, Faculty of Veterinary Medicine, Faculty of Agriculture, faculty of Food Technology and Biotechnology, Faculty of Economics and Business, Faculty of Humanities and Social Sciences, Faculty of Teacher Education, Faculty of Law, Music Academy) are grouped by 6 areas. In table 2 average values of chosen financial indicators are shown for every area of the University of Zagreb.

Table 2: Average Values of Financial Indicators For 2011 by Areas of Constituents of University of Zagreb

The biggest constituents of University of Zagreb according to students number grouped by areas		average capital costs	capital expenses/ total expenses	revenues from tuition fee/ own revenues	revenues from state budget/ total revenues	total revenues/ total expenses	total liabilities/ total assets	financial expenses/ total expenses	percentage ratio of material expenses in expenses for employees	percentage ratio of material expenses in total expenses	average capital costs per student	capital expenses/ total expenses
		per student	total	total	total	total	total	total	total	total	total	total
BIOMEDICAL AREA	Mean	3849,08	0,05	0,50	0,80	1,01	0,12	0,00	0,75	0,24	1314,00	399,75
	N	4	4	4	4	4	4	4	4	4	4	4
	Std. Deviation	3769,84	0,03	0,24	0,06	0,02	0,17	0,00	0,03	0,03	800,51	272,28
BIOTECHNICAL AREA	Mean	1945,85	0,04	0,14	0,76	0,99	0,08	0,00	0,72	0,28	1675,50	347,00
	N	2	2	2	2	2	2	2	2	2	2	2
	Std. Deviation	537,48	0,00	0,01	0,05	0,01	0,04	0,00	0,04	0,04	811,05	127,28
SOCIAL-HUMANISTIC AREA	Mean	401,07	0,03	0,77	0,60	1,03	0,16	0,00	0,73	0,27	8114,00	389,50
	N	4	4	4	4	4	4	4	4	4	4	4
	Std. Deviation	85,32	0,02	0,14	0,17	0,02	0,15	0,00	0,05	0,04	4959,89	253,42
NATURAL AREA	Mean	709,24	0,02	0,56	0,84	1,07	0,03	0,03	0,75	0,25	4949,00	721,00
	N	1	1	1	1	1	1	1	1	1	1	1
	Std. Deviation	.	.%	.%	.%	.	.%	.%	.%	.%	.	.
TECHNICAL AREA	Mean	1739,74	0,05	0,37	0,68	1,04	0,10	0,00	0,70	0,30	2977,67	354,67
	N	3	3	3	3	3	3	3	3	3	3	3
	Std. Deviation	935,12	0,01	0,20	0,05	0,03	0,09	0,00	0,03	0,03	1165,21	155,36
ARTISTIC AREA	Mean	50666,19	0,42	0,59	0,70	0,81	0,73	0,00	0,76	0,24	544,00	145,00
	N	1	1	1	1	1	1	1	1	1	1	1
	Std. Deviation	.	.%	.%	.%	.	.%	.%	.%	.%	.	.
Total	Mean	5165,80	0,07	0,51	0,72	1,01	0,16	0,00	0,73	0,26	3699,27	385,40
	N	15	15	15	15	15	15	15	15	15	15	15

Std.	12785,42	0,10	0,26	0,12	0,06	0,20	0,01	0,04	0,04	3789,89	216,57
Deviation											

Source: Authors' calculation.

From the table it is visible that average capital expenses per student in 2011 are the highest in artistic and biomedical area. But, it should be taken into consideration that in biomedical area is the highest standard deviation or average variation then standard. While the lowest average capital expenses per student are in social-humanistic area and in natural science. Further, regarding the portion of capital expenses in total expenses the situation is the same. Artistic area has the highest portion of capital expenses in total expenses and in average it is 42%. Whereas, in other areas, average values of portion of capital expenses in total expenses are between 2 and 5%. Previously has been highlighted how constituents of University of Zagreb are budgetary users and that are mostly financed through state budget. This is visible through average values of revenues from state budget in total revenues. Average values of financing out of state budget in 2011 are from 60 to 85% with differences between areas. So, the lowest value of average indicator of financing out of state budget is in social – humanistic area. This would mean that constituents in that area are using and some other financing resources. Constituents in natural sciences are financed out in largest portion from state budget which is visible from average value of average indicator of financing out of state budget which is for 2011 around 84%. Regarding economics of business activities, or average value of total revenues and total expenses indicator it can be concluded that in some areas total revenues are higher than total expenses, based on calculated average values. Those areas are biomedical area, social –humanistic area, natural science and technical area. While in biotechnical and artistic area average coefficient of economics of business activities is negative and the total expenses are higher than total revenues. Further, in observed sample average values of ratio between total liabilities and total asset are somewhere from 4 to 16%, but only for the artistic area total liabilities are even 73% of total asset. Financial expenses are not so significant in total expenses for all areas. In structure of total expenses, the highest ratio has expenses for employees and the average value is between 72 and 76%. Material expenses are next and they are in average between 20 and 30%.

Because of insufficient development of reporting system of HEI's it was impossible to calculate most of the key financial indicators. From shown calculation of financial indicators for chosen constituents of University of Zagreb it is visible that external reporting system does not provide enough information for calculation of relevant financial indicators. Therefore, it was not possible to calculate following indicators:

1. Total cost per student/ total cost per graduated student/ total cost of courses – because of modified accrual basis and because the costs are not tracked per cost objects,
2. Total burden of teaching staff – there is not any detailed allocation of working hours of teachers on teaching, researching and professional activity,
3. Average years of using equipment and other asset – there is not systematical shown depreciation costs based on objective time of usage,
4. Average usage of library services– the system of internal tracking to keep track with issued books per student should be implemented,

5. Average cost of teaching staff – from external reports it is possible to get total expenses for employees which shown teaching staff and administration staff and it is not possible to divide those expenses on teaching staff expenses and administration,
6. Average cost of administration staff - from external reports it is possible to get total expenses for employees which shown teaching staff and administration staff and it is not possible to divide those expenses on teaching staff expenses and administration,
7. Expenditures for paying off annuity of received loans as a part of total expenses and expenditures – in external financial reports there is not any information regarding those expenditures.

The research result shows that under the existing accounting system it is not possible to develop key financial indicators in the higher education system of the Republic of Croatia.

## CONCLUSION

The purpose of this paper has been to explore potential development of financial indicators at Croatian HEIs as a means of moving to the performance measurement. The calculation of financial indicators based on basic financial statements implies on a fact that in the existing reporting system of HEIs in the Republic of Croatia it is not possible to develop comprehensive performance measurement system. Moreover, the whole spectrum of information, especially cost information, is missing due to the fact that accounting system is based on modified accounting basis rather than full accrual basis. So, it was not possible to calculate some of the key financial indicators like costs per student of costs per programs. All before mentioned indicates on a need for implementation of cost and managerial instruments in existing accounting system of HEIs in the Republic of Croatia. We also propose development of full costing method by which all cost, direct and indirect, will be traced per cost object. However, this carries the problem of movement from modified to accrual basis of accounting for public HEIs. Therefore, our future research will be focused more detail on improvement of existing reporting system by introducing elements of cost and managerial accounting and creating an information base for the development of performance measurement in higher education of the Republic of Croatia.

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# SIMULATING THE TRANSMISSION OF EPIDEMICS THROUGH COMPLEX SYSTEMS: A CLASSIC MODEL

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## ABSTRACT

*For health officials and policy-makers to control the spread of epidemics is the top priority. However, challenges to deal with the outbreak and the spread of epidemics are multifarious. Because epidemics are of different types and many of their transmission routes are different, the extant research has used various models for spread of epidemics. Most of these models are studied under complex systems. Computer simulations provide interesting and valuable opportunities in understanding how epidemics spread among individuals. In the present study, we simulate the spread of the epidemics by using a classic complex systems model.*

**JEL:** C610; C630; I00

**KEYWORDS:** Complex Systems, Epidemics, Government Health Policy, and Simulation

## INTRODUCTION

Intervening in the spread of epidemics has been one of the central concerns of health officials and policy makers. Several sophisticated complex models have been proposed to conceptualize and analyze the transmission of epidemics (Breban, Vardavas, and Blower, 2005). Since the spread of epidemics is affected from a host of factors, we propose a complex systems classic-model to illustrate how microscopic activities—the spread of a disease from individuals—lead to the outbreak of large-scale epidemics at the macroscopic level. We simulate the spread of diseases using the software we developed to implement the proposed model and analyze the results of the simulation. In this paper, the term disease refers to an epidemic that is defined as a decrease in the threshold of host immunity to a parasite population (Calow, 1998). In the present research, we simulate the results of such an epidemic through a computer program (software).

Our research is important for three reasons: First, by using complex systems approach in modeling the spread of the epidemics, we show why government policy makers and health officials face so many challenges in effective interventions of the spread of the epidemics. Second, the study shows that spread of epidemics is based on several mechanisms, such as the susceptibility of the individuals. Third, a hosts of other factors such as feedback mechanisms, types of epidemics, the rate of disease spread to others also create challenges in fully understanding the impact of the disease at the macro-level. In the next section, we briefly describe some of the characteristics of complex systems.

### Complex Systems

The study of complex systems is emerging as an important area of interest for researchers and government policy makers that try to study the behaviors of “collectives” (Watts and Strogatz, 1998; Bhatt and Patel, 2012). Pipes connected through simple connections, networks, and assembly of randomly related actors- all point to the behavior of complex systems.

Crowdsourcing, traffic-congestion, stock market fluctuations, spread of epidemic diseases, information diffusion, and assembly of neurons in the mind are some of the examples that are studied under complex systems. In complex systems, the heterogeneous behaviors of several actors create a dynamic pattern at the global level. Second, complex systems consist of several interacting agents that are connected through several mechanisms, such as pipe-lines (referred as classic case) or networks and whose effects at the global levels are non-linear. Nonlinearity means that the impacts caused by small changes can have proportionately large effects. Below we discuss classic and network models are described below:

### Classic Model

This is the simplest kind of complex systems model in which agents interact in a series such as a pipe-line, connecting different homogeneous and heterogeneous sizes pipes. In the classic model, the spread of epidemics is based on the presumption that a person can initially be either sick or healthy. The disease can spread from an infected person to a susceptible individual. That is, if an individual is sick, the people who come in contact with this individual may or may not get sick. However, the sick individuals can eventually recover and become immune to the spread of the epidemics. This model is referred as the SIR (susceptible—infected—recovered) model of an epidemic.

### Network Model

Networks, such as billions of brain neurons, a power grid, human social networks, where one person is connected to several other individuals, is the next level of complex system that is more sophisticated than the simple classic model. For studying epidemic transmissions under network models, social networks among people have often been analyzed. The process of intermingling between individuals is referred as “contagion,” depicting contagious dynamics (Hill et al., 2010). Most of these models have, however, been analyzed in highly abstract mathematical terms, quite difficult to understand for policy makers and health officials, who are in charge of preventing the outbreak of diseases (Galea, Riddle, and Kaplan, 2010; Barabasi, 2002; and Barabási and Albert 1999). In the network model, the spread of infection is based on the connections between individuals. The complexity of this model depends on the fact that one individual can be connected with many other individuals simultaneously (Galea, Riddle, and Kaplan, 2010). The infections such as sexually transmitted diseases can be effectively modeled and simulated using the network model. This kind of model is referred to SIS (susceptible-infected-susceptible).

## **CURRENT RESEARCH**

Using a simplified classic model, we modeled layout of individuals situated in several rows to study the transmission of diseases. We developed probabilistic simulation software to study how quickly an infection spreads from sick individuals to the others, depending on the initial sick population and susceptibility of healthy individuals. That is, we examine how the microscopic events of infecting one individual to another leads to the macroscopic impact on the population. For example, if  $x\%$  of population initially have flue and the probability that the flue gets transmitted from a sick individual to a healthy individual is  $y\%$ , then what would the layout of individuals look like at every step of the spread, if no intervention has occurred to contain the infection?

## **METHODOLOGY**

As mentioned above, in this paper we propose a probabilistic model to simulate the complex system of epidemic transmissions using simulation software we have created in Visual Basic.NET. In the proposed model, the contagion spread is through the classic model. That is, the model assumes that infection can spread, depending on the probability of the susceptibility, from one individual to other individuals who are situated adjacently to the left or the right of sick individuals. Thus, the susceptible individuals are those situated very next to the infected individuals. In a diversion from the traditional SIR model, we presume that once an individual gets infected, the individual stays infected, and he/she can spread epidemic to individuals who are next to the infected individual.

The simulation program includes a graphical user interface (GUI) representing 21 rows of 21 individuals. That is, the GUI represents the population of 441 individuals. In our program, the GUI displays the sick and healthy individuals at the end of each state. We use the term *state* to refer to the layout of sick and healthy individuals at a given time. Different initial states are supplied by a user in terms of percent of randomly selected sick-individuals to produce different layouts. The initial state represents the start condition. State 1 signifies that the individuals who were sick in the initial state have passed their infection to their immediate neighbors. State 2 signifies that the individuals who were sick in state 1 have passed their infection to their neighbors, and so forth. In each subsequent state, sick individuals pass their disease to the healthy individuals, increasing the total number of sick individuals and making bigger clusters of sick individuals, which are measured in terms of blocks of consecutive sick-individuals.

The more advanced a state, the larger the total number of sick individuals and greater the number of large blocks of sick individuals. Our goal was to observe the state at which either (1) a significant number of blocks or consecutive sick-individuals are formed, or (2) a substantial portion of population gets sick. In this study, the user-supplied values, which are percentages of initially sick population and susceptibility, act as independent variables and the specific state acts as a dependent variable. In addition to the state, the spread of an epidemic also depends on the interval between the states, which is the speed of the transmission. The interval depends on the type of disease for example, an interval between states for an epidemic that spread incredibly fast such as the 1918 flu pandemic, would be much shorter compared to the interval for AIDS. Since the model is based on finite-state machine essentials, it exclusively conceives the notion of states and does not account for the intervals between states.

### Design

To run the simulation program, a user first chooses various the samples representing the initially infected individuals from the population. The user can input either the probability that an individual is infected or the total percent of infected population. If the user chooses to input the former, the program assigned the supplied probability to each individual and finds which individuals got the infection using the randomness programming-function. The program marks these sick individuals in green. We choose 5%, 10%, 15%, 20%, 30%, and 33% of the randomly selected individuals from the population as sick. Next, we decided the probability of susceptibility, which is the probability that an infected individual passes its infection to the individuals on its left or right. For example, a 50% probability of susceptibility makes an individual situated on the left-side of an infected individual 50% susceptible, and similarly, the individual on the right-side of the infected individual has a 50% probability of getting the infection from the infected individual. We ran each selected sample with 5%, 10%, 25%, 33%, 47%, and 70% susceptibilities. Once we supply the values of initially sick population percent and the probability of susceptibility, the program animates the spread of the epidemic at every state.

The program also creates a text file listing the statistical data. These data include the total number of infected individuals, the number of consecutive sick-individuals and the number of such blocks, for example, “five occurrences of three consecutive sick-individuals.”

## RESULTS

The Table 1 organizes the effects selected initial-states and susceptibilities on the layout of sick individuals.

Table 1: Effects of Initially Infected Population and Susceptibility

Percent of Population with Infection	Initial with	Susceptibility Probability	States	Number of Occurrences of infected consecutive individuals				Total Number Infected Individuals	
				1 to 5	6 to 10	11 to 15	16 to 21		
10%	10%	10%	Initial Condition	42	0	0	0	44	
			1	42	0	0	0	47	
			3	40	0	0	0	64	
			5	39	0	0	0	74	
			7	39	0	0	0	90	
			33%	Initial Condition	41	0	0	0	44
				1	40	0	0	0	69
				3	30	4	0	0	114
				5	18	10	0	0	158
			47%	7	13	11	4	0	192
				Initial Condition	40	0	0	0	44
				1	35	1	0	0	76
				3	22	8	0	0	133
			70%	5	13	10	3	1	179
	7	6		12	2	4	221		
	Initial Condition	39		0	0	0	44		
	1	36		0	0	0	87		
	33%	3	20	9	2	0	165		
		5	5	12	4	3	230		
		7	1	11	5	6	269		
		Initial Condition	103	0	0	0	146		
	33%	10%	10%	1	102	0	0	0	158
				3	95	3	0	0	173
				5	77	7	0	0	229
				7	64	12	1	0	263
				Initial Condition	109	0	0	0	146
				1	73	6	1	0	223
				3	45	12	6	0	293
33%		5	24	9	5	8	355		
		7	8	7	2	15	389		
		Initial Condition	102	1	0	0	146		
		1	75	5	1	0	229		
		3	20	18	6	3	340		
		5	4	10	5	12	395		
		7	3	4	4	16	413		
47%	70%	70%	Initial Condition	98	0	0	0	146	
			1	44	10	3	1	259	
			3	13	9	11	5	364	
			5	2	5	5	18	411	
			7	1	3	2	18	427	

*The above table shows the simulator-generated data for sample runs with different susceptibility-probabilities and different initial-states. A susceptibility probability is the likelihood that an infected individual passes its infection to the individuals on its left or right. An initial condition is the layout of initially sick individuals that have not transmitted their disease to anyone yet.*

The first column shows the initial populations of sick individuals supplied to the simulation software as the start state. The second column shows the susceptibilities supplied to the simulation software as the probability of a sick individual infecting its right and left immediate-neighbors. The third column shows the advancement of states. Initial condition is where the initially sick individuals have not transmitted their disease to anyone. State one is where the sick individuals have passed their disease to their neighbors. State two represents the stage at which the sick individuals' neighbors' neighbors have been infected, and so forth. The fourth column shows how many blocks of sick individuals were found. For the brevity of the table, we have grouped the blocks of consecutive sick individuals in four groups. For example, take the rows for the 10% initially sick population with 33% chances of passing their infection. During the initial condition, there were 41 blocks of either one, or two, or three, or five sick-individuals in-a-row. There was no case of six or more sick individuals located adjacently. However, in state 3, we found four blocks in which there were six to ten consecutive sick-individuals. The last column shows the total number of sick individuals in each state.

Although we ran the simulation with the sample sizes of 5%, 10%, 15%, 20%, 30%, and 33% of the randomly selected sick individuals and each of these samples with 5%, 10%, 25%, 33%, 47%, and 70% susceptibilities, the table does not include the results for sample sizes 5%, 15%, 20%, and 30% for brevity. We are also omitting the results for the cases where the susceptibility for diseases is 5%, 25%, and 70%. Finally, we are not including the results for each state in this paper. For example, results for states two, four, six, and higher than seven are omitted for succinctness. In order to practically predict a disease spread, the simulator would have to run a larger number of times with the same user-supplied values to eliminate the variation in individual runs because of randomness. Instead of that approach, we have shown a breath of supplied values to illustrate the use and workings of the simulator without concentrating on a particular set of supplied values.

Since the goal of the experiment is to find the state at which either a large number of blocks of consecutive sick-individuals are formed or a substantial percent of population becomes sick, we examine Table 1 for these criteria. The results show that for an initial value of 10% sick population, with 10% susceptibility, a large number of consecutive sick-individuals are not found until the state seven is reached. However, one fifth (90 out of 441) of the population gets sick at the end of state seven. Similarly, with the same initially sick population, assuming 33%, 47%, and 70% susceptibility respectively, we model how long it takes for the block of people to get sick respectively. The results show that the susceptibility increase hastens the rate at which more people get sick in the same and adjoining blocks.

### Significance of the Study

Classics models are the simplest form of complex systems. Although for studying epidemic transmissions under classic models, a number of interaction effects are ignored, such models are still useful in case of airline transportation, class-room setting, and movie-theaters, where individuals have little choice of changing their seats. In such a model, if a certain number of individuals are infected with some kind of virus before boarding the plane, attending the class, or watching the movie in a theater, we examine how long it takes for all the individuals in that fixed location get sick. The classic model may be important for health officials and policy makers if

the most important means of disease transmission is through local contacts between the individuals.

## CONCLUSION

The results of the present study throw light how infections spread in a very confined an closed setting. Even though a large-scale mix of classic and network models are required for understanding the complexity of infection spread, the classic pipe-line model can still offer important clues to health officials for effective intervention. In addition, the classic model is simple to use and provides a clear picture of infection transmission to the policy makers, helping them to come with appropriate interventions to prevent the spread of the disease.

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# DEVELOPING CORPORATE CULTURE IN A TRAINING DEPARTMENT: A QUALITATIVE CASE STUDY OF INTERNAL AND OUTSOURCED STAFF

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## ABSTRACT

*This qualitative case study was conducted to investigate and analyze the perceptions and lived experiences of 20 training department staff at a New York-based early childhood multi-service healthcare company. The study was used to discover the leadership practices involved in creating a positive corporate culture in a work environment with outsourced and internal employees working concurrently together. There were six emergent themes that resulted from the study. It was discovered in the study that leaders who do the following activities continually engage the employees, whether they are internal or outsourced: (1) lead to the specific needs of each staff, whether internal or external, (2) create an environment of “fun”, (3) create an environment that purports familial ties with all team members, (4) ensure that learning exists continually, (5) honor the employees who have worked in the industry the longest, and most importantly, (6) lead as a socially and emotionally intelligent leader.*

**JEL:** L2, M1

**KEYWORDS:** Outsourcing, Training, Internal Employees, Outsourced Employees

## INTRODUCTION

The challenge of leadership in an organization with an outsourcing arrangement continues to be more complex with the introduction of new technologies into the outsourcing solutions (Goolsby, 2010) as well as the increase in multi-cultural and multi-generational employees and contractors into the workplace (McCray, 2008). There are organizations that are able to navigate the complex outsourced-internal employee environments with success. In 2011, a Chief Financial Officer of the Year award was given to a New York-based early childhood multi-service healthcare company (Long Island Business News, 2011).

The acceptance speech of the Chief Financial Officer (CFO) became the impetus to the current study since the CFO indicated a correlation between leader's impact on corporate culture in an environment with outsourced and internal employees resulting in positive employee satisfaction and profitability of the company (G. Vellios, personal communication, November 22, 2011). The researchers in the current study identified the need to discover the leadership factors that can be cultivated to create a positive working environment when outsourced and internal employees co-exist. With the sensitive information and confidential files surrounding children's services, the organization will be anonymously identified in the study. The purpose of this qualitative case study was to identify the leadership culture of a New York-based early childhood multi-service healthcare provider training department with an outsource-internal arrangement. Leadership practice influencing the corporate culture of a training department with an outsourcing arrangement was uncovered in the study. The experiences of 20 training department staff were

explored and analyzed through a convenience sample. The study can be used to examine: (a) leadership decision making, (b) management practices in relation to the workplace, and (c) the training department's corporate culture.

The remainder of the paper is organized as follows. The next section describes the relevant literature on outsourcing. Next, we will discuss the data and methodology used in the study. The results are presented in the following section. The paper closes with some concluding comments.

## LITERATURE REVIEW

The literature in the study covered four topics: (a) the development of training from traditional learning into corporate universities, (b) evolution of outsourcing and its link to training, (c) leadership and a leader's role in a training environment, and (d) corporate culture. The focus of the current research was to discover linkages between the experiences and insights of a training staff and their leaders to determine how a positive corporate culture exists in a working environment with both outsource and internal employees working concurrently. The majority of literatures utilized for the purposes of this research were published between 2007 to 2012. Title searches included words and phrases to acquire the most comprehensive sources available on the subject of outsourced training. The key terms used were *outsourcing*, *leadership*, *corporate culture*, *trainer*, *job satisfaction*, *performance*, *corporate belief systems*, *corporate tribal knowledge*, *training departments*, *training as business*, *leadership styles*, *management*, *training*, *learning*, *learning and development*, *training operations*, *training relationship management*, *learning consultants*, and *outsource-insource*. Numerous sources resulted from the search including scholarly and peer-reviewed journal articles, general textbooks, book chapters, and non-scholarly articles. More than 296 literature resources and 131 relevant references resulted from the title search. While the field of training was evolving, the outsourcing industry emerged.

The foundation for outsourcing can be traced to the Roman era where tax collection was systematic through contracting services (Jacques, 2006). The industrial revolution between the 18<sup>th</sup> and 19<sup>th</sup> centuries set the stage to the development of outsourcing. An increase in the production of goods accounted for externally-sourced tasks to be fulfilled; England contracted private companies for the operation of public street lights and highways, waste and prison management while France outsourced the development, management, and distribution of water storage and railways (Commonwealth of Australia, 1997).

In the United States, it was not until the mid-1960s that computer service bureaus began providing outsourced support in the financial and operational departments of organizations (Aalders, 2002). The introduction of increased production of consumer technology created horizontal or cross-function enterprise-wide relationships between host organizations and outsourced companies (Kakabadse and Kakabadse, 2002). From an agency theory perspective, the governance of work given by the host company to the outsourced company becomes the basis for the outsourcing agreement (Eisenhardt, 1989).

By the 1970s, vertical or single department function outsourcing arrangements were made as organizations identified the shift from horizontal to vertical outsourcing as more efficient for the host company (Jacques, 2006). In the 1980s, market competitiveness increased dramatically, and companies identified organizational core competencies and critical resources to ensure strategic advantages and competitive pricing with reduced costs resulting in increased outsourcing of departmental functions (DeRose, 1999). The streamlining of organizational focus provided a perspective that anything that was not considered core competency or critical to an organization's

strategic vision was to be outsourced (Gefen, 2010). The precipitous drop in information and communication technology costs enabled massive investment opportunities in international bandwidth and paved the removal of communication barriers across continents and enticed companies to outsource functions *offshore* (Bhagwati & Blinder, 2009). In 2001, the turning point was with the landmark contract between Nortel and PriceWaterhouseCoopers (PwC), where a high-end solutions provider received major attention from corporate executives to outsource training - a pivotal moment that showcased training outsourcing as a strategic component of business planning (Rosenthal, 2010). Companies like Accenture Learning contracted with Avaya University, Sun Microsystems, and General Electric's Consumer Finance; and global consulting firms like Raytheon, IBM, Knowledge Planet, Productivity Point, Convergys Exult, and Intrepid and became forerunners and further expanded training outsourcing services to include training administration operations managing all of the staff, facilities, resources, and processes of clients (Trolley, 2004). Outsourcing expanded worldwide. Macrae (2002) forecasted "global outsourcing growth to be 20% per annum within the Pacific Rim outsourcing market alone" (p.45). Robertson (2001) opined the market for outsourcing in Australia was A\$1.3B in 1997 and jumped to A\$6.4B by 2008 (Lui, 2009). Businesses in the shrinking global market experienced dramatic shifts in organizational structure and in the makeup of the employee workforce (Nilson, 2003).

Outsourcing does not automatically mean offshoring, but offshoring can be part of an outsourcing contract (Gefen, 2010). Offshoring is a "geographical relocation of a job to another nation under the aegis of the same company's foreign subsidiary or to a foreign contract provider" (Contractor, Kumar, Kundu, & Pedersen, 2011). In 1989, outsourcing officially became part of a business strategy and additional activities were outsourced, including accounting, human resources, data processing, security and maintenance (Mullin, 1996). By the 1990s, many factors contributed to the refinement of outsourcing contracts. Examples of these factors are (a) the aging population in North American and Europe creating a shortage of skilled technical and managerial personnel (Dobbs, et al., 2010), (b) technological change has accelerated dramatically resulting in organizations unable to keep up with the pace of their competition (Tan, 2012), modularized tasks and activities (Sanchez & Mahoney, 1996), and (c) the increase of knowledge repositories in organizations enabled tacit expertise to be codified in process templates, training materials, software, and expert systems (Balconi, Pozzali, & Viale, 2007).

Outsourcing is a management tool that continues to be employed for a variety of reasons like financial, political, people, and product capability enhancement (Greaver, 1999). It is important that leaders understand the impact of a decision to restructure a company when the organization has outsourced and internal employees working concurrently (Contractor, Kumar, Kundu, & Pedersen, 2011). Leadership is a key enabler in affecting the corporate culture (Aitken & Higgs, 2010). Research shows that employees continue to be dissatisfied with an outsourcing arrangement (Rifkin, 1995; Gefen, 2010) and the discontent impacts performance (Morgan, n.d. ; Trolley, 2004; Klaas, Gainey, McClendon & Yang, 2005; Gainey & Klaas, 2005; Gareau & Lucia, 2010).

Satisfied and committed employees are "fully engaged and exhibit high levels of discretionary effort in support of the mission and vision of the organization" (Marciano, 2010, p. 40). Leaders are critical players in creating an environment of positive corporate culture in their role as mentor, trainer, or coach (Hamel, 2012). Motivation, engagement, and ultimate satisfaction of employees are crucial for organizational survival in the current global dynamic environment of high competition (Marciano, 2010). The current qualitative research case study explored the impact of leadership to a corporate culture of a training department staff where an outsourcing arrangement was implemented. Outsourcing is a common phenomenon (Wankel & DeFillippi, 2008), which

comes with many challenges, risks, and client complaints (Preimesberger, 2007). Concerns include hidden costs, unexpected outcomes, diminishing service levels (Lundby & Jolton, 2010), trust (Poitras, 2009), geographical and cultural disruptions (Farrel, 2006), and leadership cultures resulting in unintended low performance results (McCray, 2008).

The complexity of leading a workplace with both internal and outsourced employees working concurrently continues to affect achievement of business goals (Contractor, Kumar, Kundu, & Pedersen, 2011). The trend of outsourcing job functions started with using external vendors to run company information systems (DeRose, 1999). Manufacturing and logistics departments were the next organizational function outsourced followed by human resources (HR) and training activities (Tipton & Nozaki, 2012). The role of the leader is crucial in creating a positive corporate culture when the working environment has both outsourced and internal employees (Stoddard & Wyckoff, 2009; Silzer & Dowell, 2010). The leader's role becomes especially important when the outsourcing contract includes outsourced individuals from different countries with dissimilar experiences and professional credentials (Gurung & Prater, 2006; Oza & Hall, 2006; Metiu, 2006). Leadership's impact in the corporate culture of training departments with an outsource-internal arrangement has been overlooked so far. There has been a shift from training department employees having shared team identities to employees challenging workplace roles due to an increase in engagement of outsource employees (Mortensen & Hinds, 2001; Hinds & Mortensen, 2005). Employees have also challenged organizational controls (Kosmala & Herrbach, 2006) and sense-making due to the organizational changes stemming from outsourcing arrangements (Elsbach, 2003). Instances of inconsistent instructor performance (Bowersox, Closs & Cooper, 2002) and diminished learner satisfaction have been attributed to training department outsourcing contracts (Worthington, 2002).

## METHODOLOGY

A qualitative case study approach was appropriate in this research because the method allowed for the ability to identify specific data concepts for coding and determining categories and thematic patterns (Creswell, 2009). Leadership decision making is a defining aspect of leadership (Nohria & Rakesh, 2010) and the decisions made that translated into insights on corporate culture were explored and analyzed in the research. The research study used the following overarching research question: What role does leadership have on the corporate culture of a training department with internal and outsourced staff?

A pilot interview was conducted as a trial run in preparation for the in-depth interview (Polit, Beck, & Hungler, 2001). The in-depth interviews provided an understanding of the factors that affect corporate culture. Interviewing both internal and outsourced employees yielded an understanding of the leadership factors impacting the corporate culture. Coding each interview identified trends in insights of the corporate culture. Interviews were analyzed through pattern recognition software, e.g. NVivo10®, of specific key words that were indicative of the subject's trait or behavior.

The current research investigated the occurrence of leadership influence on the working environment of a New York-based early childhood multi-service healthcare provider's training department with an outsourcing arrangement. The research was conducted at a New York-based early childhood multi-service healthcare training department. The researcher documented the in-depth interviews using a web-based communication device called Skype™. There were 20 training department employees in various roles including outsourced employees interviewed in the study. The goal of the research study was to understand the factors of leadership practice's motivational drivers towards a positive working environment with an outsourcing arrangement.

This qualitative research study used the following research question: What is the role of leadership to the corporate culture of a training department where internal and outsourced employees work concurrently in the same environment? The sub-questions to the research question were: What is role of the leader to the employee's perception of the work environment? What is the role of the leader to an internal employee's perception of outsourced coworkers as it relates to the corporate culture of the work environment? What is the role of the leader to an outsourced employee's perception of internal coworkers as it relates to the corporate culture of the work environment?

To discover the reasoning behind the positive corporate culture of the researched organization, in-depth interviews focused on deliberated questions that directed study participants to the importance of the research study's design based on observation, insight, and knowledge (Moustakas, 1994). A highly rich description, particularly of novel or unique experiences, of the study participants enabled the researchers a deeper understanding of the corporate culture (Swanson & Holton, 2005). There were seven assumptions made in the research process. First, it was assumed there is a possibility of gaining an insight about the culture of the organization in the study. Data was collected from the leadership phenomenon of a training department with an outsourcing agreement. The purpose of the research study was to uncover the experiences of the identified staff to explore the reasons behind the positive corporate culture in the workplace. In attempting to uncover the underlying essences and meaning of lived experiences of the study participants to arrive at a deeper, inter-subjective understanding of the phenomenon (Gibson & Hanes, 2003), the second assumption was that study participants identified the existence of a positive corporate culture in the company studied.

A third assumption was that study participants were willing to participate in the study and responded honestly to the interview questions. It was believed that training staff participants would be engaged in volunteering to be part of the current study. The employees have all been part of the shift from a pure internal employee only organization to an outsourced and internal employee structure. The fourth assumption was that study participants were able to recall the experiences they had from the shift of internal employee only organization to an outsourced and internal employee structure. Due to the intensity and sensitivity of job satisfaction and employee motivation as a theme for the current study, the fifth assumption was that the research study topic would not bias the responses of study participants and potentially impact the results of the research data. The sixth assumption was that the qualitative case study research method was the suitable method to use within the circumstances of the research. The last assumption was that the results of the research study would contribute to the field of knowledge.

A key component of research is to identify the most appropriate participant for the qualitative research study. Any potential participant falling within a high risk classification (i.e., pregnant women, children under the age of 18 years, residents of prisons or institutions, the elderly, terminally ill, comatose, cancer patients, individuals with AIDS, and mentally incompetent individuals) were not included in the current research study. Since the current qualitative study methodology is intended to deepen understanding more than to predict, participant selection were based on individuals who became the catalysts for dialogue about their lived experiences (Jemielniak & Kociatkiewicz, 2009). The criteria for the current research study's population were (a) internal or contract employee, (b) employed by a New York-based early childhood multi-service healthcare provider, (c) a member of the training department staff, (d) currently working in an environment with internal and outsourced contract employees working concurrently, and (e) be at least 18 years of age.

In order to fulfill the research study criteria, participants were selected by the researcher through purposeful sampling due to availability and willingness (Patton, 2002). There were 10 outsourced and 10 internal employees who participated in the study. Of the 20 members of the training department staff eight had direct reports and the rest of the participants were outsourced instructional designers, outsourced instructors, internal trainers, and training coordinators. The sample excluded employees of the organization who were not part of the training department. The current study participant invitation included a copy of the informed consent form. The contents of the informed consent form included (a) the researcher's name, university affiliation, and mailing address; (b) the current study's purpose; (c) the study participant's eligibility criteria; (d) the risks and benefits of the study; and (e) the details of a contact for any additional information requested (Creswell, 2009). While at the consent stage, the participants were encouraged to reflect on the elements of the current study and to participate voluntarily in the research (Miller & Boulton, 2007). Each study participant was asked for an e-mail address or a fax number for purposes of presenting the informed consent form for their review and reference.

The research study invitation also informed prospective participants that the study involved an in-depth web-based interview that lasted approximately 30 to 60 minutes. Voluntary participation and withdrawal any time with no consequence from the research interview process were included in the informed consent form. The informed consent form included a statement indicating that employment status was not impacted by volunteering in the current study. The informed consent form also indicated that study participants were not compensated nor there be any risk for their participation. Web-based interviews were recorded for accuracy and were part of the informed consent form. The study participants were informed that an audio-recording of the interview was to be made. There were an additional hand-recording and transcription by an external company of the audio-recordings to triangulate the data (Flick, 2002). In the event a participant refused to be audio-recorded, the researcher hand-recorded the interview. Participants were advised that interview questions were conducted for the purpose of research only and would be provided with a published summary without any reference to the participant's personal information. The results of the research were triangulated by documentation on employee performance reviews of the study participants. The documentation and descriptive narrative from the interviews provided the necessarily support to strengthen the validity and reliability of the qualitative research (Yin, 2009). A copy of the transcribed in-depth interview was sent by e-mail to each of the respondents to review for accuracy. Every respondent was instructed to make any necessary transcription changes by using a different color of text from the original transcription and send the updated transcription to the researchers by e-mail. A deadline to return the updated transcription was given to all participants. Each participant was thanked for their participation to the current study. Updates given by the participants included spelling and grammar corrections or deletion of text. Any inaudible text provided by the transcription service were corrected by the researcher and confirmed by the study participant. The prospective participant was advised the research data will be secured in an offsite locked storage facility for the sole purpose of keeping the data private, confidential, and secure. Participants were informed that 3 years after the interview, any and all paper documents, audio and web-based camera recordings, as well as flash drives, will be discarded and destroyed. All paper documents and audio recordings will be frayed and shredded. A document shredding service will crush and discard web-based camera recordings embedded on flash drives.

## RESULTS AND DISCUSSION

The in-depth interviews were conducted by a web-based communication device called Skype™ while the study participants were at a team bi-annual gathering at the organization's main office

in New York. Each study participant was asked to go to private room specifically setup with a laptop, a webcam, and internet access for the interview. No other individual was in the room. Upon completion of the interview of one study participant, the participant would leave the room and another study participant would come in to be interviewed. The resulting 20 in-depth interviews were transcribed by a third party. The third party signed a confidentiality agreement to ensure the anonymity and security of the study participants and their responses. To ensure anonymity, an identification code was given to each study participant starting with 6 to 26. The letters SP (study participant) were used to identify each participant to assist in determining participant responses in place of using the actual name of the participant.

The population of the current case study included eight management level staff with roles like project manager, manager, director, and vice president and 12 department staff with roles like administrative assistant, training coordinator, instructional designer, facilitator, developer, and learning consultant. The criteria for the current research study's population was (a) internal or contract employee, (b) employed by the current study organization, (c) a member of the training department staff, (d) currently working in an environment with internal and outsourced contract employees working concurrently, and (e) be at least 18 years of age. There was equal representation between internal employees and outsourced employees from all the participants interviewed. Of the 20 participants, 10 participants were current outsourced employees who held positions such as project management, trainers, instructional designers, learning consultants, developers, managers, and coordinator. The 10 internal employee study participants held similar roles including senior manager, director, and vice president.

There were five participants who have been in their current position between 7-10 years, nine participants between 4-6 years, and six participants have been in their role for 1-3 years. The outsourced employees have a total of 47 years among the 10 study participants and the internal employees have a total of 49 years. The 20 participants have a total of 96 years in the current position and a total of 186 years in the industry. The study demographics included participant time in organization as well as the training industry. The demographics also incorporated questions on gender, ethnicity, and age. Each study participant was also asked to provide their academic background (see Table 1).

Table 1: Current Study Demographics

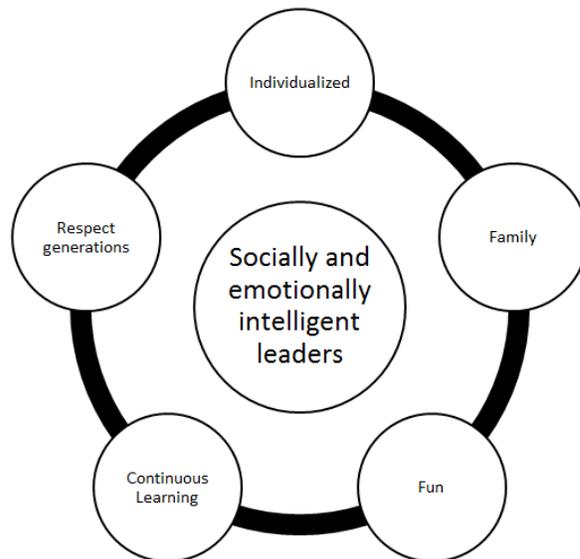
Total Time in Org (years)	Total Time in industry (years)	Gender		Ethnicity					Age			Education			
		Male	Female	African American	Asian American	Caucasian	Hispanic American	Native American	26-35	36-45	46+	Associate's	Bachelor's	Master's	Doctorate's
<b>96</b>	<b>186</b>	<b>60%</b>	<b>40%</b>	<b>20%</b>	<b>13%</b>	<b>35%</b>	<b>25%</b>	<b>5%</b>	<b>50%</b>	<b>35%</b>	<b>15%</b>	<b>5%</b>	<b>30%</b>	<b>60%</b>	<b>15%</b>

*This table shows the demographic information provided by both outsourced and internal employees in this study.*

The purpose of the current qualitative research case study was to uncover opportunities for leaders to create an environment of positive corporate culture in an organizational structure with internal and outsourced employees. Six emergent themes resulted in the current study. First, the employee's expectation and experience was linked by a leader's ability to understand each employee's needs. Leaders need to be socially and emotionally intelligent at the core of their behaviour to develop and permeate a positive working environment. Second, it is imperative for a leader to engender a sense of belonging to a family in the corporate culture. Third, leaders need to have the capability to modify their leadership approach depending on individuals they are

working with. Fourth, respondents with the highest adaptability rate are those who have been in the industry the longest. Fifth, it is important for leaders to create a work environment that is fun for all team members. Sixth, continuous learning is imperative to continually engage the employees (see Figure 1).

Figure 1: Emergent Themes from Current Research Study



*This figure shows how five emergent themes are linked to the main theme of having a need to have socially and emotionally intelligent leaders.*

The research revealed a work environment that links leadership approaches to developing a positive corporate culture. It was discovered in the study that leaders who do the following activities continually engage the employees, whether they are internal or outsourced: (1) lead to the specific needs of each staff, whether internal or external, (2) create an environment of “fun”, (3) create an environment that purports familial ties with all team members, (4) ensure that learning exists continually, (5) honor the employees who have worked in the industry the longest, and most importantly, (6) lead as a socially and emotionally intelligent leader. The implication for organizational theorists is the importance of trust, openness, and the need for employees to articulate their specific needs to their leaders to impact the corporate culture positively. It is imperative for the leader to actively listen to the specific needs of each team member, modify the leadership approach to address those specific needs, and have a heightened social and emotional intelligence. The data from the current study interviews discloses the linkage between leadership approaches to work environment.

The challenge in the current economic landscape is the overwhelming occurrence of financial issues, which result in rewarding training manager’s performance for fiscal reasons alone (Chartered Institute of Personnel and Development, 2012). Training department leaders need a holistic balance between financial status, employee satisfaction, and organizational performance. The current study shows how a leader’s approach impacts internal and external employee satisfaction. The leader also acts as a catalyst in fostering a positive corporate culture. Garmendia (2004) indicated that a positive corporate culture is correlated positively to organizational performance. The literature is rich in the areas of training, outsourcing, leadership, and employee

motivation as separate fields of studies. Corporate training departments' mission statements align with corporate vision and goals (Meister, 1998). With the growing operational costs of training, outsourcing became an option to continue supporting business requirements within the shrinking budgetary constraints of training departments (Contractor, Kumar, Kundu, & Pedersen, 2011). Leaders became more focused on running training departments like a business (Mumma, Todd, & Trolley, 2011) with the human side as a secondary lever (Brinkenhoff & Gill, 1994).

Kehres (2011) indicated that companies with outsourcing arrangements could have a negative impact on their employees. Such an agreement can lead to disharmony, dissatisfaction, and low productivity in the workplace (Kehres, 2011). The literature on motivation in corporate environments, though in-depth, is not fully researched in the area of training and development staff motivation in a workplace of internal and external employees working concurrently. Studies show that high performing work units benefit companies through increased productivity and service quality, advanced levels of safety performance, and financial stability (Gareau & Lucia, 2010; Marciano, 2010). Employees' level of trust and sense of ownership are the results of high performing work systems (Appelbaum, Bailey, Berg, & Kalleberg, 2000; Zacharatos, Hershcovis, Turner, & Barling, 2007). The impact of the current study relates to the linkage between the training department leader's approach and employee satisfaction and motivation, whether internal or outsourced.

## CONCLUDING COMMENTS

Karim (2008) indicated a strong correlation between emotionally intelligent leaders and the overall employee commitment to the organization; a commitment that includes employee satisfaction and motivation. The current study is significant to leadership as it reflects the linkage between socially and emotionally intelligent leaders and highly satisfied employees, whether internal or outsourced. Gefen (2010) indicated that in outsourcing arrangements, the external employees are part of the fabric of the host organization, and management should not differentiate the corporate culture accorded to outsourced and internal employees as the relationship has become a true, shared venture. The current study confirms the leadership approach to external employees, in relation to developing familial ties, does not differ from treatment received by internal employees. The current research differentiated relationship building with employee development. The caveat is for contractors to remain independent of the host company when it relates to personal development. The legalities of developing an outsourced employee can be viewed by leaders as a limitation to the complete engagement of all employees, but it is not the development that is an issue rather the leadership attitude and treatment (Gefen, 2010).

As a result, the leadership approach could to be individualized to address specific employee needs and requirements, whether internal or external. Second, leaders could to create a fun environment. Third, it may be important for leaders to develop an environment that purports familial ties with all team members, whether they are internal or external. Fourth, it could be a key factor for leaders to create an on-demand training environment. Fifth, it may be imperative for leaders to encourage and support the participation of team members who have been in the industry the longest as they have the greatest capacity to adapt when the right work environment is in place. Sixth, it may be important for leaders to be socially and emotionally intelligent in their leadership approach. The basis of the recommendations stem from the themes from the current study linked to the responsibility of the training department staff, management, and the organization.

Leaders have an impact to the corporate culture of an organization (Kaplan, 2011). The themes that emerged from the current study reflect the following recommendations to training department leaders with an outsourced and internal employee arrangement. The recommendations are as follows: When planning for an outsourcing engagement, it may be imperative for leaders to consider the impact to the employees and to create a strategic people plan. The people plan should include both internal and external employees. It may be important to identify the workplace environment after the outsourcing arrangement is implemented by conducting an impact analysis on individuals' needs, behaviors and attitudes.

Workplace fun may require planning from leaders. Fun goes beyond the existence of humor and play. Leaders may need to create an environment that engenders an emotional connection among the team members to allow them to feel that they are part of a family. Adaptability is not generational but individualized. There may be a need for leaders to create an environment where learning is addressed individually to the needs of each employee. Have different learning inputs: face-to-face, online, social networks like learning labs and communities of practice. This approach will address the needs of a multigenerational workplace. It may be important to incorporate social and emotional intelligence training not just for leaders but for everyone in the organization. This will assist in providing an environment of heightened respect, authenticity, and strengthen relationships amongst team members.

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# STUDENT ETHICAL AWARENESS AS EFFECTED BY GENDER AND GRADE POINT AVERAGE

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## ABSTRACT

*An ethics survey of business students was conducted over a nine semester period in a variety of business courses at a regional state university in the Midwest. The university's business program has adopted an across the curriculum approach to ethical instruction and has mandated a one-semester ethics course for all business majors. The purpose of the study was to determine if gender or academic success, as measured by cumulative grade point average, affects ethical awareness scores. The results of the survey revealed that students who had completed the one-semester ethics course achieved higher ethical awareness scores than those who had not. Although no correlation between class level and ethical awareness was discovered, gender appeared to have a limited impact on ethical awareness. While all students demonstrated a significant increase in ethical awareness after completing the ethics course, the demonstrated increase in awareness was stronger for females. Finally, the survey revealed that both high and low GPA students demonstrated increased ethical awareness after completing the ethics course. This suggests that a stand-alone ethics course does improve ethical awareness for all students and that the benefit is not limited to females or high GPA students.*

**JEL:** I21

**KEYWORDS:** Ordered Logit Model, Student Ethical Awareness

## INTRODUCTION

There is a longstanding controversy over whether business ethics can be taught, and if so, what methodology is most suitable to the task. Some argue that, desirable as sound business ethics may be, it simply can't be taught in the classroom (Stape, 2002). Business ethics has been caustically referred to as being an oxymoron (Townley, 1992) and, during the 1970's and 1980's, writers as influential as Peter Drucker and Milton Friedman argued that it cannot be taught at all (Nguyen *et. al.*, 2008).

A study dealing with attitudes towards unethical behavior, Machiavellianism, and tolerance for risk identifies business students as being more likely to engage in unethical behavior than psychology students (Tang *et al.*, 2008). The authors posit that corruption and scandals are caused, not by lack of intelligence, but by lack of wisdom or virtue. They also argue that social institutions, as well as business schools, CEO's, corporate culture, and compensation systems have significant impacts on managers' ethical behavior. This corroborates earlier studies which suggest that organizational culture and other organizational factors which occur after formal education play a major role in shaping the way individuals perceive moral responsibility (Frederick and Weber, 1987; Kelley *et al.*, 1989). Similarly, Awasthi (2008) conducted a study which revealed that exposing students to a business ethics course influenced their managerial judgment and managerial intent, but did not directly influence moral judgment. However, the

literature questioning the efficacy of teaching business ethics does not recommend abandonment of the discipline, nor does it condemn it as useless. For example, Tang *et al.* (2008) recommend that schools, organizations, and society as a whole need to work together to promote ethical behavior. In the initial portion of this study, the authors surveyed undergraduate business students to determine whether they demonstrate an increase in ethical awareness as they progress through the program and complete a required course in business ethics. The initial study was conducted over a five semester period from spring 2008 through spring 2010 at a regional state university in the Midwest, with students sampled from courses in accounting, economics, finance, and entrepreneurship. In addition to requiring a one-semester business ethics course, the business program has adopted an across the curriculum approach to ethical instruction.

The objective of the original study was to test the hypothesis that students completing required business courses have higher ethical awareness scores than students who have not completed the business courses. The data used to test the hypothesis was obtained from surveys that asked students to rank the degree to which they believed an ethical issue was associated with a particular situation. The responses were then analyzed using an ordered logit model to determine what variables significantly affect student ethical awareness (Altmyer *et al.*, 2011). The results were somewhat surprising. The findings illustrated modest support for the premise that students who completed an ethics course were more ethically aware. However, the completion of the ethics course significantly affected ethical awareness only as measured by the questions relating to individual situations, and not for those relating to business situations. Furthermore, there appeared to be no correlation between class level and ethical awareness.

Thus, business students understanding of ethical awareness did not significantly improve as they progressed toward graduation. Additionally, the study revealed that students who performed better academically, as evidenced by a higher GPA, has higher ethical awareness scores relative to individual situations. In addition, female students showed higher ethical awareness scores in both individual and business situations than their male counterparts. Overall, in the initial study, it appeared that most of the differences in ethical awareness between students were the result of factors unrelated to the curriculum, although a stand-alone ethics course did appear to have a modest impact (Altmyer *et al.*, 2011). The results suggested that further research of the relationship between gender, GPA, and ethical awareness might prove a useful addition to the literature. The findings also appeared to imply that further research was needed to determine more effective ways to teach ethics. Therefore a continuation of the study was initiated over a four-semester period from the fall of 2010 through the spring of 2012. The results of the expanded study are reported in this paper.

The revised study adds several contributions to the original analysis. First, the current study finds a stronger link between ethical awareness and completion of the stand-alone ethics course. Beginning with the Fall semester of 2011, the lecture sections of the ethics course have changed to a hybrid format comprising a mix of lecture and online delivery. Although not conclusive from the data, perhaps the revised delivery method is more effective. Other studies suggest hybrid courses are more effective than pure lecture versions of the same course (i.e., Chan, 2011; Jones and Chen, 2008), although the research is not conclusive (Keller *et al.*, 2009). Second, the current study examines the effectiveness of the ethics course across genders. The results suggest both male and female students experience a significant increase in ethical awareness following completion of the ethics course. However, the response is stronger for females, perhaps partly explaining the higher level of ethical awareness experienced by females in general. Third, the current study examines whether the benefits of taking the ethics course depend on GPA. Surprisingly, both high and low GPA students demonstrate an increase in ethical awareness

following completion of the ethics course. Overall, the current study suggests that a stand-alone ethics course does improve ethical awareness, and that this improvement is not limited to females or high GPA students. The paper is organized as follows: Section 2 provides a literature review, section 3 presents the data and methodology, section 4 discusses the empirical results, and the conclusion is presented in section 5.

## LITERATURE REVIEW

There is a large body of literature indicating a positive correlation between teaching business ethics and changing student awareness of ethics in business. A study examining undergraduate student learning in business ethics, particularly ethical judgment, indicated that the more students learn about contractualism ethics the less likely they are to engage in unethical behavior (Nguyen *et al.*, 2008). Research also suggests that moral development continues during the college experience and that knowledge gained during this experience has a positive correlation to moral development (King and Mayhew, 2002; Williams and Dewett, 2005). In addition, while commenting on Williams and Dewett's work as part of their own study, Cox *et al.* (2009) state that their review of the business ethics literature indicates "business ethics education can be effective in increasing students' awareness of moral issues, promoting students' moral development, and promoting students' ability to handle complex ethical decision making." In a work dealing with the subject of teaching ethics, Gilbert (1992) stated that exposure to business ethics is necessary in order to increase student's awareness of the ethical components of business situations as well as to improve their ethical reasoning.

Klugman and Stump (2006) posit that teaching ethics enhances student's critical reasoning and therefore makes them better able to effectively deal with ethical dilemmas. Langan (1990) went so far as to state that exposure to business ethics courses prepares students to face ethical dilemmas in the workplace by broadening their knowledge base relative to business ethics, which in turn increases their analytical reasoning skills. Finally, Falkenberg and Woiceshyn (2008), while acknowledging a trend toward required ethics instruction in schools of business, state that the inclusion of business cases can facilitate the development of deductive, inductive and critical reasoning skills. A study involving undergraduate students demonstrated that the more students learn about ethics the less likely they are to report that they would engage in unethical behaviors as depicted in scenarios presented to them (Nguyen *et al.*, 2008). Furthermore, research supports a link between changing ethical mores and educational accomplishments (Gundersen *et al.*, 2008). As individuals progress through different levels of cognitive moral development, their ability to deal with ethical dilemmas improves (Christensen and Kohls, 2003; Goolsby and Hunt, 1992; Kohlberg, 1969). As a result, a pattern of increasing ethical standards should develop as individual's progress educationally (Gundersen *et al.*, 2008).

Research has also linked business ethics education with changing student attitudes towards ethics in general, as well as with improving their understanding of the complexity of ethical decision making (MacFarlane, 2001). A statistical analysis of responses from 175 students who were pursuing master's degrees in business supported the hypothesis that a comprehensive course with an ethical focus mitigated bias in judging the ethical standing of others (Cloninger and Selvarajan, 2010). It is generally agreed that ethics can and should be taught across the curriculum, and many believe such across the curriculum programs to be effective in developing student's moral standards (Gundersen *et al.*, 2008). Some have concluded that integration of ethical education across the curriculum is not possible in the short term without the inclusion of a stand-alone ethics course (Driscoll and Finn, 2005). However, as described by Cox *et al.* (2009), much of the support for across the curriculum efforts is based on anecdotal evidence.

Furthermore, several studies cast doubt on the effectiveness of ethics instruction (Cole and Smith, 1995; Wynd and Maget, 1989). There are various rationales advanced for the belief that ethics cannot, or should not, be taught in schools of higher education. Kultgen (1988) suggests that efforts at ethical instruction are better left to institutions outside higher education. He suggests that the family or religious institutions are more adept at ethical instruction and the development of individual moral values. Others, like McDonald and Donleavy (1995) and Bishop (1992), suggest that many schools give only lip service to the teaching of ethics because they have adopted such programs for appearances sake only. They conclude that such programs are therefore ineffective. Our continuation of this study attempts to gather additional data to further clarify the link between ethics instruction in higher education and student awareness of ethical issues.

## DATA AND METHODOLOGY

The original data for this study came from a classroom survey taken by students attending a regional state university. The survey was conducted in undergraduate classes that were either delivered in the traditional lecture classroom or via the internet during the semesters of spring 2008, fall 2008, spring 2009, fall 2009, and spring 2010. Following the publication of the initial results, the study was expanded to include the semesters of fall 2010, spring 2011, fall 2011, and spring 2012. Students completing the survey were business and non-business majors taking courses in accounting, economics, finance, or entrepreneurship as part of the general education, business core, or business specialization requirements.

The survey respondents were asked questions concerning gender, year in college, cumulative grade point average, major, and completion of the business ethics course. The questionnaire also measured ethical awareness associated with personal situations and business situations. Table 1 provides the list of questions as well as sample statistics for each question, and Table 2 reveals the correlations between questions.

Table 1: Survey Summary Statistics ( $N=737$ )

Variable	Description	Distribution*
<b>Individual Situations</b>		
Q1	In preparing your income taxes, you claim charitable deductions that are not valid.	1-4.48%; 2-4.48%; 3-7.73%; 4-23.34%; 5-59.97%
Q2	You use your computer at work for personal reasons such as shopping online.	1-6.92%; 2-18.45%; 3-19.27%; 4-35.28%; 5-20.08%
Q3	You tell a potential buyer of your used car that it gets 30 mpg, but in reality the car gets less than 25 mpg.	1-4.34%; 2-6.24%; 3-8.14%; 4-35.28%; 5-46.00%
Q4	You download music for free off the internet.	1-9.77%; 2-17.64%; 3-19.81%; 4-29.72%; 5-23.07%
Q5	You give a store clerk \$20 to change and she gives you change for \$30 and you keep the extra money.	1-4.88%; 2-6.78%; 3-6.92%; 4-24.15%; 5-57.26%
QIS	Sum of Q1 through Q5	Mean = 19.46, Std. dev. = 4.15
<b>Business Situation</b>		
Q6	A job candidate was rated poorly and would never be considered for a position with your company but you tell her that you will hang onto her resume and consider her for future job openings.	1-9.91%; 2-29.31%; 3-27.82%; 4-22.93%; 5-10.04%
Q7	You smell alcohol on a valuable employee's breath after his lunch hour. Company policy requires termination for drinking on the job. Instead, you give him a verbal warning and tell him never to get caught again.	1-4.34%; 2-15.47%; 3-20.35%; 4-34.19%; 5-25.64%
Q8	You fill a job in your department with someone you personally pick rather than posting the position for all employees to see.	1-4.61%; 2-12.48%; 3-24.56%; 4-30.53%; 5-27.82%
Q9	You make copies of copyrighted materials and distribute them in a business meeting.	1-5.43%; 2-10.18%; 3-23.47%; 4-28.49%; 5-32.43%
Q10	Your boss calls from out of town and instructs you to forge his signature on a purchase order and bring it to the purchasing manager for processing.	1-6.11%; 2-17.64%; 3-21.57%; 4-26.05%; 5-28.63%
QBS	Sum of Q6 through Q10	Mean = 17.45; Std. dev = 3.72
QTS	Sum of QIS and QBS	Mean = 36.92; Std. dev = 6.96

*This table shows the description of each of the questions contained in the survey and the distribution of the responses to each of the questions. \*Coding applied to all survey questions is as follows: 1-Definitely not an ethical issue; 2-Probably not; 3-Maybe (not sure); 4-Probably; 5-Definitely an ethical issue.*

Table 2: Spearman Rank Correlation Matrix

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Q1	1.00									
Q2	0.37	1.00								
Q3	0.54	0.39	1.00							
Q4	0.23	0.33	0.31	1.00						
Q5	0.53	0.39	0.57	0.33	1.00					
Q6	0.07	0.17	0.19	0.24	0.21	1.00				
Q7	0.18	0.30	0.23	0.27	0.30	0.29	1.00			
Q8	0.25	0.29	0.32	0.22	0.35	0.18	0.29	1.00		
Q9	0.39	0.33	0.35	0.31	0.33	0.17	0.26	0.32	1.00	
Q10	0.21	0.22	0.21	0.23	0.24	0.13	0.28	0.25	0.35	1.00

This table shows the correlation between any two questions contained in the survey. The closer the number to 1 the more correlation between the two questions.

Table 3 summarizes the characteristics of the respondents. The explanatory variables include the student's class level (Year), cumulative grade point average (GPA), whether or not the students major is business (Business), gender (Gender), and whether or not students have completed the Business Ethics class (Ethic). In total 784 students were surveyed, 737 of which produced valid questionnaires. The majority of the respondents were majors in business (approximately 77 percent), and nearly three-quarters were in their junior or senior year. As business ethics was only recently added as a requirement in the college, only 27% had completed this course at the time of the survey.

Table 3: Demographic Summary Statistics ( $N=737$ )

Variable	Description	Distribution (%)	Coding
Year	1. Freshman	9.50	As described
	2. Sophomore	20.49	
	3. Junior	33.51	
	4. Senior	36.50	
GPA	Cumulative Grade Point Average		As described Mean = 2.98 Std. dev. = 0.49
Business	0 if non-business major	22.93	
	1 if business major	77.07	
Gender	0 if female	45.05	As described
	1 if male	54.95	
Ethic	0 if not taken Business Ethics Class	72.86	
	1 if completed Business Ethics Class	27.14	

This table shows the demographic statistics of the respondents whose completed surveys are utilized in the study.

Given the discrete, ordered, and multinomial nature of the survey data, the responses of the ethical awareness survey were modeled using an ordered logit model. It is assumed that the error term,  $\varepsilon_i$ , follows a logistic distribution (an assumption that the  $\varepsilon_i$  are normally distributed would result in an ordered probit model). Further, the model was used to evaluate the factors that influence the degree of ethical awareness which may be modeled as a linear function of the observable explanatory variables,  $x_i$ , and unobservable factors,  $\varepsilon_i$ , according to Greene (2003) as

$$y^* = x_i\beta_i + \varepsilon_i \quad (1)$$

where  $y^*$  is a continuous latent variable which is not observable, given that the respondents are only provided with  $j$  possible choices and will choose the one that best reflects the degree of their ethical awareness regarding the respective situation. The respondent's ethical awareness concerning each situation can be segregated into thresholds  $\alpha_j$ , where  $j = \{1, 2, 3, 4, 5\}$ . Each student ranked his/her ethical awareness by classifying their response to each situation as

definitely not an ethical issue, probably not an ethical issue, maybe an ethical issue, probably an ethical issue, and definitely an ethical issue. Hence, we observe:

$$\begin{aligned}
 y_i = 1 \text{ (definitely not an ethical issue)} & & \text{if } y_i^* \leq \alpha_1 = 1 \\
 y_i = 2 \text{ (probably not an ethical issue)} & & \text{if } \alpha_1 < y_i^* \leq \alpha_2 \\
 y_i = 3 \text{ (maybe an ethical issue)} & & \text{if } \alpha_2 < y_i^* \leq \alpha_3 \\
 & (2) & \\
 y_i = 4 \text{ (probably an ethical issue)} & & \text{if } \alpha_3 < y_i^* \leq \alpha_4 \\
 y_i = 5 \text{ (definitely an ethical issue)} & & \text{if } \alpha_4 < y_i^* \leq \alpha_5
 \end{aligned}$$

where the unknown  $\alpha_j$ s are estimated along with the  $\beta$ s. The  $\alpha_j$ s are restricted such that  $\alpha_1 < \alpha_2 < \alpha_3 < \alpha_4 < \alpha_5$ , which is required for positive probability estimates. If the error term,  $\varepsilon_i$ , is assumed to be logistically distributed, the probabilities that the students rank the degree of ethical issue are given as:

$$\begin{aligned}
 Pr_{ij} = Prob\{y_i = j | x_i\} = F(\alpha_j - x_i\beta) - F(\alpha_{j-1} - x_i\beta) \\
 (3)
 \end{aligned}$$

where  $i = 1$  to  $737$  and  $j = 1$  to  $5$ .  $F(\cdot)$  is defined as a cumulative logistic distribution function with mean zero and standard deviation  $\sigma = \pi/\sqrt{3}$ . The maximum likelihood parameter estimates (MLEs) are obtained by maximizing the log likelihood function with respect to  $\beta$  and  $\alpha$ ,

$$\begin{aligned}
 L(\beta, \alpha) = \sum_{i=1}^I \sum_{j=1}^J \delta_{ij} \ln(Pr_{ij}) \\
 (4)
 \end{aligned}$$

where  $\delta_{ij}$  is an indicator variable equal to one if student  $i$  ranks the degree of  $j$ , and zero otherwise. Further, the constant term in the linear regression model is set to zero without any loss of generality in the estimation. As is the case with binary models, the marginal effects of the exogenous variables on the probabilities are not equal to the coefficients, thus only the signs are unambiguous. Accordingly, the marginal effects are computed by taking the first derivative of the probabilities in equation (3) with respect to  $x_i$ .

## DISCUSSION AND EVALUATION

The results of the ordered logit model are analyzed in terms of the overall significance of the model and the influence of each explanatory variable on ethical awareness. Table 4 presents the estimated ordered logit model for the degree of ethical awareness of the five predetermined scales. *QIS* in column 2 represents the cumulative scales of ethical awareness for each individual situation. *QBS* in column 3 represents the cumulative scales of ethical awareness for each business situation, and *QTS* in column 4 represents the cumulative scales of ethical awareness for both individual and business situations. For the estimations of all three situations, *QIS*, *QBS*, and *QTS*, the Likelihood Ratio tests show the regression models are highly significant, with the significance of the Chi-square statistics at the one percent level or higher. The results indicate that the explanatory variables are significantly related to the dependent variables in all three situations. For the ethical awareness estimate of individual situations, the variable representing the cumulative grade point average of respondents (*GPA*) is positive and significant ( $p < 0.01$ ), thus suggesting that students who perform better in academics have more awareness of the given individual situation. The variable *Gender*, which is a binary variable with 1 indicating male and 0 for female, is negative and significant ( $p < 0.01$ ), implying that female respondents have relatively more ethical awareness toward the individual situations.

The positive and significant coefficient of *Ethic* ( $p < 0.01$ ) suggests that students who have taken the Business Ethics class are more ethically aware with regard to the individual situations. For the ethical awareness estimate of business situations, only the *Gender* variable is significant at the one percent level or better. As is the case with individual situations, female respondents are relatively more aware of possible ethical issues in the given business situation. For the ethical awareness estimate of the two situations combined, both *GPA* and *Gender* are statistically significant at the one percent level or better. Similar to the estimates for individual situations, both cumulative grade point average and female status have a positive influence on overall ethical awareness.

Table 4: Ordered Logit Model: Explanatory Variables Coefficient Values

Explanatory variables	QIS	QBS	QTS
Year	0.08 (0.07)	-0.02 (0.07)	0.02 (0.08)
GPA	0.67 (0.14) <sup>a</sup>	0.07 (0.14)	0.43 (0.14) <sup>a</sup>
Business	0.004 (0.16)	0.09 (0.16)	0.05 (0.16)
Gender	-0.50 (0.14) <sup>a</sup>	-0.81 (0.14) <sup>a</sup>	-0.75 (0.14) <sup>a</sup>
Ethic	0.48 (0.16) <sup>a</sup>	0.12 (0.16)	0.37 (0.17) <sup>b</sup>
Log likelihood	-1940.25 <sup>a</sup>	-1966.66 <sup>a</sup>	-2365.70 <sup>a</sup>
LR test	62.02	41.17	57.72
Pseudo-R <sup>2</sup>	0.08	0.05	0.08

This table shows the results of the ordered logit model with three general situations as explanatory variables, including individual situation, business situation, and the two situations combined. Standard errors are in parentheses where <sup>a</sup> indicates significant at 1%; <sup>b</sup> indicates significant at 5%; and <sup>c</sup> indicates significant at 10%.

The marginal effects of the explanatory variables that are statistically significant to the probability of observing a positive ethical attitude are reported in Table 5. In an ordered logit model, a unit change in the explanatory variable will have marginal effects on each situation of the ethical awareness scales. For example, the marginal effect of a variable with a positive sign would imply a shift in the probability distribution of the scale variable to the right, i.e. toward a more positive view of an ethical issue, but the marginal effect on each situation will be different in magnitude and direction. For instance, the *GPA* variable has a marginal effect of 0.07 for individual situations and 0.08 for the combined situations. Therefore, students with a higher GPA are 7 percent more ethically aware of individual situations and 8 percent more ethically aware of both individual and business situations.

Table 5: Marginal Effects Of Significant Variables At Means

Explanatory variables	QIS	QBS	QTS
GPA	0.07		0.08
Gender	-0.05	-0.20	-0.14
Ethic	0.05		0.07

This table shows the marginal effects of the explanatory variables that are statistically significant to the probability of observing a positive ethical attitude from the estimation presented in Table 4.

The marginal effects of female respondents on the ethical awareness scale are 5 percent, 20 percent, and 14 percent higher than male respondents for the individual, business, and combined situations, respectively. Students who have taken the Business Ethics class are 5 percent more ethically aware on the individual situations than those who have not taken the class.

Table 6 presents the estimated ordered logit model for the degree of ethical awareness for each of the ten situations, and Table 7 presents the corresponding marginal effects of the significant explanatory variables. Students who are at higher year in college are more ethically aware of

situation 1 (Q1), 2(Q2), and 7(Q7), while students who are at a lower year in college are more ethical aware of situation 6 (Q6). Further, students who maintain a higher cumulative grade point average tend to be more concerned with ethical issues in all situations except situations 6 (Q6), 7 (Q7), 8 (Q8) and 10 (Q10). Students who major in business are less ethically aware in situation 3 (Q3), but more ethically aware in situation 4(Q4), 9(Q9), and 10 (Q10). Female students are more likely concerned with an ethical issue in all situations except 1 (Q1), 3 (Q3), and 5 (Q5).

Table 6: Ordered Logit Model: Explanatory Variables Coefficient Values

Explanatory variables	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Year	0.21 (0.08) <sup>b</sup>	0.13 (0.07) <sup>c</sup>	0.04 (0.08)	-0.07 (0.07)	0.03 (0.08)	-0.21 (0.07) <sup>a</sup>	0.13 (0.09) <sup>c</sup>	-0.03 (0.08)	-0.09 (0.07)	0.11 (0.07)
GPA	0.78 (0.16) <sup>a</sup>	0.52 (0.14) <sup>a</sup>	0.35 (0.15) <sup>b</sup>	0.42 (0.14) <sup>a</sup>	0.35 (0.15) <sup>b</sup>	0.07 (0.14)	-0.14 (0.14)	0.04 (0.14) <sup>c</sup>	0.24 (0.14) <sup>c</sup>	0.01 (0.14)
Business	0.10 (0.18)	0.12 (0.16)	-0.34 (0.17) <sup>b</sup>	0.29 (0.16)	-0.21 (0.17)	-0.21 (0.16)	-0.10 (0.16)	-0.26 (0.16)	0.27 (0.16) <sup>c</sup>	0.39 (0.16) <sup>b</sup>
Gender	-0.05 (0.15)	-0.49 (0.14) <sup>a</sup>	-0.18 (0.14)	-0.54 (0.14) <sup>a</sup>	-0.24 (0.15)	-0.43 (0.14) <sup>a</sup>	-0.49 (0.14) <sup>a</sup>	-0.61 (0.14) <sup>a</sup>	-0.46 (0.14) <sup>a</sup>	-0.54 (0.14) <sup>a</sup>
Ethic	0.23 (0.19)	0.31 (0.17) <sup>c</sup>	0.11 (0.17)	0.43 (0.17)	0.30 (0.18) <sup>c</sup>	0.02 (0.17)	0.02 (0.17)	0.15 (0.16)	0.07 (0.16)	0.13 (0.17)
Log likelihood	-807.55 <sup>a</sup>	-1085.89 <sup>a</sup>	-905.56 <sup>b</sup>	-1123.50 <sup>a</sup>	-860.19 <sup>b</sup>	-1103.29 <sup>a</sup>	-1070.59 <sup>a</sup>	-1067.43 <sup>a</sup>	-1061.21 <sup>a</sup>	-1103.24 <sup>a</sup>
LR test	39.21	44.97	14.15	42.02	14.88	23.76	17.97	24.02	23.70	28.30
Pseudo-R <sup>2</sup>	0.05	0.06	0.02	0.06	0.02	0.03	0.02	0.03	0.03	0.04

This table shows the results of the ordered logit model with all ten survey questions as explanatory variables. Standard deviations are in parentheses, where <sup>a</sup> indicates significant at 1%; <sup>b</sup> indicates significant at 5%; and <sup>c</sup> indicates significant at 10%.

Table 7: Marginal Effects of Significant Variables At Means

Explanatory variables	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Year	0.01	0.02				-0.04	0.03			
GPA	0.03	0.06	0.07	0.08	0.07				0.06	
Business			-0.07	0.05					0.06	0.09
Gender		-0.06		-0.10		-0.09	-0.12	-0.14	-0.11	-0.13
Ethic		0.04		0.08	0.06					

This table shows the marginal effects of the explanatory variables that are statistically significant to the probability of observing a positive ethical attitude from the estimation presented in Table 6.

### Further Estimations on the Classifications of Gender and Gpa Differences

In accordance with the findings and what is stated in the previous section, we further divide the results into two groups. The level of student ethical awareness was first analyzed for female and male students separately. Table 8 presents the mean responses to each situation for all the respondents, broken down by groupings of female and male students, along with the marginal effects of the explanatory variables that are statistically significant to the probability of observing a positive ethical attitude. Overall, the results were consistent with the findings including all survey respondents, yet the Likelihood Ratio tests show the regression models are not statistically significant for the questions regarding business situations.

For female students, the *GPA* variable has a marginal effect of 0.07 for both individual and combined situations, implying that female students with a higher GPA are 7 percent more ethically aware of individual situations and overall situations. For individual and combined situations, the marginal effects of female respondents who have taken the course of business

ethics on the ethical awareness scale are 5 percent and 8 percent higher than those female respondents who have not taken the course. On the other hand, male students who maintain relatively higher grade point average are 4 percent and 6 percent more ethically aware on the individual and overall situations than those whose grade points averages are relatively lower. Additionally, male students who have completed a required course in business ethics are 3 percent more ethically aware of individual situations than those who have not taken the course.

Table 8: Ordered Logit Model: Gender Difference

Explanatory variables	Explanatory variables coefficient values					
	Female Students (n=332)			Male Students (n=405)		
	QIS	QBS	QTS	QIS	QBS	QTS
Year	-0.03(0.12)	-0.02 (0.12)	-0.05(0.12)	0.16 (0.10)	-0.01(0.10)	0.08 (0.10)
GPA	0.71(0.23) <sup>a</sup>	0.06 (0.22)	0.42(0.23) <sup>c</sup>	-0.66 (0.20) <sup>a</sup>	0.07(0.18)	-0.44 (0.20) <sup>b</sup>
Business	-0.03(0.24)	0.14 (0.22)	0.07(0.23)	0.02 (0.23)	0.04(0.24)	0.04 (0.23)
Ethic	0.52(0.26) <sup>b</sup>	0.26 (0.24)	0.46(0.25) <sup>c</sup>	0.44 (0.22) <sup>b</sup>	-0.00(0.23)	0.29 (0.23)
Log likelihood	-841.60 <sup>a</sup>	-854.89	-1030.55 <sup>c</sup>	-1089.67 <sup>a</sup>	-1096.06	-1317.38 <sup>b</sup>
LR test	17.07	2.11	8.81	24.86	0.18	10.42
Pseudo-R <sup>2</sup>	0.05	0.01	0.03	0.06	0.00	0.03
	Marginal effects of significant variables at means					
Year						
GPA	0.07		0.07	0.04		0.06
Business						
Ethic	0.05		0.08	0.03		

This table shows the results of the ordered logit model with three general situations as explanatory variables, including individual situation, business situation, and the two situations combined. Standard errors are in parentheses where <sup>a</sup> indicates significant at 1%; <sup>b</sup> indicates significant at 5%; and <sup>c</sup> indicates significant at 10%.

We also dissect the sample respondents into two groups based on student academic achievement. Specifically, the level of student ethical awareness was analyzed separately for groups of students whose grade point average was above and below 3.00. The results are consistent with the findings including all survey respondents, and the Likelihood Ratio tests show the regression models are statistically significant for the questions with all three situations. The *Gender* variables are negative and statistically significant at 5 percent level or higher for all three situations in each group, implying that female respondents are more ethically aware of all three situations than male respondents, regardless of their academic achievement. According to the marginal effects, female students maintaining better academic records are 9 percent, 17 percent, and 15 percent more ethically aware of individual, business, and combined situations than male students, respectively, and female students who have lower-than-average academic records are still 17 percent, 26 percent, and 22 percent more ethically aware of all three situations than their male counterparts, respectively. Regardless of academic achievement, the marginal effects of students who have taken the stand alone business ethics course on the ethical awareness scale are 10 percent and 11 percent higher than students who have not taken the course. Interestingly, low-GPA students who major in business are 12 percent less aware of individual ethics situations than those not majoring in business.

Table 9: Ordered Logit Model: GPA Difference

Explanatory variables	Explanatory variables coefficient values					
	High-GPA Students (n=416)			Low-GPA Students (n=321)		
	QIS	QBS	QTS	QIS	QBS	QTS
Year	0.13 (0.10)	0.01(0.10)	0.06 (0.10)	-0.001 (0.12)	-0.08(0.12)	-0.04 (0.12)
Business	0.32 (0.21)	0.17(0.21)	0.29 (0.22)	-0.52 (0.26) <sup>b</sup>	-0.04(0.26)	-0.34 (0.25)
Gender	-0.38 (0.18) <sup>b</sup>	-0.68(0.18) <sup>a</sup>	-0.60 (0.19) <sup>a</sup>	-0.77(0.23) <sup>a</sup>	-1.04(0.23) <sup>a</sup>	-1.03(0.23) <sup>a</sup>
Ethic	0.45 (0.22) <sup>b</sup>	-0.01(0.22)	0.26 (0.23)	0.50 (0.27) <sup>c</sup>	0.38(0.26)	0.55 (0.28) <sup>b</sup>
Log likelihood	-1068.67 <sup>a</sup>	-1112.89 <sup>a</sup>	-1317.99 <sup>a</sup>	-864.23 <sup>a</sup>	-843.01 <sup>a</sup>	-1024.70 <sup>a</sup>

LR test	20.47	16.75	19.39	21.03	26.43	29.48
Pseudo-R <sup>2</sup>	0.05	0.04	0.05	0.06	0.08	0.09
	Marginal effects of significant variables at means					
Year						
Business				-0.12		
Gender	-0.09	-0.17	-0.15	-0.17	-0.26	-0.22
Ethic	0.10			0.11		0.12

*This table shows the results of the ordered logit model with three general situations as explanatory variables, including individual situation, business situation, and the two situations combined. Standard errors are in parentheses where <sup>a</sup> indicates significant at 1%; <sup>b</sup> indicates significant at 5%; and <sup>c</sup> indicates significant at 10%.*

## SUMMARY AND CONCLUSION

The original objective of the study was to test the hypothesis that students have higher ethical awareness after completing required business courses in a business program which has adopted both an across the curriculum approach to ethical instruction as well as a stand-alone business ethics course. The data used to test the hypothesis was obtained from surveys that asked students to rank the extent to which they believed an ethical issue was associated with a particular situation. The responses were then analyzed using an ordered logit model to determine what variables significantly affect student ethical awareness.

The expanded study supports the hypothesis that students who have completed an ethics course are more ethically aware, and the support for this hypothesis is slightly more significant in the second portion of the study than it was in the first portion of the study. There may be various explanations for this improvement but as noted in the introduction to this paper, the stand-alone ethics course has been revised since the first portion of the study and is now taught in a hybrid format. Perhaps this new delivery format is more effective than the traditional classroom or internet mode of delivery.

Consistent with the earlier portion of the study, the completion of the ethics course most significantly affects the ethical awareness as measured by the questions relating to individual situations and not those relating to business situations. Once again, there appears to be no correlation between class level and ethical awareness. Gender appears to have an impact on ethical awareness. Both male and female students experience a significant increase in ethical awareness following completion of the ethics course. The response is stronger for females, which may be related the higher level of ethical awareness experienced by females in general. An examination of the responses dealing solely with business situations reveals an interesting phenomenon. Both high and low GPA students demonstrate an increase in ethical awareness following completion of the ethics course. Thus, overall, the current study suggests that a stand-alone ethics course does improve ethical awareness, and that this improvement is not limited to females or high GPA students. It should be emphasized that this is a continuation of an exploratory study conducted on campus in one small upper Midwestern university. It is possible that results gathered elsewhere, or results gathered using different sampling tools, may produce different results. However, the results suggest further study of the relationship between gender, GPA, and ethical awareness may prove a useful addition to the literature. Furthermore, it would be of interest to probe the link between other non-curriculum related variables and ethical awareness. Further research is also needed to determine potentially effective ways to teach ethics, including the effects of delivery modalities and student ethical awareness outcomes.

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# THE STRATEGY OF MARKETING THE CULTURAL CREATIVE COMMODITIES ADDING TECH-FUNCTION IN THE NEW PRODUCTION DEVELOPMENT

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## ABSTRACT

*In economy world, cultural creative product development should satisfy consumers' physical or mental needs especially the firms need to develop a formal conceptualization of the process of customer knowledge development. By enhancing the fit between cultural creative commodities and customer preferences, the adoption of technical function fosters those cultural-based products success. This research focuses on the ingredients responsible for the successful factors of cultural creative commodities and consumers' purchasing behavior in cultural creative industries. Relevant literature was utilized, as well as supporting information obtained by means of corporate interviews, physical questionnaires and online investigations. A final sampling is 421 and the overall response rate is 92%. Statistics and structural equation analysis were conducted to construct the relationship among tech-functions, cultural creative commodities and the consumers' purchasing behavior. The results show that media technology which provided new material-functions to diversify the cultural creative product development and enhanced the interaction between the commodities and consumers. By interacting with cultural creative commodities, customers are able to achieve the purposes of causing his/her purchasing behavior. The author explores the theoretical and managerial implications that arise from the results and provides further research directions.*

**KEYWORDS:** tech-function, cultural creative industries, cultural creative commodities, structural equation model

**JEL:** Classification: M00, M30

## INTRODUCTION

New product, such as cultural creative commodities, has become one of the most new product developments around the world. Customer knowledge development – that is, the development of an understanding of customer preferences – has been identified as the critical success factors for ensuring the new product development will be succeed (Cooper and Kleinschmidt, 1995). In cultural creative industry, one of the most important national industry development projects around the world, new product development (i.e. cultural creative commodity) mainly focuses on new elements embedded in the traditional commodities that artistic and creative cultural workers contribute their efforts into the product development. Unique creative and cultural commodities based on the main exhibits could also be used to prolong memories of the trip, helping to promote any specific objectives and induce repeat purchasing. The development of creative and cultural commodities not only encouraged the growth of small businesses, but also enabled the export of unique cultural facets on a global scale. By cooperating with other disciplines and fields, the diversification and popularization of culture and art could be used to achieve the objective of enabling everyone to enjoy and become part of cultural art.

The 1980s was also an important landmark period for the development of digital multimedia technologies. Digital content companies not only helped to improve the basic foundation of the cultural creative industry's overall economy by promoting the transformation of traditional

industries into knowledge-based ones; they also provided a diverse selection of creative opportunities to art workers, enabling them to express their creative ideas while inducing a myriad of developments in other fields, such as visual and tech-art, as well as multimedia technologies. With the dawning of the information era, the value of the cultural creative industry and art workers will not be limited to tangible cultural assets, but also the utilization of knowledge, multiple disciplines and skills. This study seeks to investigate how cultural creative and artistic workers utilize art technologies and transform intangible cultural assets into tangible commodities. Accordingly, the study objectives in this research are to

1. Investigate how cultural creative and artistic workers utilize tech-functions creating the new elements on the traditional products
2. Investigate how cultural creative and artistic workers remold brand images to improve their identity with the general public,
3. Develop a formal construct to reflect consumers' repurchasing behavior of cultural creative commodities.

The study begins by defining the rise of the cultural creative industry and by articulating the conceptual framework, including tech-functions, cultural creative commodities, and consumers' purchasing behaviors. We then elucidate the methods and measures the study used to test the framework. Following presentation of the results, the study concludes the discussion of the results in terms of its theoretical, managerial, and further research implications.

### Conceptual Framework And Hypotheses

Cultural Creative Industries: The term of 'cultural creative industry' were combined by two terms, 'culture industry' and 'creative industry'. Cultural industry was provided by Horkheimer and Adorno (1976, original publication dated 1944) and the term, creative industry, was raised by a British specialist team in creative industries in 1997. Culture industries should lean toward theoretical thinking espoused and creative industry leaned toward the economic benefit of intellectual property rights and the social benefit of employment opportunities in culture industries. Accordingly, cultural creative commodities are conceived by the integration of the creativities, production and economy of intangible assets, and the contribution of cultural/creative concepts would be protected by intellectual property rights (Council for Economic Planning and Development, Executive Yuan, 2002).

### Tech-Function

Tech-function, which is a platform, integrates simple media function into cultural artworks. Traditional cultural creative/artistic commodities could be linked with tech-function to provide new concepts or exhibition formats. Thus, cultural creative commodities, which integrate simple tech-function, herald more possibilities for new product development in cultural creative industries. Cultural creative commodities which not only enabled the use and integration of diverse materials and media, but presentation and content could now emphasize interactivity (Arango, 2005; Manovich, 2001; Tseng & Lee, 2006; Varnedoe & Gopnik, 1990; Zanni, 2004) to revolutionize the three-way relationship between cultural creative artists, cultural creative commodities and consumers.

Interactive artwork presented by integrating tech-function could be defined as being a concept whereby artworks were completely presented in a format, which enabled consumers to interact with it. This means cultural creative commodities acted as an integrative vector of information, which could link people with different cultural backgrounds through purchasing behavior. Generally, these artworks provided an interaction involving the integrated processes of

admiration, identification and transmission of concepts to result in consumers' purchasing behavior.

*Hypotheses:* Oliver (1997) believed that satisfaction was the consumer's evaluation of a certain service or product. Woodruff (1997) further believed that 'value' derived from an individual perspective was the actual critical factor behind consumer satisfaction. For tech-art and cultural creative extension products, product image (Kotler, 1994) and visual value (Babin, Darden & Griffin, 1994; Babin & Attaway, 2000) provided to consumers would be critical factors to influence their repeat purchasing behavior. The product image represents the image of the tech-function or cultural creative commodity that persists in the mind, which reorganizes and links with other relevant objects in the environment as the individual accumulates more experience. The consumption image of cultural creative work could be viewed as consumers' expectation before they experience their visit. This concept would also influence the actual experience and future desire to spend. Kotler, Bowen & Makens (1996) also pointed out that a cause and effect relationship exists between the variables of imagery, quality, satisfaction and post-purchase behavior. More positive imagery induces stronger behavioral objectives in the future (Alnemoud & Armstrong, 1996). Visual value could be considered as being an intermediate variable between service quality and satisfaction. The results of an investigation by Patterson & Spreng (1997) illustrated that visual value was an antecedent variable which was positively correlated to satisfaction, and would also positively influence the desire to make a repeat purchase. Petrick & Backman (2002) believed that, if consumers had greater sensory values, this would positively influence their future desire to make repeat purchases. On the other hand, further investigations by Murphy, Pritchard & Smith (1999) discovered that characteristics of purposeful products would also positively influence visual values, and thus, influence the desire to make purchasing decision because of service quality. Thus, the hypotheses of this research were based on the investigation results of Alnemoud & Armstrong (1996), Kotler et al. (1996) and Murphy et al. (1999):

H<sub>1</sub>: Tech-function can directly influence consumers' purchasing behavior.

H<sub>2</sub>: Cultural creative commodity characteristics have a direct and positive influence on consumers' purchasing behavior.

Digital creative industries were the first to utilize new technology as a media to conceptualize their ideas. Interactivity was the main feature of cultural creative commodities made by creative artists by incorporating digital tech-function (Arango, 2005; Manovich, 2001; Tseng & lee, 2006; Varnedoe & Gopnik, 1990; Zanni, 2004). According to Ascott (2003), 'emerging' aesthetics from applied digital technologies have replaced the traditional 'externalist' aesthetics. Traditional aesthetics were concerned with the absolute value of the appearance and tangible features of an object, while emerging aesthetics attempted to interact with consumers by means of transformations in technological culture and evolving techniques. Borsook & Higginbotham (1991) proposed six points of critical elements for interaction, namely, immediacy of response, non-sequential access of information, adaptability, feedback, options and bi-directional communication. Hence, cultural creative commodities which incorporate tech-function revolutionized and broke the confines of the one-sided sensory interaction of traditional artwork and removed the barrier between consumers and artworks. Interaction enabled consumers to recognize their existence and position in the artwork, introducing new life to the work by means of their personal senses and experiences. Hence, cultural creative commodities which incorporate with tech-function provide additional connection under consumers' personal control, and induce purchasing behavior by immersing them in the artwork. The third hypothesis for this research was derived from the above information:

H3: Cultural creative commodities, which incorporate tech-function, can better induce consumers' purchasing behavior.

### Empirical Results

*Sampling Frame and Sample:* The sampling frame in this study included questionnaires and online survey in four major Cultural and Creative Parks located in Taipei, Taichung, Chiayi and Hualien. To enhance the response rate and accuracy, the questionnaire was delivered in the sampling frame to inform respondents of the study objectives and to solicit their participation. The survey required respondents to serve as key informants on the cultural creative commodities in which they purchased and that was typical of the tech-function embedded in the products. After deducting 32 invalid survey, the sampling is 328. The effective response rate is 91%. The online survey questionnaire receiving the effective survey are 93 after deducting 5 invalid responses (they don't have any purchasing experience). Consequently, the final valid questionnaires are 421 and the overall response rate is 92%.

*Descriptive Analysis:* In order to verify the internal consistency reliability of the three major dimensions of the structural equation model, the study analyzes the relationships among those three major variables. The result (Table 1) shows Cronbach's Alpha is 0.867 and  value of three major variables, tech-function, cultural creative commodities, and customers' purchasing behavior, are highly significantly (0.864, 0.852 and 0.854 respectively). Furthermore, the value of each observing index is higher than 0.8 describing that the structural equation model with highly internal consistency reliability.

Table 1: the Results of Internal Consistency Reliability

	Mean	Std. Deviation	N	Cronbach's Alpha if Item Deleted
Tech-function	4.8170	1.31508	421	<b>.864</b>
Cultural Creative Commodities Characteristics	5.0588	1.18230	421	<b>.852</b>
Customers' Purchasing Behavior	4.9477	1.27109	421	<b>.854</b>
Cronbach's Alpha	<b>0.867</b>			

*Factor Analysis:* A confirmatory factor analysis (CFA) was conducted for tech-function, cultural creative commodities and the consumers' purchasing behavior. The result shows the suitability indices of tech-function with a GFI of 0.9151, AGFI of 0.753 and an RMR of 0.110. The main components of tech-function as described by Borsook & Higginbotham (1991) include non-sequential access information, adaptability, feedback, options and other factors which can be used to evaluate the influence of tech-function on cultural creative commodities and determine whether or not it would directly or indirectly affect consumers' purchasing behavior.

For cultural creative commodities characteristics, the result shows the suitability indices of cultural creative artworks with a GFI of 0.955, AGFI of 0.082 and an RMR of 0.865. This shows that the characteristics of memory extension, product innovation, exhibition relationship, marketing strategy and product design are significant for cultural creative commodities and consumers, and these features can be used to evaluate the features of cultural creative commodities and determine whether those products will cause to consumers' purchasing behavior. The results of survey shows the suitability indices of consumers' purchasing behavior with a GFI of 0.916, AGFI of 0.181 and an RMR of 0.495 implicating that the variables of product influence and product uniqueness can be used as determining factors of consumers' purchasing behavior. Table 2 shows the covariance matrix of variables in each category.

The data shows that non-sequential access information and cultural creative commodities are highly correlated. Consumers will be willing to give cultural creative/artistic workers their opinion and feedback after purchasing experience. Memory extension, exhibition relationship and product design had significant positive correlations in the category of cultural creative commodities. In the category of consumers' purchasing behavior, positive correlations were observed in the influence of cultural creative commodities on consumers' purchasing behavior. The motives behind the purchase of cultural creative commodities are largely derived from consumers' wish to procure products related to the ongoing experience, for instance those commodities can help to prolong the experience of their visit and expand the features and memory of the artwork. Thus, memory extension, product innovation and exhibition relationship would be important factors in deciding whether or not consumers would purchase.

Table 2: Correlation Coefficient

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	FM1	FM2	FM3	FM4	FM5	PD1	PD2	PD3	PD4	PD5	PD6	CS1	CS2	CS3
FM1	1.000													
FM2	.116	1.000												
FM3	.137	.720	1.000											
FM4	.182	.641	.484	1.000										
FM5	.222	.596	.391	.594	1.000									
PD1	.250	.308	.233	.194	.241	1.000								
PD2	.230	.165	.144	.133	.289	.440	1.000							
PD3	.134	.099	.117	.113	.063	.342	.387	1.000						
PD4	.251	.171	.100	.172	.266	.497	.367	.257	1.000					
PD5	.238	.174	.011	.233	.211	.237	.090	.203	.352	1.000				
PD6	.516	.068	.084	.173	.155	.352	.223	.196	.388	.240	1.000			
CS1	.158	.163	.209	.102	.164	.532	.611	.421	.374	.087	.252	1.000		
CS2	.127	.150	.205	.174	.160	.283	.295	.462	.204	.062	.317	.435	1.000	
CS3	.134	.099	.117	.113	.063	.342	.387	1.000	.257	.203	.196	.421	.462	1.000

FM1: Tech-function; FM2: Non-sequential access information; FM3: Adaptability; FM4: Feedback; FM5: Options. PD1: Cultural creative commodities characteristics; PD2: Memory extension; PD3: Product innovation; PD4: Exhibition relation; PD5: Marketing strategy; PD6: Product design. CS1: Customers' purchasing behavior; CS2: Product influence; CS3: Product unique.

### Structural Equation Model (SEM) Analysis

Relationship between tech-function and cultural creative commodity characteristics The route between tech-function and cultural creative commodities characteristics was 0.33, with t-value attaining a significant (0.01). This shows that a direct correlation exists between tech-function and value-added to cultural creative commodity characteristics. The numerical data shows that cultural creative workers could provide consumers with a higher level of interactivity by using cultural creative commodities which were embedded tech-function. The economic value-added to these commodities will also be increased due to new characteristics providing by new adoption of technology. Relationship between tech-function and consumers' purchasing behavior The direction between tech-function and consumers' purchasing behavior was 0.05, but the result was failed to achieve significance (0.01). The results implied that tech-function does not have a direct relationship with the ability to induce consumers' purchasing behavior. The above-listed data shows that, although tech-function can create new realms in art and aesthetics, it is insignificant in inducing consumers' purchasing behavior.

Therefore, this research concludes that, although tech-function can integrate the interface of art media, the main objective of interactivity of tech-function cannot be achieved if consumers lack relevant experience, sensory response and feedback about the extension product. Relationship between cultural creative commodity characteristics and consumers' purchasing behavior The path between cultural creative commodity characteristics and consumers' purchasing behavior was 0.61 and reached significant level (0.01). This shows that a direct correlation exists between cultural creative commodity characteristics which incorporate tech-function and consumers' purchasing behavior. The data shows that cultural creative commodity characteristics which incorporate tech-function can significantly improve consumers' motives of purchasing behavior. The results show that tech-function not only provides artistic workers with new material to develop new products, it also improves the diversity of cultural creative commodity characteristics and those characteristics providing more interactions with consumers.

## CONCLUSION

On the one hand, cultural creative extension products which incorporate tech-art have the ability to resolve the financial crisis faced by museums, and on the other hand, they provide an opportunity for museums to transmit their culture and knowledge of their collection by the sale of these products. Repeat purchases by consumers could be induced by prolonging relevant experiences, and such measures have become the main creative language and marketing method utilized by modern cultural creative art workers. With this premise in mind, this research mainly focused on investigating the influence of extension products based on tech-art on consumers' repeat purchasing behavior. This research firstly used interviews targeting cultural creative art workers in the country and investigated the model of value creation of cultural creative extension products, elaborating the means by which cultural creative art workers incorporate tech-art to create value and marketing models for extension products. Quantitative questionnaires coupled with a factor analysis and structural equation model analysis enabled an understanding of how the extension products developed by these art workers could resolve the financial difficulties of the cultural creative industries. A further analysis of the critical factors for the success of extension products from the consumer perspective proposed product concepts and relevant marketing techniques which the cultural creative industries in this country could rely on to expand their market, induce repeat purchasing behavior and resolve the issue of insufficient funding.

This research utilized physical and online questionnaires and achieved an effective sample recovery rate of 75.2%. The results showed that a positive correlation exists between incorporating tech-art by art workers and extension products. Consumers' repeat purchasing behavior would be induced as a result of the interactivity introduced by tech-art. From the perspective of extension products, those products which incorporate exhibition themes would not only help to provide a memory extension in their added value, but they would also improve consumers' motivation to repeat purchase.

### Limitation and Future Research Directions

The model of cultural creative commodities focuses on the adoption of tech-function and products' characteristics that improving the willingness of consumers purchasing behavior. However, because cultural creative industries include 15+1 cultural creative categories, it is also necessary to examine the specific field in fostering this process. Further research should (1) concern the questionnaire design including different combinations and (2) study how the value-added process moderate the main effects of cultural creative commodity characteristics on new product development.

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# POSITIONING FOR INTERNATIONAL MARKET SEGMENTS: A CASE STUDY OF SALMAN BIN ABDULAZIZ UNIVERSITY

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## ABSTRACT

*The purpose of this study was to identify target segments and positioning attributes for Salman Bin Abdulaziz University (SAU) to achieve objectives related to recruitment of high performance students and distinguished faculty. As a newly established institution, SAU strives to occupy a niche in the increasingly competitive academic marketplace of Saudi Arabia in response to globalization and quality assurance standards. Thus, positioning and brand building are important aspects of SAU strategic planning. The research followed a qualitative method based on internal survey. The sample size comprised 92 faculties with a representative diversity of international and local contracts. Positioning attributes aligned with SAU mission, vision, strategic goals and objectives were analyzed and compared to perceptions of internal stakeholders with regards to value categories designed to target segments of high performance students and distinguished faculty. The research yielded practical outcomes for the implementation of SAU Strategic plan. Findings proved that SAU has recognizable strengths to build distinctive brand assets for identified international segments. However, the University should strategize its internal values to capitalize on these advantages in the long run and benefit from stable enrollments, greater students' retention and less faculty turn-over.*

JELM30

**KEYWORDS:** Positioning, Higher Education, Strategic Planning

## INTRODUCTION

Within the new global environment characterized by increasing competition, higher education institutions are emerging as organizations driven by the commercial imperative of market-led forces. In a highly competitive educational market, differentiation and effective positioning appear to be key success factors pertaining to the choice of study and work destination. Universities all over the world compete to recruit international students and faculty in response to globalization and quality standards. Therefore, there is a need for higher education managers to build strong brands locally and globally, in both short and long term. Positioning an organization in the environment of its industry is one of the most important phases of the organizational strategic planning. Universities currently face complexities in external variable environments to which their internal structures are under pressure to adapt in an effective way. It forces universities to use strategic planning and strategic management to be responsive and supportive of stakeholders' needs.

### Background and Problem

Higher education sector in the Kingdom of Saudi Arabia has grown substantially since late 1990s in response to high demand for higher education and national development plans for a qualified workforce. The number of public universities increased from eight universities in 2000 to 25 universities in 2012. This expansion of the higher education sector went along with establishing of the National Commission for Assessment and Academic Accreditation (NCAAA) that

obligates all universities to create a long-term strategic plan to meet national higher education quality standards that are consistent with international accreditation.

### Research Gap

The boom in the number of Saudi Universities created competition for students, faculty, and financial support among higher education institutions. However, universities in the public sector of Saudi Arabia lack experience in positioning higher education institutions to forge strong and individual identities. As a newly established institution, Salman Bin Abdulaziz University faces a need to raise the quality of the educational process by means of recruiting professional employees and high achievement students to meet the criteria of NCAAA accreditation standards. SAU strives to occupy a niche and develop distinctive positioning strategy that enables to achieve its strategic goals in the increasingly competitive academic marketplace of Saudi Arabia.

### Problem Statement

The problem of this research is to identify potential international target segments and the specific positioning attributes that should be implemented as a part of the University strategic plan to achieve the objectives related to the recruitment of high performance students and distinguished faculty. This problem can be stated in the following research questions:

1. What potential positioning attributes can be aligned with SAU mission, vision and strategic goals?
2. What target segments can SAU reach to recruit high performance students and distinguished faculty?
3. What are the key positioning attributes SAU can capitalize on to recruit international students and faculty?

## **LITERATURE REVIEW**

The authors consider that it is important to highlight the following applicable ideas from the overview of the related literature.

### Branding of Higher Education Institutions

There is a general consensus among scholars that branding is as important for educational institutions as it is for commercial businesses. However, marketing in education provoked a lot of discussions. Driscoll and Wicks (1998) point out differences between the markets for traditional commodities and the university education. Chapleo (2006) holds that the brand management in higher education is similar to nonprofit brands, but it may not necessarily be suited to the specific needs of the university sector due to greater competition in the market. Harrison-Walker (2009) emphasizes that strategic positioning which has a critical application to marketing in higher education, is often mismanaged. A substantial number of published studies address the subject conceptually (Aaker & Shansby, 1982; Lowry and Owens, 2001; Mashhadi et al., 2008; Harrison-Walker, 2009; Manhas, 2010). Positioning has been acknowledged as a core branding activity (Aaker & Shansby, 1982). By directing all of its marketing efforts towards a desired positioning, a university maintains a coherence and unity in its activities and establishes a specific image (Lowry & Owens, 2001). The characteristics of a good position for the brand are thought to be perceived uniqueness, prevalence, and strength (Aaker, 1991).

A quality-oriented approach toward strategic positioning in higher education has been discussed by Mashhadi et al. (2008). Some researchers make attempts to differentiate service branding to

avoid the danger of adopting product based branding strategy in developing positioning in higher education (Padgett & Allan, 1997; Morrison & Grane, 2007). Padgett & Allan (1997) emphasize that the experiential aspect of services play an important role in conceptualizing in a service brand image because it represents the customers' perspective. According to Morrison & Crane (2007), emotional dynamics plays a powerful role in the customers' selection, satisfaction and loyalty toward service brands.

Branding builds an institution identity (Chapleo, 2005; Guzman et al., 2006; Goi Mei, 2010; Lockwood & Hadd, 2007). Chapleo (2005) argues that among universities insufficient effort has been done to clearly differentiate their institutions from competitors. Lockwood & Hadd (2007) reiterate that much of the branding work in higher education has been in peripheral areas, such as assessing logos, creating and disseminating marketing materials, or selling licensed merchandise. So, improvements should take place along dimensions of marketing communications, reputation, and public relations activities. Researchers emphasize that building brand identity begins within the organization and requires coordination of branding communication efforts (Schiffenbauer, 2001; Schultz, 2002; Judson & Aurand, 2009). Schiffenbauer (2001) contends that the brand message will lose its credibility if it is not supported by the employees within the organization. Hence, internal branding efforts are essential for employees to understand and take ownership in the brand.

Brand messages conveyed to employees of an organization have been recognized as an important aspect of an organization's positioning to ensure that the brand messages sent internally to employees closely match those sent to customers (Judson & Aurand, 2009). This becomes even more critical for service organizations because consumer loyalty is typically challenged by service quality, which is often much more variable and more difficult to control than product quality (Schultz, 2002). Another line of research has been evolving to help brands achieve differentiation with respect to social values. Guzman et al. (2006) present a reference group influence model which considers brand building with social values by leveraging brand equity with public services. Developing the brand identity is important for both public and private universities. Goi Mei (2010) explored the difference in service branding model between private and public higher educational institutions. The finding of the study showed that positioning of private universities is better developed than in public higher educational sector (Goi Mei, 2010). This observation confirms the author's premise about the similar situation in Saudi public educational sector.

#### Creating Customer-Based Brand Equity in Higher Education

Within the context of higher education, customer-based brand equity is concerned with the ways prospective students, employees, legislators, other stakeholders, and general public perceive the value added to an institution by associating it with a brand name. Customer-based brand equity is a multidimensional construct. In general, customer-based brand equity comprises brand loyalty, brand awareness, perceived quality, brand associations, and other proprietary brand assets, such as trademarks and patents (Aaker, 1991). Taylor and Reed (1995) hold that marketing in higher education should not take a totally student-centric perspective, but ought to balance needs of various stakeholders. Although the key target for a university's positioning program is prospective students, faculty and staff represent an important public (Lowry & Owens, 2001). McAlexander & Koenig (2010) situate brand community framework in the context of higher education marketing investments. As loyalty to the institution depends largely on a sense of belonging, it is one of the critical aspects to determine students' choice. An effective brand management strategy can be maximized only if the brand carries a promise and if every member of the academic community is committed to fulfilling that promise (Lockwood & Hadd, 2007).

The value of a brand image to attract prospective applicants is a topic that has garnered most interest in recent years (Lowry & Owens, 2001; Rapert et al., 2004; Bennett & Ali-Choudhury, 2009; Judson et al., 2009). Bennett & Ali-Choudhury (2009) argue that branding facilitates decisions in selecting of an institution, particularly in the promise of outcomes. A strong brand increases the institution's ability to compete for the best students, gain alumni membership and financial support from donors (Judson et al., 2009). Consequently, success in the educational marketing environment depends on the ability of an institution to recruit and retain the best students, faculty and staff (Jevons, 2006; Melewar & Akel, 2005).

Rapert et al. (2004) argue that students are uniquely qualified to assess the quality of their educational experience. This aspect has acquired more significance due to the globalization of higher education associated with the creation of national and international brands by universities. Empirical studies focus on universities' branding initiatives by institutions of higher education in United States (Judson, et al., 2009; Jevons, 2006), United Kingdom (Chapleo, 2007; Melewar & Akel, 2005). There is a body of research that deals with specific problems of positioning Asian (Gray et al., 2003) and Australian universities (Whyte, 2001; Shanka et al., 2005) for international markets. Based on the literature review, the author holds that internal branding is vital for educational institutions as service organizations where employee' ownership in the brand should match customers' needs. It is the premise that can be built upon to position SAU.

## **METHODOLOGY AND DATA**

This case study follows a qualitative method to analyze data from primary and secondary sources, and the internal survey that offers descriptive statistics applicable to the study.

*Survey Design and Development:* A survey using a structured questionnaire was developed to elicit responses within internal environment of SAU. The questionnaire contained multiple items related to two dimensions. First, it evaluated employment criteria for the current faculties at SAU, as well as problems they encountered while the job recruitment process. Second, it was used to investigate perceptions of SAU faculty with regards to the positioning attributes applicable for SAU to attract prospective international students and faculty. The attributes were selected to identify perceived target regions to recruit high performance international students for SAU. A hand-delivered version of the survey was conducted for 19 faculties as a pilot survey design. A necessary modification was made before administering the on-line and email final version based on the input from the pilot study response.

*Survey Implementation:* The survey was distributed using two channels. An English version of the survey was posted online. An Arabic version was offered for additional convenience via the university website mail system.

*Survey Data Analysis:* Analysis of data collected in the English version of the survey was done through the website summary and Excel charts that highlight trends displayed by the data collected. Statistic from the Arabic survey version was added manually to the online data. The overall sample size comprised 92 faculty at SAU. The only relevant personal data considered for the research was the type of contract the employees have. The overwhelming majority of the respondents (74%) have an international contract, while only 26% of the respondents were hired locally, which means that such a sample gives a representative diversity for the research purposes.

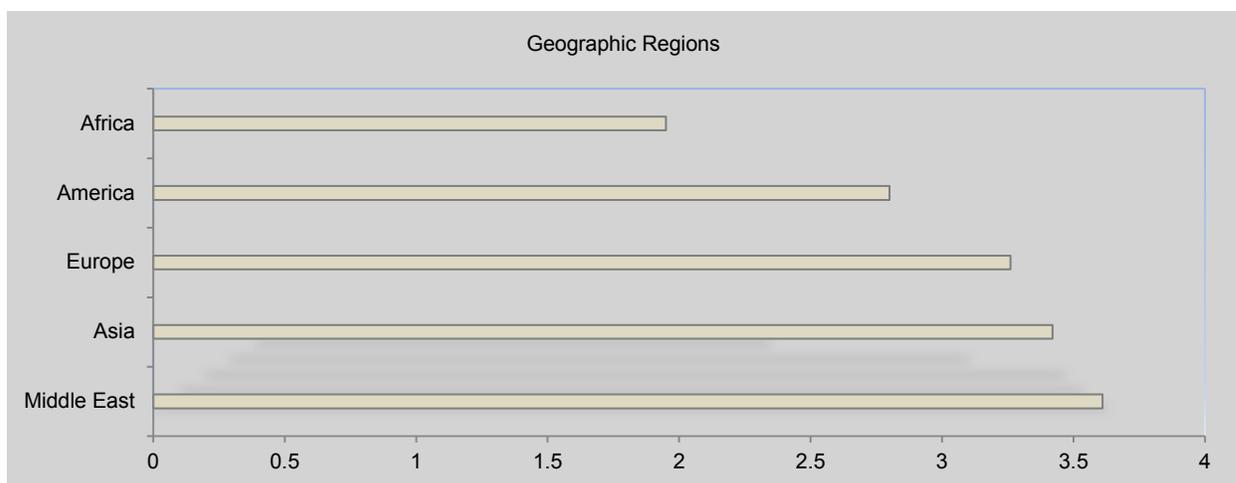
*Institution Documentation Analysis:* Data in respect to SAU potential attributes to strategize the recruitment of high performance students and distinguished faculties were obtained from the primary sources, in particular SAU Strategic Plan 2012-2021 and Strategic Plan PMO report. Data comprised information on SAU mission, vision, and strategic goals that have been analyzed and compared to the perceived strength as viewed by the faculty.

## RESULTS AND DISCUSSION

Job contract criteria were viewed as important by current SAU faculty. The majority of the respondents (78%) who filled out the survey placed salary at the top of the list, while professional development and research opportunities ranked second and third with corresponding 68% and 62%. This means that though financial benefits are the priority for the job seekers, employees in academia are very much concerned about a professional setting the university can offer. Other criteria such as career promotion, friendly and cooperative environment and satisfaction for family needs were ranked on average between 44% and 48%. As a conclusion drawn from the above mentioned data, offering opportunities to pursue professional growth in the contracts for prospective employees would be a positioning strength for SAU.

*International Target Segments for Students:* 90% the respondents in this study strongly agreed that international faculty and students are important for the University. The chart below shows preferable regions for recruitment of high performance international students as perceived by SAU employees.

Figure 1: Distribution of Geographic Regions For Recruitment of High Performance International Students



An important assumption can be made that SAU should attempt to recruit students from diversified locations around the world, rather than focusing on the Middle East. While the Middle East is still on the top position (3.61), it is narrowly followed by Asia (3.42) and Europe (3.26), which is in close proximity too. 92% of respondents unanimously agree that academic records is the most important criteria for admitting international students to a Saudi university, while 42% consider that majoring in Islamic studies and Arabic language is another significant factor. It should be added to these selective criteria, that 25% of the respondents consider religion and 17% - nationality as valid criteria for students' recruitment. Income status and gender are rated equally low at 8.47%. These data present a perceived student's profile targeting, to a large extent, international segments that are either affiliated with the Islamic world or pursue studies in the correspondent fields with no gender or income discrimination.

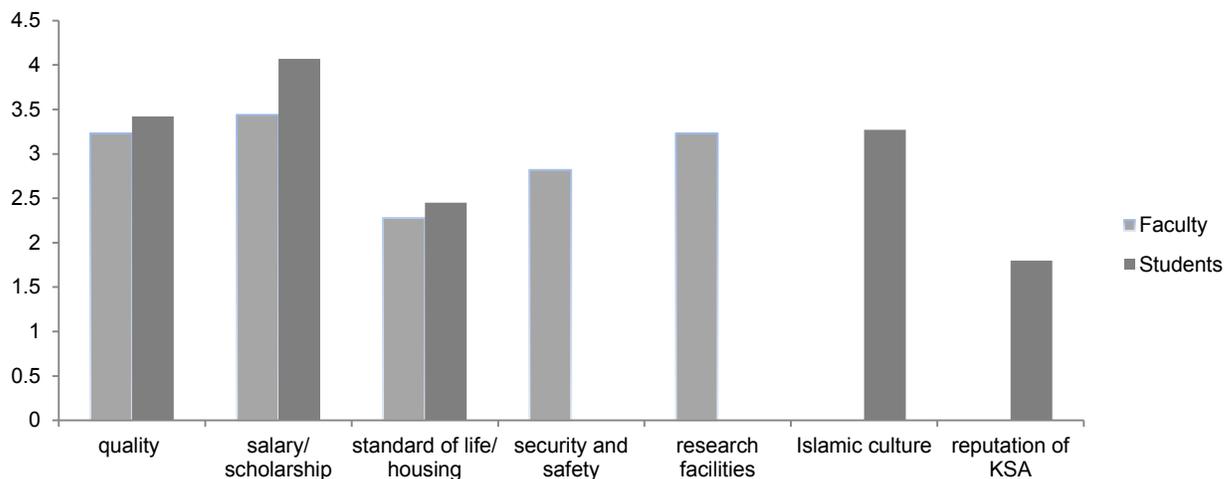
### Value Categories As Potential Positioning Attributes

Value categories of a Saudi University were appraised to indicate strength variables for positioning SAU. Three value categories were identified as intersecting for the purpose of categorization:

- A. Quality standards/ quality of educations
- B. Tax free salary/ scholarships and financial aid
- C. Standard of life/ availability of housing and recreation activities

The charts below summarize value out of 5 points for the categories perceived as strength for attracting high performance international students and distinguished faculty to a Saudi University.

Figure 2: Distribution of Value Categories For SAU Target Segments



As displayed by the chart, there are a few patterns among responses common for both target segments, such as quality of the educational process and living standards with a slight overarching significance for the student segment. The respondents also agree that financial benefits are the key attractive category for both target segments, and it is a dominant factor for prospective international students. The results of this cross-checking chart are consistent with the previous conclusion that faculty value equally financial benefits and professional opportunities with the ranking of the salary (3.44) and research facilities (3.33). Additionally, Islamic culture was rated at the value of 3.27 for the students, and security and safety at 2.82 for the faculty. It can be concluded that internal institutional factors are ranked above the advantages of the external environment. Finally, respondents suggested that the best way for advertising SAU is participation in educational fairs (87%) and the institutional website (74%), followed by utilizing advertising in media (53%) and social networks (55%).

### SAU Positioning Attributes Aligned with the Strategic Plan

To evaluate positioning messages aimed at external and internal branding, a brief analysis of SAU Strategic plan has been done. The SAU strategic plan gives a holistic and shared understanding of how the University adapts to the education policy, environment and develops its activities. From SAU Vision: *“To become a distinctive university in education and community partnership”*, the perceived uniqueness of the brand revolves around social, communitarian and public values that underlie services in the educational sector. Thus, “community partnership” can be associated with values that could help develop SAU equity by relating to citizen’s concerns, as well as by establishing meaningful relationships with international customers. However, this most important aspect has been under communicated to SAU stakeholders. Interpretation of a community partnership should be extended broader to capitalize on its strength more. SAU mission suggests a promise to meet customer expectations: *“Salman bin Abdiaziz University endeavors to produce competitive graduates through internationally recognized education standards within an academic and research environment, distinguished human resources, effective community partnership and supportive administrative systems”*. These promises correlate with the target needs of prospective students and employees as perceived by the respondents of the internal survey

The perceived strength of SAU is highlighted in the adopted Core Strategic Values:

1. *Quality*: A level of performance that engenders stakeholder satisfaction and ensures future continuous improvement.
2. *Justice and integrity*: All employees are treated fairly and equally.
3. *Teamwork and cooperation*: A culture of teamwork and collaboration is highly emphasized.
4. *Transparency and accountability*: The University’s performances, and any response to all enquiries regarding that performance, are fairly published.

The Core Strategic Values give clear implications for unique assets that SAU can capitalize on to develop a distinctive positioning strategy with a clear message for internal stakeholders, prospective students and faculty, including international target segments.

### **CONCLUSION AND IMPLICATIONS**

Within the limitations in the research scope, we encourage the expansion of this initial study to an approach that gives a better representation of customers’ needs involving the student body. Nevertheless, the internal survey yielded clear results regarding applicable positioning attributes to target international market segments at SAU. The findings of the research proved that SAU Strategic plan has recognizable positioning strength to build the University brand asset. However, as can be implied from the study, SAU should strategize its internal values rather than benefits of the external environment to capitalize on these advantages in the long run. Moreover, a need for aligning accurate positioning messages of SAU Strategic plan with perceptions of internal stakeholders has emerged. It will enable effective communication between employees and customers. If SAU pursues active positioning, the University will benefit from stable enrollments, including identified international segments, greater students’ retention and less faculty turn-over, and as a result, increased students’ achievement and quality assurance of the educational process. Finally, SAU has to develop clear advertising strategies to reach target segments of high performance students and distinguished faculty that will enable University to fulfill the promises delivered to the customers at the current stage of the implementation of the Strategic plan.

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# INCREASING YOUR CULTURAL AWARENESS

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## ABSTRACT

*The world has become increasingly interrelated in the past three decades. Technology and the internet have dramatically facilitated communications, there is increased foreign investment, global trade barriers have been minimized and outsourcing of work is common. As Thomas Friedman says 'the playing field is flattening.'*

*In order to service clients and subsidiaries in all parts of the world, CPAs need to know how to deal effectively with those from other cultures. According to the 2010 census, 13% of the US population is foreign born. The US workplace is becoming increasingly diverse. Understanding how cultures differ can enable us to interact more effectively with those from other cultural backgrounds.*

**JEL:** M49

**KEYWORDS:** Cultural Awareness, CPA

## INTRODUCTION

This article will focus on several areas of cultural differences. The intent is to make the reader more aware of these differences and to heighten cultural awareness and sensitivity. Also, the implications of culture awareness on the CPA will be addressed.

## RESULTS

Why it's important to understand culture and how it impacts us

Culture can be said to be the shared norms of a society based on values, beliefs and customs passed on over generations. Often people from other cultures will act differently and in ways we do not anticipate.

Take the case of an American company that acquired a foreign subsidiary. It had a large receivable from a local company that was seriously overdue. A collection agency was hired and they promised quick action. The next week the collection agency indicated that the money would be arriving shortly. When asked how they got such quick results, the agency said 'We kidnapped the president's infant son.' The Americans insisted the infant be returned immediately. They did collect their receivable within a month. The collection agency's values were different from the American company's in unanticipated ways.

Past AICPA chairman Paul Stahlin says that thirty years ago it was the exception rather than the rule to have overseas dealings. Today it is the opposite. He believes that Americans are getting better at recognizing cultural differences. But he recommends that if you are to work with other cultures, it is important to invest time in studying the culture, history, political and business issues that the country faces.

CPAs must deal with cultural differences not only when operating overseas but also when managing today's more diverse workforce.

Building relationships is even more important in many cultures than in US. In China, for example, the rule of law is not the practice. A strong relationship can be more important than a contract. Without a solid relationship between partners, it is difficult to do business successfully in the Chinese workplace. Developing such a relationship requires time and patience, something short term oriented Americans are not well accustomed to.

Adapting to local culture is a must if you are to be successful working in another country. A hurried French-speaking American's request for a Paris train ticket is likely to be met with a "Don't you want to say good morning?" Americans are too much in a rush to pay attention to the requisite niceties. There are many websites and books which provide insights to familiarize you with local customs.

#### Sidebar

##### An Expatriate's Experience

Bern Kuelker, a Canadian partner currently working in KPMG's Short Hills, New Jersey, spent twelve years working in Germany and Russia. Bern found his international experience enjoyable and interesting, but not always easy. He had to learn to deal with unfamiliar situations and cultures. He improved his German-speaking ability but used translators in Russia. When dealing with complex accounting issues, there can be misunderstandings due to a translator's lack of familiarity with the terminology. It is important to speak more simply, recap conversations and test for understanding to minimize the miscommunications.

His spouse greatly encouraged him to take the first assignment abroad. For both husband and wife, the international assignment was a very rich life experience. Having a supportive spouse was essential in the decision to relocate overseas. Not only does the employee face the challenges of living abroad, but so does the family.

He noted a difference in the balance between work and personal life while overseas. There was more of an emphasis on 'working to live.' Americans are said to 'live to work.' While the Europeans were on vacation, it was easier for them to disconnect from work.

Upon moving to Russia he found his expectations of the people were off the mark. He also found that there were significant changes happening quickly as the country moved to a market economy. He noted that CPAs must understand and deal effectively with people regardless of their culture. Bern says "It is essential to be open-minded, to show respect for the other culture and be observant of how people interact."

#### Ethnocentrism

One of the major problems when dealing with other cultures is the natural feeling that my way is better. We expect others to behave as we would behave. When we believe that our approach to management is the better way, it is known as ethnocentrism. However what works in one culture does not necessarily work in another. Attempting to motivate staff with individual rewards might work well in US, but would be poorly received in a collectivistic society, where the group rather than the individual is to be rewarded.

Ethnocentricity can lead to a disregard or contempt for other cultures. Imposing our management approach in another culture may be ineffective. Some resistance to the adoption of IFRS may be the result of an underlying ethnocentrism. Especially for accountants, change brings on a significant set of issues and challenges.

## Sidebar

### Tips for managing cultural differences

Be culturally sensitive  
 Respect cultural differences  
 Be nonjudgmental  
 Establish trust  
 Understand that no culture is inherently superior  
 Be patient and diplomatic  
 Know before you go  
 Expect the unexpected  
 Be open to new experiences

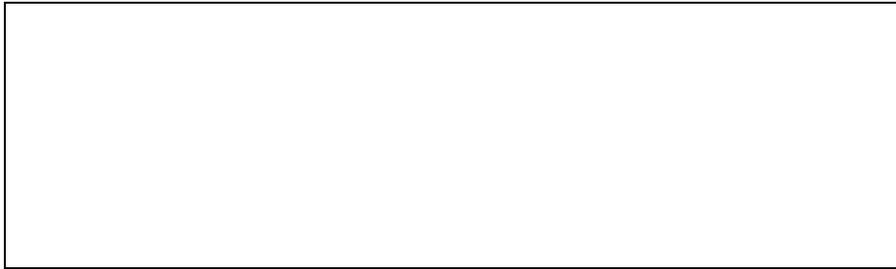
### Attitudes toward Time

Americans tend to be deadline driven (monochronic.) They do one task at a time. Schedules are all important and strictly observed. Punctuality is essential. Time is money and is limited. Meetings should stay on topic and attendees should stick to the agenda. There is a sense of urgency in accomplishing what needs to be done. A monochronic person will be impatient with the perceived rudeness of the Brazilian sales clerk who is talking on the phone, while sipping a soda, and ringing up the sale. A Brazilian would have no problem with this behavior.

People from time insensitive cultures (polychronic) see time as plentiful and have a more relaxed view of schedules. They are multi-taskers and easily distracted. Social relationships take precedence over adherence to a rigid schedule. Polychronics might consider strict adherence to the schedule as inflexible because it may interfere with their social relationships which are far more important adherence to schedule. Meeting times are not strictly observed. An American executive would be frustrated and angry when a Middle Eastern counterpart shows up for a noon lunch at 2:30 PM. The Middle Easterner doesn't understand why the American is mad. This is an example of a time-based culture clash.

## Sidebar

Time Sensitivity	
Insensitive (Polychronic)	Sensitive (Monochronic)
Arabian Countries	Germany
France	United States
Latin Countries	Scandinavian countries



### Communication Issues

Even when the same language is spoken there are often differences in meaning. When a UK accountant talks about turnover, she is referring to revenue not how quickly inventory or receivables turn over. Idioms are often not understood in different cultures. When translated literally, 'it's raining cats and dogs' will confuse someone from another culture.

Humor does not travel well across cultures and there are other complications with communications. Americans tend to be more informal and familiar in their communications and could offend someone from a more formal culture. Some cultures do not express feelings or thoughts explicitly. Another aspect of communication that differs among cultures is the amount of directness used.

### Directness of Communication - High context vs. Low Context Communication

In the US, we tend to be direct and explicit communicators. Information is more readily available and straightforward. This is referred to as a low context culture. One says what one means. In indirect or high context communication, feelings and thoughts are not explicitly expressed. The context in which something is said says more than the words. People seem to talk around the issue. Asian and Middle Eastern countries tend to be high context communicators.

When dealing with a high context person, a low context person may think to himself, "why can't I get a straight answer?" The high context person may be viewed as sneaky, hiding something and a time waster. The low context person must be sensitive to the subtle clues given by the high context speaker. This requires considerable effort on the part of the listener. Low context speakers focus on information rather than context. When a high context person says, "That will be difficult." It is a polite way of saying "no."

The high context person views the direct speaker as unnecessarily talkative, rude, impatient and not a good listener. They may be seen as too aggressive to be trusted.

Communication differences can make reaching an understanding a challenge. It is important for direct communicators to recognize that when you are dealing with a high context person you need to adjust expectations and to understand the context of what is said.

Direct, embarrassing questions or statements should be avoided when dealing with high context people. Saving face is important to high context speakers.

Sidebar

Directness of communication	
Indirect (High Context)	Direct (Low Context)
Japan	Switzerland
Middle East	Germany
Latin America	North America

### Saving Face

In many Eastern cultures, harmony is greatly valued. There is a desire to avoid embarrassment or to save face, even at the expense of being truthful. Many Westerners cannot appreciate the importance of saving face. In other cultures, disagreeing publicly or having a loud confrontation has severe consequences in a negotiation.

Saving face is also related to a cultural disinclination to say no. Those who grow up respecting the need for harmony will seemingly agree even when they don't. Frustrations and hard feelings can ensue. Frequently in Eastern and Middle Eastern cultures, yes means 'I understand what you're saying' rather than 'I agree with you.' When asked "Do we have a deal?" Responses such as:

Yes, approval appears likely  
 You will know soon  
 That is a difficult question  
 We can't answer that question at this time

are all polite ways of saying no in many cultures. The speaker wants to maintain harmony and not cause the questioner embarrassment. A failure to respond is another way of saying no. This is understood in the high context cultures but not so well understood in low context cultures.

### Individualism vs. Collectivism

Collectivism refers to the interdependence of community members. Do people think of themselves as I or we? Individualistic cultures are loosely knit. People look after themselves. They are expected to be self-reliant and display initiative. Collectivistic societies value the group over the individual. One doesn't want to stand out. It is viewed as disloyal to the group. The nail that sticks out is the first hammered. In a collectivistic society, one would not want to show up a fellow worker. Providing individual incentives to reward a collectivistic worker generally backfires.

In the US, providing direct, frank feedback is viewed as an effective way of improving performance. In a collectivistic culture, such an approach would be viewed as disrespectful, insensitive, and disgraceful. In a collectivistic society, the family of an employee fired by an American boss might go to the boss to beg for the rehiring of the family member. The employee was too disgraced to face the boss himself.

Sidebar

## Highly Individualistic Cultures

United States  
Australia  
United Kingdom

## Highly Collectivistic Cultures

Singapore  
Korea  
Pakistan

The Impact of Culture Awareness on the CPA

In today's ever expanding global business environment, the understanding, respect, interaction and adaption of different cultures is inherent for every CPA at all levels. At the staff level position, the CPA will be working with individuals from a multiple of cultures. At the senior and management levels, culture understanding is critical for the planning and testing phases of an assurance engagement. As an example, it would be unlikely to include the testing of a defined benefit plan of an Asian subsidiary, as these plans are basically existent only in USA. Bribery is quite common in many non US countries. The CPA must be aware of this potential in such countries. Additionally, managers supervise individuals with diverse cultural backgrounds. The manager thus needs to instill multi-cultural awareness and make the workplace a respectful, friendly, collegial environment.

At the partner level, meetings with clients and prospective clients who come from differing cultures is commonplace. The partner needs to understand and adapt to differing cultural behavior if she wants to maintain good client relations. Successful and effective marketing strategies are culture related. In short, cultural understanding, respect and adaption is critical to every CPA firm in securing a good working environment, which will perform its services in a most efficient and effective manner, while ensuring a most profitable "bottom line". It is also highly recommended that the CPA firm provide ongoing in house seminars for its most relevant cultures; describing its history, political and religious makeups, acceptable and unacceptable behavior, as well as an email domain for employee reference .

**CONCLUSION**

When John Kennedy went to Berlin he made his famous comment "Ich bin ein Berliner." The crowd sheered and appreciated his attempt to relate to them, especially in their language. He should have said however, 'eine Berliner.' What he said was "I am a jelly doughnut." People from other cultures appreciate the effort and are tolerant of a foreigner's mistake.

Cultural awareness is best used to explain behavior that is different than ours rather than to anticipate behavior. Cultural sensitivity can help us interact more effectively with the increasing number of cultural backgrounds in today's workplace. It is imperative for the CPA firm to embrace cultural awareness as a critical aspect of its business model.

# THE PRESENT AND FUTURE OUTLOOK OF THE LAST IN FIRST OUT INVENTORY METHODS

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## ABSTRACT

*Until very recently, the Last in First out Method (LIFO) was under severe scrutiny from the financial community, and its repeal as an acceptable accounting method seemed imminent. There were pressures from the Securities and Exchange Commission and the International Financial Accounting Standards Board to standardize accounting standards worldwide. In addition, there were political pressures imposed by US Congress to raise additional revenues. Both groups strongly oppose LIFO. However, an SEC Report issued in July 2012 has greatly renewed the lifeline of LIFO indefinitely. In the unlikely case of its ultimate repeal, the author presents some tax opportunities available in this transition period.*

**JEL:** M48, M49

**KEYWORDS:** LIFO, IFRS, US GAAP, SEC July 2012 Report

## INTRODUCTION

The Last in First out (LIFO) method has been an acceptable, popular accounting method since its inception in 1939. Since then, many have and continue to argue against LIFO as a viable, economic accounting method. Until recently, LIFO faced a possibility of its elimination by the year 2015, as political forces coming from the International Financial Accounting Standards Board, the world financial community and the US administration strongly oppose this method. The International Financial Reporting Standards (IFRS) prohibits LIFO as an acceptable accounting method, and the Obama administration proposed in its 2010 budget to repeal LIFO altogether in the future. However, given a recent unprecedented report issued by the SEC in July 2012, which questioned IFRS use altogether, stating that there are too many gaps inherent in this regime, LIFO's repeal is now very unlikely. Part 2 will give a literature review of LIFO's tax advantages and financial statement limitations. Part 3 will examine the current state of LIFO, and Part 4 will investigate the future of LIFO, while Part 5 will provide recommended tax planning opportunities assuming the possible repeal of LIFO. The conclusion section Part 6, will also recommend areas for future research.

## LITERATURE REVIEW

The tax advantages associated with LIFO have been documented by tax laws, research, literature and Congress. Internal Revenue Code (IRC) 472 allows for the Last in First Out method of inventory since its inception date in 1939. Computationally, as the price of inventory increases, lower income will result under LIFO when compared to all other inventory methods, resulting in a lower tax payment. This tax advantage has led to the criticism of LIFO resulting in an unfair tax loophole advantage for a few beneficial industries; leading to poor and inefficient management of inventories, the need to maintain two sets of accounting records, and finally flawing the balance sheet presentation.

White, Sondhi and Fried (2008), state that due to the tax advantages associated with LIFO resulting in greater cash flows, the choice of inventory method should point towards LIFO. Dopuch and Pincur (1988) found that the taxation effect was the primary reason a company chose LIFO.

To obtain the tax benefit, three elements have to be satisfied. First, there has to be a scenario of increasing inventory prices (inflation); second, a buildup or increase in inventory, known as a LIFO reserve; and finally, there has to be an income tax. LIFO use in an inflationary environment will result in expensing the most current higher cost inventory purchases against revenue, resulting in the lowest possible income total. The greater the inflation environment, the more pronounced is the tax benefit. This was observed in the early to mid-1970, a period of double digit inflation in the U.S, when more than 400 publically U.S companies elected to change their inventory method to LIFO.

The tax advantage of LIFO is also dependent on inventory additions or buildups, known as reserves. This has resulted in poor inventory asset management and suboptimal business behavior as observed by Trackel and Trezevant (1994).

The US government has estimated that presently less than 15% of publically traded companies use LIFO, and that the corporate tax rate of 35% can be reduced to 30.5% if all of the corporate tax loopholes such as LIFO were eliminated. The elimination of LIFO is expected to add 100 Billion Dollars in US tax revenue over the next ten years according to the US government. This figure is very optimistic and inflated when one considers that the overall LIFO reserve is 100 Billion dollars (Compustat), so at a 35 percent tax rate, this LIFO reserve figure will have to triple over the next ten years to meet such projections. A more realistic figure will be 35 million dollars added to tax revenue to the US government over an eight year period.

As a defense to LIFO users, non LIFO firms have the option to adapt the Lower of Cost or Market Method (LCM). LCM allows inventory to be valued below cost if cost exceeds market value. Market value is defined as replacement cost and such valuation can be made on an item by item basis. As an example, a company may use and to take a tax advantage prior to sale by the use of a non LIFO- LCM method. Given that LIFO adopters tend to experience increasing inventory market values, this benefit is not really viable to them. Additionally, I believe pressures in the future by Congress will eliminate this potential advantage if LIFO is repealed, as it represents yet another tax loophole, primarily for non LIFO users. This method is used by industries which have obsolete type inventories like computer, chip and food.

The tax deferred argument under FASB 109 can be made in defense of LIFO. One may argue that this LIFO reserve represents a temporary tax difference which will be paid to the US government in the future, when this difference reverses causing higher taxable income. This then is similar to differences resulting in depreciation totals between book and tax purposes, which lead to a deferred tax liability. This is a weak argument as research has shown that when future earnings expectations are not available, companies opt out of LIFO and therefore, no reversal of this deferred tax liability is ever realized.

Finally, one needs to question whether the elimination of LIFO will have any dent on the Federal Deficit which at present is 16.5 trillion dollars. Repealing LIFO will add per my projection, 35 billion in tax revenue which will reduce the deficit a meager one quarter of one percent. LIFO is not in any way the culprit of this deficit, and the regulators realize this, as they have eased their

attack on LIFO in this most recent time. Too many tax loopholes exist, many of which are political in nature which adds to the problem of a fair tax code. A comprehensive tax policy is argued as a good starting point to address this lingering and critical problem. However, interest groups can put a quick end to this potential and hopeful development.

### Recent Developments and Current State of LIFO

For the period 2006 to early 2012, LIFO was facing pressures from both: the International Reporting Standards Board in cooperation with the SEC, and the U.S. Congress for its possible complete elimination by the year 2014. On November 15, 2007, the Securities and Exchange Commission (SEC) exempted foreign firms from including reconciliation from International Financial Reporting Standards (IFRS) to U.S. Generally Accepted Accounting Principles, (U.S. GAAP) when filing on U.S. Stock exchanges. Foreign public firms were permitted until 2010 to file using the International Financial Reporting Standards (IFRS) without reconciliation to U.S. GAAP as previously required. This move created a mandate to converge IFRS and U.S. GAAP and financial statement requirements (SEC, 2007).

On June, 18, 2008 the SEC issued a press release stating that the world's securities regulators are uniting to increase their oversight of international accounting standards. There were plans set forth by the SEC and the IFRS to standardize accounting standards, on a worldwide basis with a target date set for periods ending after December 31, 2014. IFRS convergence in the US seemed manifest. Under IFRS rules, LIFO is not a permitted acceptable accounting method. The Obama Administration had proposed in its 2010 budget to repeal LIFO altogether in an attempt to generate greater tax revenues.

On January 1, 2011, more than 100 countries have adapted IFRS or a variation, including our neighboring country Canada. IFRS curriculum has also penetrated the college curriculum of US universities as the major testing agencies have greatly incorporated IFRS as required topic coverage. The Uniform CPA exam tests IFRS and the CFA examination has eliminated US GAAP altogether from the curriculum and solely tests IFRS. International Accounting courses have become the norm in US universities. So what happened to change this thinking?

First, the development of a financial crisis in Europe questioned whether accounting information really causes economic downturns. The European Community adopted IFRS but it did not prevent a financial crisis. Secondly, different variations of IFRS were adopted for use by many countries, thus raising the issue of comparability. Third, and most importantly was a report issued by the SEC in July 2012 questioning IFRS as a viable accounting system, and stating that it has too many "gaps"?

The SEC questioned a number of items, starting with adequate funding needs in there continued success. A lack of reporting consistency among IFRS users is also a major SEC concern. Significant accounting reporting gaps were cited such as the treatment of contingency losses. Additionally, the report noted that several items of accounting are too much removed from US GAAP treatment that convergence seems unlikely. These items include, inventory costing, contingencies, deferred income taxes, depreciation and the presentation of Fixed Assets. These differences seem irreconcilable and in the case of LIFO, the issue relates to taxation, rather than accounting policy.

Most significantly in this report, the SEC announced that it has no target date, if any, for IFRS convergence. Clearly, the SEC is in no rush and non-enthusiastic about convergence, which is not likely to happen anytime in the intermediate future. These developments have put LIFO repeal on the backburner, and the result is that the political pressures against LIFO have eased in a significant manner and the likelihood of its eventual repeal anytime soon is very unlikely

## THE FUTURE OF LIFO

In case 1, LIFO would continue as present. Although dual resistance from IFRS and Congress exist, recent developments and charges against senator Rangel, coupled with the continued weakness in the worldwide economy makes the status quo a reality. Although the continued use of LIFO will greatly and potentially hinder the goal of uniform financial reporting going forward, the ultimate goal here has moved to convergence and not uniformity, adding to the real probability of continued LIFO use in the USA. Compromises between US GAAP and IFRS in my opinion will be the norm rather than the exception going forward.

There are four possibilities of LIFO going forward, and illustrated as follows:

Case	Financial Reporting Purposes	Tax Purposes
1	Yes	Yes
2	No	Yes
3	Yes	No
4	No	No

In case 2, allowing LIFO for tax purposes and not for financial reporting purchases represents the best of both world, as a company report the highest income for financial reporting purposes and pay the least amount of tax. The scenario would effectively eliminate the LIFO conformity requirement. The likelihood of this happening is most unlikely and not feasible.

In case 3, the worst of both worlds for a company; that is, the lowest income for financial reporting and the highest tax payment. This scenario is also not feasible.

Case 4 represents the complete elimination of LIFO. This will only occur if LIFO is eliminated at the tax level. If so, then it will be eliminated for financial reporting purposes, as the advantage for business purposes would not exist. Given the SEC's non commitment to IFRS adaption in the US and the spiraling US deficit which now exceeds 16.5 trillion Dollars, LIFO is safe, and it is unlikely that any repeal will occur in the future. In addition, the continuing worldwide economic problems, LIFO at this time is just a footnote for the US regulators, which leads me to predict that this issue will not be addressed well beyond the next US election in 2016. My prediction then is a status quo on LIFO at this time and in the near foreseeable future.

### Tax Planning Opportunities Available for the Current Users of LIFO

Assuming the repeal of LIFO, or a switch from LIFO voluntarily which is more suitable, what are some of the tax planning opportunities available to taxpayers to help ease in this transition?

**Extended Payment Adjustment Period:** Under current tax rules, if a taxpayer changes its accounting period from LIFO to another acceptable method, and it results in a higher inventory value (income total), the difference in additional tax is payable over a period of four years. Under the current Obama Administration's 2010 Budget Proposal, the difference would be spread to taxable income and payable over eight years. Consequently, the termination of LIFO would be

mitigated as the resulting extra tax would be payable to the tax authorities over an eight year period. In an atmosphere of economic slowdown, many entities have chosen this route.

Lower inventory amounts and switch to a Just in Time Inventory purchasing system. Lower inventory levels will somewhat insulate against increased income (added income tax payments), and will also lead to a better inventory management approach, resulting in lower carrying costs.

## **CONCLUSION**

The probability of the elimination of LIFO as an acceptable accounting method is very unlikely any time in the foreseeable future. This paper addressed the present and future outlook of LIFO. In the author's opinion, LIFO will continue as is in the indefinite future, and will not be addressed again until after the 2016 presidential election. Worldwide financial reporting will continue to have differences with the US, and whether SEC workings with the International Reporting Board continue remains to be seen. In the event of LIFO's eventual repeal, the author recommends several tax strategies to help ease the burden of this change. Additional research examining the managerial, non-tax advantages of FIFO when compared to LIFO should be addressed, as well as the effect of the US deficit by the continued allowance of LIFO use.

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## **BIOGRAPHY**

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# INTERNET FINANCIAL COMMUNICATION ON UNREGULATED MARKETS: QUALITATIVE AND QUANTITATIVE APPROACHES

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## ABSTRACT

*Our doctoral research is interested in the voluntary effort of financial communication on the Internet realized by companies quoted on Brussels' unregulated markets. In the absence of obligation of communication, are companies quoted on these markets proactive regarding financial disclosure on their website? What are the determiners of the level of internet financial communication?*

*Have the characteristics of the SME an impact on this level? What brought the managers of these SME to disclose or not financial information on the Internet? Do companies quoted in Paris disclose more financial information on their websites than those quoted in Brussels? These questions are handled through four scientific papers mobilizing quantitative and qualitative methodologies. The general methodology of this thesis follows Grounded Theory's principle. This paper aims at showing the contribution of an inductive positioning, the complementary of quantitative and qualitative approaches and the wealth of the results coming out from the ground.*

**JEL:** M15, G10, C50, 032

**KEYWORDS:** Financial communication – Websites analyses – Internet financial reporting (IFR) - not regulated financial markets - Linear Regression – OLS - voluntary disclosure – paired sample.

## INTRODUCTION

The stock exchange of Brussels (The stock exchange of Brussels, created in 1801, called Euronext Brussels, is a part of the NYSE Euronext since the merger, in 2007, of the NYSE Group and Euronext NV. Euronext NV who, since 2000, included Paris Stock Exchanges, Amsterdam and Brussels, to which came to be added the stock exchange of Lisbon and the Liffé in 2002) accounts two unregulated markets: the Free market and Alternext. These two markets evolve in the side of a regulated market: Euronext. The study of these unregulated markets seemed to us interesting in several respects. First of all, the majority of the scientific papers are dedicated to the regulated financial markets and, to our knowledge; no research (except ours) was interested in the case of Belgium. Then, the unregulated markets address especially small and medium-sized enterprises (SME) which are an important part of the Belgian economic frame. These markets give to SME the possibility of a first stock-exchange experience, without satisfying all the obligations related to a quotation on a regulated market, and offer them to raise capital.

The absence of obligation regarding internet financial communication leads to the question of the voluntary effort realized by these companies. Four scientific researches were led around this problematic. Quantitative and qualitative approaches were mobilized to answer at best the researches' objectives. The general methodological approach of our doctoral thesis is inductive and joins the principle of Grounded Theory.

The first point of this article exposes the stakes of financial communication and will lead to our research questions. Then we present the different methodology mobilized in our four papers. The

results which these various researches allowed to bring to the foreground are developed in the point 4. Finally, the avenues of research, revealed thanks to our fundamentally inductive and exploratory approach, are exposed.

## LITERATURE REVIEW

The financial communications had, originally, for function to answer a legal obligation compulsory for listed companies and aimed at a public of initiated. Since the 1990s, the approach of companies evolved well. Beyond the simple disclosure of financial information, the financial communications became one of the elements of the global strategy of the company (Westphalen & Libaert, 2009). The stock exchange is a market as the others where the exchanges take place according to the law of supply and demand. The product which sells the company, even if it is a share, requires a communication plan (Heldenbergh & Scoubeau, 2005). «*For the listed companies, it is not any more a question of contenting itself with the compulsory financial information [] a real plan of financial communication must be developed according to the financial objectives that settled the company*» (Malaval, Décaudin & Benaroya, 2009: 496). A distinction is made thus between financial information which ensues directly from legal obligations governing the publication of the annual accounts of companies and financial communication which is "*any activity of financial information and promotion of the financial image of the company*" (De Bruin, 1999: 16). The financial communications allow the companies to differ, it is the strategic element which becomes inseparable of any approach of financial and stock-exchange marketing (Léger, 2008).

Several arguments are moved forward in favor of the financial information disclosure:

- Agency Theory: the context of agency finds its application within the framework of the financial information disclosure. According to Jensen & Meckling (1976), the disclosure of financial information allows to limit the agency conflicts and to reduce the agency costs. The transparency aims at reducing the information asymmetry and preventing the opportunist behavior, by a control and supervision increased (Chaher & Gnichi, on 2007). Schapiro-Neil (2011: 57) reminds that "*financial communication aim at limiting the risks attached to the company and at managing the uncertainties of the market*".
- Signal Theory: In a context of information asymmetry, signal allows the company to put additional information on the market. For example, debt level and paying dividends are used to show the good health of the company (Leland & Pyle, 1977).
- Financial markets transactions: On financial markets, the investors ask for a risk premium to compensate for the information asymmetry. By disclosing voluntary information, the company reduces the risk associated with its share and thus decreases the cost of the capital (Merton, 1987).

However, several researches demonstrate that the decision of disclosing information is influenced by proprietary costs: costs affecting the holder of the information. Indeed, the disclosure of information can damage the competitive position of the company on the market (Verrecchia, 2001; Dye, 2001). These studies demonstrate that companies are incited not to communicate to preserve their competitive position, even if raising capital will be more expensive afterward and if the investors interpret the withholding of information as a signal of bad news. «*The financial information is arbitration between disclosing information to the investors and to competitors*» (Fasse & Schapiro-Neil, 2011: 57).

### Internet as a Tool of Financial Communication

More than two billions 400 million persons were users of the Internet on the 30 of June 2012; against 360 millions in 2000, that is a 566, 4 % growth in 12 years ([www.internetworldstats.com/stats.htm](http://www.internetworldstats.com/stats.htm)).

Internet offers three types of tools: the website, the e-mail and the advertising banner. Other means of communication such as blogs, social networks, forums, virtual worlds, online videos, and wikies are also offered to companies (Westphalen & Libaert, 2009).

Within the framework of this PhD research, we concentrate on the website of the company. Carrier in terms of image and sharp tool of direct marketing, the website is a " *space created by the company to inform and to introduce a relation; the website is the starting point, the heart of the system*" (Westphalen & Libaert, 2009: 98).

In matter of financial information this new communication tool appeared near to other traditional support such as annual report, press release and shareholder assembly. The Internet gives to individual investors the access, at low cost, to the same information as other investors (Brissy, Guigou & Mourot, 2008). As Westphalen & Libaert (2009: 337) say, "*The Internet participated in the democratization of the stock-exchange life: it offers to the shareholders the real equality of access to the information*".

The internet communications tool presents several advantages (Geerlings et al. 2003; Branco & Rodrigues, 2006; Léger, 2008; Jahdi & Acikdilli, 2009):

- Spread a more important quantity of information, at a lower cost, at reduced time;
- Reach several targets at the same time and send them specific information;
- Archive the information, update them, and make them available at any time and accessible at low-cost.

Thanks to a financial space on its traditional website, the company can show the financial information and go away from the presentation of its activities and from its marks (Malaval, Décaudin, Benaroya, 2009: 481).

Andrikopoulos & Diakidis (2007) explain that some possibilities are exclusively offered by the Internet as for example: the distribution of videos of shareholder assembly, of roadshows, a space of storage and archivings of documents over several years, the subscription to a newsletter, a space of dialogue via a forum of the shareholders or the possibility of raising questions. A company can choose to disclose financial information to all the Internet users, without distinction, so favoring the transparency. However, the communication of particular information with certain targets, such as institutional investors and particular investors, can be an asset for the company (Heldenbergh & Scoubeau, 2005: 196).

The efficacy of a financial information website (Malaval, Décaudin, Benaroya, 2009: 482) can be evaluated by: referencing, user-friendliness, personalization, interactivity, information and links. A website 'stake is " *to inform and to seduce, to explain and to convince, to attract and to develop loyalty* " (Léger, on 2008: 92), to anticipate the questioning of the investors and to answer it in a clear and complete way, to supply to the financial community the necessary information to estimate the company's value and especially feed a relation with the investors (Barredy and Darras, on 2008: 3).

### **CONTEXT OF THE STUDY AND RESEARCH QUESTION**

The Free market and Alternext are legally considered as MTF (multilateral trading facility) since November 1st, 2007. They are unregulated markets in the sense of European directives or Belgian financial legislation. Listed companies on these markets are not thus forced to publish their accounts in the standards IAS / IFRS or to conform to the Belgian Code of governance. Rules are established by Euronext Brussels and approved by the Financial Services and Markets Authority (FSMA). On the unregulated markets, the conditions of membership and the obligations were voluntarily relieved to allow the companies to concentrate firstly on the development of the business (Euronext, 2006).

To be listed on the Free market, the company has to satisfy no preliminary condition, except the approval of the IPO prospectus by the FSMA.

To be listed on Alternext, firms have to exist for two years, raise a minimum of 2, 5 million euro on the market and choose a listing sponsor who will help the firm to prepare the IPO.

Once quoted, the companies of the Free Market have no legal obligation of information, except the accounting obligations been imperative by their social shape, such as the disclosure of the annual report.

On Alternext, companies have to disclose periodic account and information susceptible to influence the stock market price. Furthermore, the legislation regarding transparency plans that the Alternext shareholders who hold an important participation, have to let it know. They have to indicate to the FSMA and to the listed company the crossing of the thresholds of participation of 25, 30, 50, 75 and 95 %.

Contrary to companies quoted on Euronext, companies evolving on the unregulated markets do not have to have a web site (FSMA, 2012).

Pourtier (2004) explains that by defining what is required, we define by default what is voluntary. Given that no disclosure of financial information on the Internet is required, any internet financial communication from listed companies on unregulated markets results from a voluntary effort. From then on, in the absence of obligation of communication, are companies quoted on these markets proactive regarding financial disclosure on their website?

The exploratory study of Arnone, Colot, Croquet, Geerts & Pozniak (2010) was the first to focus on this question: what is the level of internet financial communication of companies quoted on the Free market of Brussels? Thanks to a literature review highlighting the recommendations concerning financial communication on the Internet, the authors created an analysis grid of websites. This grid is used to evaluate the quantity of communication of every company quoted on the Free market at the end of 2008 (27 SME). For every items of the analysis grid available on the web site of the company, a point is awarded. A final score of financial communication is obtained for every company.

The authors of this exploratory work discover that certain elements such as a press review or the board of director's presentation are very present, whereas the stock market price and the dividends, for example, are rarely communicated.

A certain disparity in the level of financial information disclosure between companies is observed. Some companies communicate a lot of financial information on their website whereas others present hardly their activity and some key figures. What elements explain these differences of Internet financial communication degree? What are the determiners of the Internet financial communication score?

Then, no company shows all the elements of the analysis grid on its website and the average of obtained score is relatively low. We can wonder then if it is due to the fact that they are SME. All are SME below what recommend the scientific papers in terms of Internet financial disclosure? Have the characteristics of the SME a link with the distribution of financial information on Internet?

Or maybe it is the case for all the companies quoted on unregulated market, doesn't matter in Brussels or Paris? These two stock markets are governed by the same rules; do the companies which are quoted there present the same degree of communication? Have the characteristics of the unregulated markets a link with the internet financial communication?

Finally, the authors (Arnone and al., on 2010) underline the voluntary effort realized by these companies which are nevertheless hardly forced to disclose financial information on their website. What is the origin of this voluntary effort? What brought these SME to publish financial information on their web site?

All these questions, raised up thanks to exploratory work of Arnone et al. (2010) are the start of our doctoral research.

## **METHODOLOGY AND DATA**

This section presents the field we analyze in our doctoral thesis and the methodology we use in our four papers.

### Study Field in Evolution

Through the articles which built this thesis dedicated to companies quoted on unregulated markets of Brussels, the field analyzed is evolutionary:

Article n° 1 (Pozniak, 2010) studies all the companies quoted on the unregulated markets of Brussels in 2009.

Article n° 2 (Pozniak & Croquet, 2011) compare all the SME listed on the unregulated markets of Brussels to unlisted SME.

Article n° 3 (Pozniak & Guillemette, 2013), 10 managers of SME listed on the Free Market of Brussels has been interviewed.

Article n° 4 (Pozniak, 2013) compare companies listed on the unregulated markets of Brussels in April 2012 to companies listed in Paris.

Figure 1: Research Questions

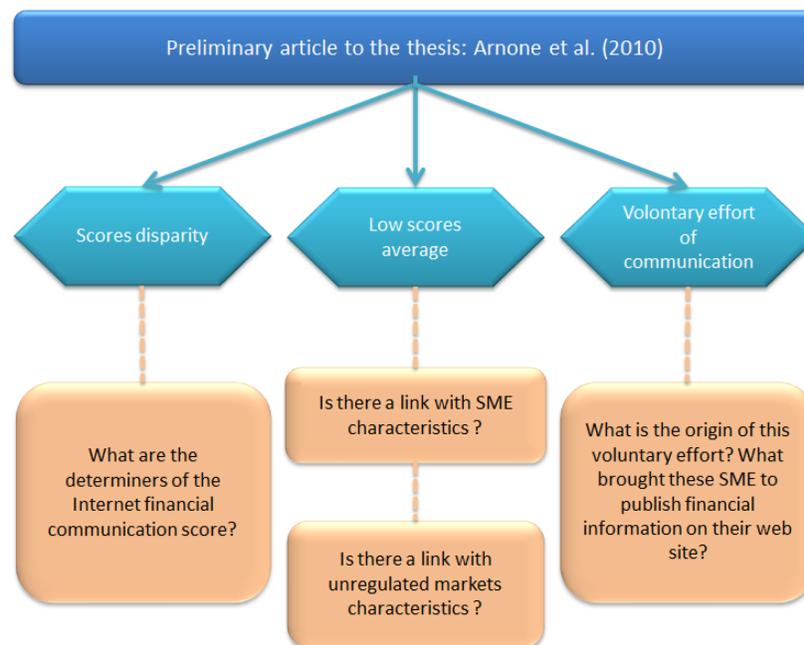


Figure 1 shows the questions, raised up thanks to a preliminary study, which are at the beginning of our doctoral research.

Table 1: Study Fields in Evolution

	Article n°1	Article n°2	Article n°3	Article n°4
Analyzes of websites	Feb 2009	Nov 2009	09-12	April 2012
Financial data	2007	2008	no	2010
Composition of corpus				
SME listed on the Free Market of Brussels	28	26	10	23
SME listed on Alternext Brussels	9	9		11
Unlisted SME		35		
SME listed on the Free Market of Paris				23
SME listed on Alternext Paris				11
<b>Number of SME studied</b>	<b>37</b>	<b>70</b>	<b>10</b>	<b>68</b>

Table 1 shows the sample of firms studied in each paper of our doctoral thesis. It also mentions when the data are collected and when the websites are analyzed.

The number of companies studied change in every article for two reasons:

On one hand, because the objectives of research sometimes required to widen the corpus of companies in the study. It was the case in article n°2 (Pozniak & Croquet, 2011) where unlisted SME were added and in article n°4 (Pozniak, 2013) where French companies were added;

On the other hand, there are IPO and Bankruptcy on the unregulated markets as on other stock exchange.

### Methodology

Each articles of this thesis uses the most appropriate methodology to answer its research question. So articles n°1, n°2 and n°4 use a quantitative approach, indicated when the research aims at measuring, at explaining as well as at testing theories (Cooper & Schindler, 2006).

These articles use two methodologies.

First of all, the literature review relative to the recommendations in terms of internet financial communication (Pervan, 2006; Euronext, 2006; Dutta & Bose, 2007; Léger, 2008; Barredy & Darras, 2008) and elements discovered during the consultation of some websites allow the construction of an analysis grid. Thanks to this grid, we analyze companies' websites and give one point for each item of the grid available on the website (Debreceeny & Rahman, 2005; Khadaroo 2005; Paturel, Matoussi & Jouini, 2006; Abdelsalam, Bryant & Street, 2007; Jouini, 2007; Gabteni, 2011). The analysis of contents of websites aims at obtaining an Internet financial communication score (Allam & Lymer, 2003; Oyelere, Laswad & Fisher, 2003; Xiao, Yang & Chow, 2004; Gowthorpe 2004; Khadaroo, 2005; Lybaert, 2005; Abdelsalam, Bryant & Street, 2007; Oyelere & Mohamed, 2007; Gabteni, 2011)

Then, this financial communication score is regressed by means of the explanatory variables stemming from research hypotheses (Debreceeny & Rahman, 2005; Paturel et. al., 2006; Ben Rhouma & Cormier, 2007; Jouini, 2007).

Futhermore, articles n° 2 and n°4 use the paired samples technique (Thietart, 2003; Evrard, Pras & Roux, 2009; Malhotra, Birks & Wills, 2012; Caby, 1994; Bughin & Colot, 2008).

Paired sample means the two samples are similar with regard to certain characteristics (in this case, the size and the sector) who allow to assure that the observed effect came from the studied variable (in article n°2, the listing status; and in article n°4, the market of quotation) and not from the difference in sample composition. The structure of samples is a priori controlled to obtain samples presenting identical structures. From then on, the errors due to the differences of composition of the groups are reduced (Thietart, 2003).

The article n°3 follows a qualitative approach, adequate when the understanding of the real-life experience of the persons is pursued (Paillé, 2007).

Table 2: Methodology of Each Paper

	Article n° 1	Article n° 2	Article n° 3	Article n° 4
Approach	Quantitative	Quantitative	Qualitative	Quantitative
Methodology		Paired sample	Interviews	Paired sample
	Content analysis	Content analysis		Content analysis
	Linear regression	Linear regression		Linear regression
Tools	Stata 10.1	SPSS	WeftQDA	Stata 10.1
		Stata 10.1		

*This table shows the methodology used in every paper of our doctoral thesis. It also mention the software used.*

Our doctoral research clearly defend the complementarity between the quantitative and qualitative methodologies such as numerous methodology (Malhotra, Décaudin & Bouguerra, 2004; Evrard, Pras & Roux, 2009 ; Gauthy-Sinéchal & Vandercammen, 2010 ; Baines, Fill & Page, 2012 ; Lendrevie & Lévy, 2012 ; Malhotra, Birks & Wills, 2012).

The general methodology of our thesis follows the Grounded Theory. Indeed, the methodological progress leading of an article to the following one is resolutely iterative and inductive. From an exploratory research, we let data talks and we follow avenues of research revealed by the ground. Every article had ambition to try to answer the questions raised by the previous article. As for the

research problematic, it is defined only at the end of the study (Guillemette, 2006; Evrard, Pras & Roux, 2009; Guillemette & Luckerhoff, 2009; Luckerhoff & Guillemette, 2012; Plouffe & Guillemette, 2012).

## RESULTS AND DISCUSSION

This section aims at finding answers to our research questions (presented in Figure 1) in the four thesis paper and demonstrate how rich and complementary both qualitative and quantitative approaches are.

The first question asked was: what are the determiners of Internet financial communication level? Article n°1, dedicated to companies quoted on unregulated market of Brussels; reveal the negative impact of the performance and the positive impact of the membership in the IT sector on the Internet financial communication score. The market of quotation also influences the score: companies quoted on Alternext inform more than those quoted on the Free market.

Article n°2, where SME unquoted were matched to SME quoted on Brussels's unregulated market, establishes the positive effect of the size of the company and its quotation and the negative effect of the debts on the level of financial communication through the company's website.

Article n°4, where companies quoted in Paris were matched to companies quoted in Brussels, demonstrates the positive influence of the size, the membership in the IT sector and the market of quotation on the degree of financial information disclosure on the Internet and the negative influence of the age of the company.

Focusing on the Belgian sample, it is variables size, membership in the IT sector and the performance that show to have a positive influence on the Internet financial communication score.

Focusing on the French sample, it is variables size and age of the company that turns out to have an impact, respectively, positive and negative on the level of financial information disclosure on the company's website. Through our various researches, certain variables turn out to be recurring determiners of the Internet financial communication score:

The size has a positive impact in the article n°2 and the article n°4: more the company is big more its Internet financial communication score is high. Besides, the managers met within the framework of the article n°3, talk about their low human and financial resources they can dedicate to the Internet financial communication. In most of the cases, the manager takes care himself of the company's website.

The membership in the IT sector has a positive impact in the article n°1 and the article n°4: the companies of the IT sector have a higher Internet financial communication score. Besides, the managers of IT companies, met within the framework of the article n°3, demonstrate a use more pushed by the Internet, among which it is Core Business. These companies presented the best scores, except when the manager explained that he fears to reveal information to competitors.

The influence of the performance on the level Internet financial communication listed in Brussels seems to evolve in time: in the article n°1, its impact is negative, whereas in the article n°4, its impact is positive. The more successful companies in 2008 were rather suspicious and disclosed less financial information on their website. In 2012, the more companies are successful, the more they disclose financial information on the Internet. When we dive back into the data, we notice

that the Internet financial communication score increases very slightly with an average of items of 12.76 in 2008 (standard deviation 6.13) and 13.21 (standard deviation 6.95) in 2012.

On the other hand the average performance fell. The average ROE passes of 4,71 % in 2008 (standard deviation 45,85) to 3,28 % in 2012 (standard deviation 35,12) and the average ROA passes of 8,18 % in 2008 (standard deviation 11,96) to 2,27 % in 2012 (standard deviation 19,42). In this context of economic crisis, we can suppose that the more successful companies realized more financial communication efforts to distance itself from ailing firms and reassure the investors.

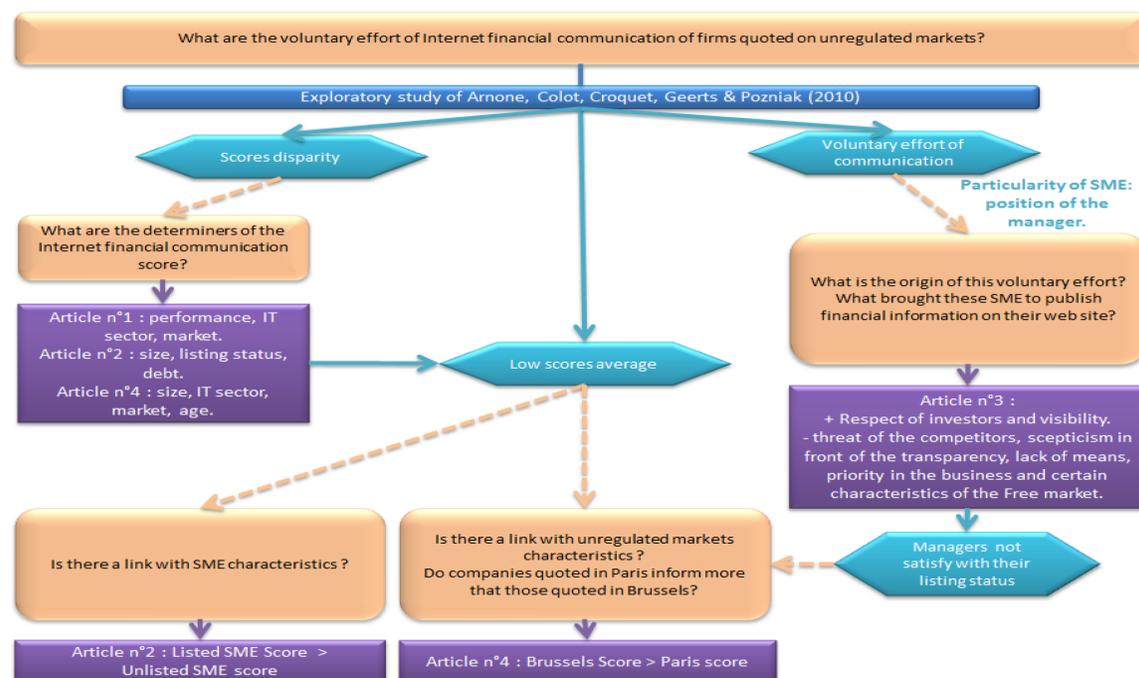
The second question asked concerned the characteristics of the SME and the link with the level of Internet financial communication. Do listed SME inform more than unquoted SME?

Article n°2 shows that SME have a higher level of Internet financial communication comparing to their unquoted peers. Although having no obligation of disclosing financial information on the Internet, companies quoted on unregulated markets of Brussels realizes a voluntary effort of communication.

Then, we wondered if the characteristics of the unregulated markets had a link with the level of Internet financial communication. Do companies quoted in Paris inform more that those quoted in Brussels?

Article n°4 allows answering negatively this question. Companies quoted on Brussels' unregulated markets present an upper level of Internet financial disclosure than their peers quoted in Paris. The voluntary effort of financial communication on the Internet is thus upper within companies quoted in Brussels. This result is against our forecasts. The notices of the managers of companies quoted in Brussels (see article n°3) as well as the data of Euronext relative to the Brussels and Paris markets let us suppose an upper level of financial communication on the French companies' websites.

Figure 2: Results



*This figure shows the results of our PhD research and the answers to our research questions rose up thanks to our four-thesis paper.*

We were interested in what brought the managers of SME to publish or not financial information on the Internet. What relation can be established between the information with financial character available on the web site of a SME and the elements evoked by the managers? The results of article n°3 confirm the dominating place of the manager in his SME and his influence, in particular on the disclosure of financial information on the Internet. The elements which brought the managers to publish financial information on the website of the company are the respect for the investor and the visibility. The elements, which brought the managers not to publish financial information, are the threat of the competitors, the skepticism in front of the transparency, the lack of means, the priority in the business and certain characteristics of the Free market. Article n°3 reveals that the managers fearing the disclosure of information to competitors are the ones whose web site presents least financial information, whereas the managers mentioning their will to respect the investors are the ones whose web site presents most financial information.

## CONCLUSION

The fundamentally inductive and iterative positioning adopted in this doctoral research allowed to reveal numerous avenues of research that could be exploited in our future works. The subject of the determiners of the Internet financial communication level could be improved in different ways.

At the level of the explanatory variables: the growth potential, measured by the difference between market value and book value has not much sense for companies quoted on unregulated markets, which present a low liquidity level. This variable showed itself not significant in the article n°1 and was not any more used on articles which followed.

The age of the company is used only in the last article and shows it significant only for companies quoted in Paris. It would be more appropriate to take into account the number of years since the IPO and not since the creation of the company. Indeed, several researches showed the impact of the listing status on the level of communication of the company. We could suppose that the voluntary effort of communication is more important first years which follow the IPO.

The free float, used in articles n°1, 2 and 4 to measure the dispersal of the capital, is supposed to represent the percentage of the capital held by the public and thus the shares potentially exchanged quickly. However on the unregulated markets, the liquidity is lacking and the shares are exchanged with difficulty. The measure of the free float is thus not the most appropriate. We could take into account the percentage of the capital held by the manager and his family as the measure of the concentration of the capital. Indeed, some researchers (Labelle and Schatt, 2005) demonstrated that companies controlled by a family tend to disclose less information given that the majority of the shareholders already have the information but also given that the family is afraid of disclosing information to the competitors. At the level of the population studied then: The size of unregulated markets of Brussels is relatively small and thus even when we study all the population, the number of companies in the study exceeds hardly 30. In optics of extension of the ground in the study but also to continue on the way of the article n°4, we intend to add SME on AIM London and AIM Italia The understanding of the real-life experience of managers of SME quoted could be pursued at several levels.

First, we could meet managers of SME quoted on other markets and compare their experience and their opinion about Internet financial communication.

Second, in an objective of generalization, we could realize a survey with managers of SME quoted on unregulated markets to encircle their objectives and motivations. A typology could be defined and the link between the level of Internet financial communication and the reasons evoked by the managers, discovered in article n°3, could be statistically validated.

The situation of the unregulated markets and their issues could be analyzed. A part of our survey proposed previously could contain questions relative to the quotation of the company: Is the manager satisfied by its quotation on an unregulated market of Brussels? Does he intend to transfer on another market? Why? If yes, which one? Would he like to leave the market? How? It would come to complete the positive and negative aspects connected to a quotation on an unregulated market, put forward by the managers of the Free market (met within the framework of article n°3). By collecting the opinion of managers of Alternext, a comparison could be realized.

The same survey could be sent to companies quoted on unregulated markets in Paris. On one hand, in optics of continuity of the article n°4, we could pursue our comparison of the French and Belgian unregulated markets.

Finally, the analyses grid of websites, used in articles n°1, n°2 and n°4, were built thanks to a literature review of papers making the inventory, of the financial information which should, in the ideal, be available on website. At no time, the opinion of the investors was requested. However, the targets of financial communication are varied and it is important to adapt a communication plan to each of them. In a future research, it would be interesting to meet the investors of the unregulated markets, to submit them our analysis grid and to try to understand what they are looking for on a company's website.

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# PERFORMANCE MEASUREMENT IN PUBLIC SECTOR

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## ABSTRACT

*The paper acquaints the reader with the practice of evaluation in the public sector. Main research materials for this paper are based on data from a survey and follow-up interview of budgetary managers and accountants. In the survey of some of the indicators set priorities.*

**KEYWORDS:** Public Sector Entities, Key Performance Indicators of Public Sector

## INTRODUCTION

It has been said that public sector can not improve what it does not measure. Performance measurement is only one of the management tools. The basis of this position is simple: if the organization is complex and consists of many different components, evaluation of this activity would be complex and multifaceted. The public sector KPIs need to be based on a comprehensive system of indicators and criteria for public sector, adapted to the strategic goals of the public policy. Budgetusers (public sector entities) are a special type of organizations, the effectiveness of which can be judged by special criteria for the public sector. As noted B. Stevens (1984), "most public organizations need a clear, precise statement of purpose and description of the work assignment in conjunction with readily identifiable responsibility for the quality of their work ... "In this case one of the main effectiveness criteria should be an assessment how well they manage to outcomes and/or outputs. From this point of view, the possible ineffectiveness of budget should be acknowledged to be admissible if they are coping with the features built-in stabilizer macroeconomic and social proportions. We have chosen to approach understanding changes in public sector reform by focusing on the performance-based budgeting in Russia.

## STUDY RESULTS

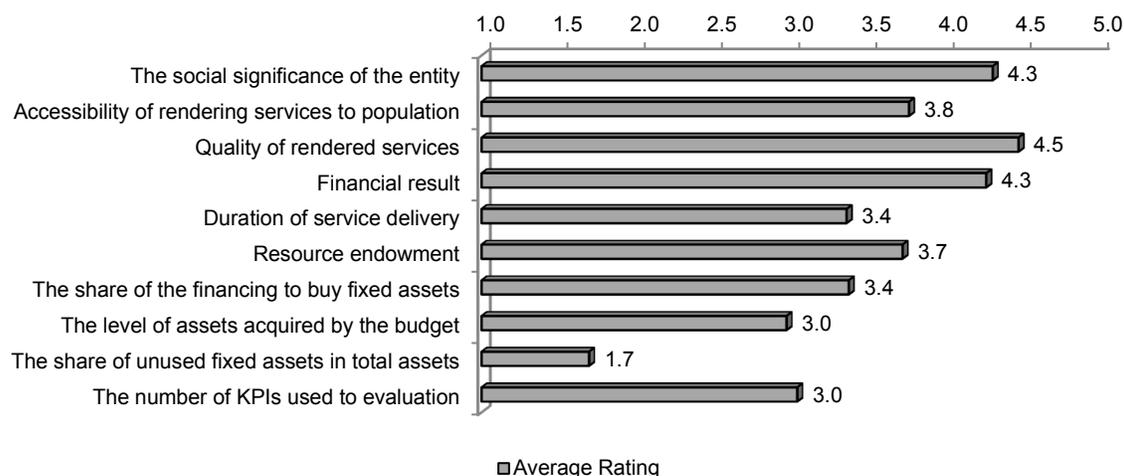
For the purposes of this study, we have developed a questionnaire. The questionnaire consisted of several questions which were important to characterize the attitude of Russian public sector reforms. We made a relative short but informative one-page questionnaire. This questionnaire was composed from 16 questions, but in this paper we are considered seven of them only. The questionnaire was distributed to 17 participants during a workshop and follow-up interviews. The survey took place on July 11th 2013 in Perm (Russia) consisted of practicing managers and public sector accountants from different types of organizations such as educational establishments (e.g. colleges, universities, schools), health care institutions, employment institutes, etc. Finally, we received 13 completed questionnaires (76%). Basic information about respondents in this survey is provided in Table 1. Respondents mostly working in a budget area with between 5 and 15 years' practical experience (46%), between 30 and 50 years (46%). It is important to notice that 77% of the respondents have taken higher economic education.

Table 1: Number of Responses in the Survey

Age		Experience in a budget area				Type of entity			Funding budget			Scope				
Yanger than 30	Between 30 and 50	Older than 50	Less than 5 years	Between 5 and 15	More than 15 years	Autonomous	Budgetary	Agency	Federal	Subject of Federation	Local	Government Management	Healthy Culture	Educational	Employment	
3	6	4	2	6	5	4	8	1	2	3	8	1	2	2	7	1

We have asked about the significance of some indicators. These indicators were chosen as a result of many interviews with professional public sector accountants in the setting of a competence improvement course. In our opinion, there are following ten indicators: a) Social significance of the entity; b) Accessibility of rendering services to population; c) Quality of rendered services; d) Financial result; e) Duration of service delivery; f) Resource endowment; g) Share of the financing to buy fixed assets; h) Level of assets acquired by the budget; i) Share of unused fixed assets in total assets; j) Number of KPIs used to evaluation. These indicators we are marked in the questionnaire and then participants rated them on a 5-point scale. The average ratings of these indicators are shown in Figure 1.

Figure 1: Rating of Entities' Kpis



We can see the highest rating of all is the quality of rendered services (4,5) and the second two are Social significance of the entity (4,3) and Financial result (4,3). It seems the public sector has to offer people more quality services and they have to start demanding from their government better opportunities. Social significance should be lead to encourage public sector entities to do their services better. But a term “Financial result” is not defined in Russian public sector policy and therefore we have some problem with this.

## CONCLUSION

Through the questionnaire we were able to deduce the weight of some performance indicators in the public sector. In particular, we found several obstacles while doing the survey: understanding of what is the essence of effectiveness; to the fact that the list of indicators was not always accurate. The result of this study will allow comparisons of the public sector KPIs among different budgetary areas.

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# WHAT IMPACT DOES THE APPLICATION OF IFRS 11 HAVE ON (EUROPEAN) COMPANIES? AN EMPIRICAL STUDY OF THE IMPACTS ON SELECTED FINANCIAL STATEMENT FIGURES AND KEY FINANCIAL RATIOS

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## ABSTRACT

*Following the adoption of IFRS 11 “Joint Arrangements”, IFRS reporting entities are facing new challenges regarding the classification and accounting of joint ventures. As a consequence of the short-term convergence project between the IASB and the FASB, the accounting option for joint ventures has been eliminated in the new standard in order to reduce the differences between these two major accounting principles. However, the abolition of the accounting option for joint ventures has affected financial statement figures and key financial ratios, as some (European) companies have to change from the proportionate consolidation method to the equity method. This paper examines how the transition from the proportionate consolidation method to the equity method will affect (European) companies. It describes the relevance and preferred accounting methods for joint venture investments and explores whether the effects on several financial statement figures and key financial ratios are material for (European) companies. Thus, this paper provides (European) companies as well as the users of financial statements – auditors, financial analysts, banks and investors – first evidence of these expected effects.*

**JEL:** M40, M41, M42, M48

**KEYWORDS:** IFRS 11, Joint Arrangements, joint ventures, proportionate consolidation, equity method, materiality

## INTRODUCTION

To achieve economic goals, joint ventures have gained international importance in recent years. Therefore, the International Accounting Standards Board (IASB) published IFRS (International Financial Reporting Standard) 11 – a new standard for accounting for joint arrangements – to replace IAS 31, which was endorsed by the EU in 2012. With the goal of improving the quality of financial reporting, the revision of IAS 31 concentrated on two major aspects. First, the identification, classification and accounting requirements now focus on the rights and obligations of the parties as central criteria for demarcation. Second, the accounting option for joint ventures has been eliminated to reduce differences between IFRS and US-GAAP (United States-Generally Accepted Accounting Principles) and to improve the comparability of IFRS reports. Therefore, the proportionate consolidation (PC) method for joint ventures is prohibited, which means that all joint ventures have to be included in the consolidated financial statements using the equity method (IFRS 11.24 as well as Küting/Seel, 2011).

Through this harmonization between IFRS and US-GAAP, as well as the new requirements of IFRS 11, European companies are facing new challenges in accounting for joint arrangements. On one hand, they have to apply the new classification rules and therefore have to re-evaluate all existing joint arrangements. Especially for companies in industries where the use of know-how

and financial resources is an important factor (e.g. in the construction and food industries), re-evaluation causes a significant workload. On the other hand, the abolition of the accounting option affects financial statement figures and key financial ratios. These effects can be justified by a change from the PC method to the equity method.

The structure of the paper is organized as follows to cover the aforementioned topics. In the first step, this paper shows the readjustments of IFRS 11 compared with the previously prevailing legal norm IAS 31, followed by a critical analysis of the abolition of the accounting option based on the general opinion in the literature and in practice. The empirical part of this paper analyses the practical relevance of joint ventures and consolidation methods. It then provides information about how many of the sampled European companies account for joint ventures using the PC method and consequently are concerned with the effects of the transition. In the main part, the effects of the abolition of the accounting option on selected financial statement figures and key financial ratios for European companies are analyzed and compared with the formulated hypotheses using a deductive empirical study.

## LITERATURE REVIEW

Since the beginning of the 21<sup>st</sup> century, standard setters worldwide have called for research to investigate the impact of different joint venture accounting methods. Nevertheless, there is little extant literature on accounting for joint venture investments. According to the categorization of Biddle et al. (1995), the following studies explain the relative information content based on a multiple regression model. Therefore, the conformation content of an accounting method is measured by the predictive value of an elected earnings ratio. The study of Kothavala (2003) provided market-based evidence that financial statements based on the equity method are more relevant for bond ratings. Even based on the same regression model as Kothavala (2003), the results of Bauman (2007) showed that financial statements prepared under the PC method are more relevant for explaining bond ratings. However, the samples differ due to differences in reporting methods used in the financial statements (US-GAAP, Canadian GAAP), bond rating methodologies and sample composition (Bauman, 2007).

The findings of the study by Stoltzfuss and Epps (2005) pointed out that the PC method for accounting for joint ventures should be used if there is evidence of guarantees and/or other agreements. These results indicated that financial data prepared under the PC method have a stronger association with bond risk premiums than financial data prepared under the equity method. For a set of Canadian firms, Graham et al. (2003) found evidence that financial statements prepared under the PC method have more relative information content for predicting future returns on shareholder equity than financial statements prepared under the equity method. Based on the same regression model, the study of Leitner-Hanetseder (2010) indicated that the PC method provides greater predictive power of future profitability than the equity method for German listed companies. The findings showed that the intended elimination of the PC method would not improve the relative information content for users of financial statements prepared under IFRS. However, the findings also proved that additional disclosures to calculate PC data would improve the relative information content of future profitability under the equity method.

Richardson et al. (2011) found that the elimination of the choice of joint venture accounting method does have value relevance implications. Similarly, the findings of the study by Soonawalla (2006) proved that the separate recognition of the disclosure of joint ventures and associate companies provides value relevance. According to previous research, the elimination of the choice between the PC method and equity method decreases value relevance. Furthermore, the use of the PC method provides stronger information content than the use of the equity method. However, few studies investigate the relevance of the equity method or PC method for accounting for joint venture investments within single industries. The study of Keitz (2005)

indicated, for example, that the equity method is preferred in the automobile and transport industry and that the PC method is preferred in the construction industry. Nölte et al. (2007) and Leitner (2009) investigated the impact of the change from the PC method to the equity method on financial figures and/or ratios. However, the studies mentioned were carried out only for German and/or Austrian listed companies. Similar results for listed companies in the EU are missing.

## METHODOLOGY

As shown above, the transition from the PC method to the equity method affects financial statement figures and key financial ratios. However, the extent of these impacts has been analyzed to a limited degree for European companies. As potential effects are still known theoretically (see IASB, 2011; KPMG, 2011), this study provides a detailed descriptive overview and quantifies these impacts in practice using data on 350 European companies from different indices, industries and countries in the EU. The following cross-sectional study is characterized as a deductive analysis, which means that hypotheses introduced will be confirmed or rejected. Descriptive deviation analysis was elected as the methodology, whereby selected financial statement figures and key financial ratios are calculated twice, using the PC method and a fictitious equity method. For the fictitious calculation of the equity method, the impacts on assets, liabilities, income and expenses can be directly seen in the Notes.

As the study examines the effects on total assets and liabilities as well as income and EBIT, these financial data were converted. To convert liabilities and sales under the equity method, the liabilities and sales of joint ventures had to be subtracted. To ascertain the fictitious equity in joint ventures, the share of liabilities decreases the amount of total assets. The fictitious total assets under the equity method are increased by the amount of the net book value of the joint venture. A calculation is only possible if European companies provide information about their jointly controlled entities in the Notes as required by IAS 31.56. Furthermore, the results are based on the assumption that jointly controlled entities under IAS 31 will be joint ventures under IFRS 11 otherwise an evaluation of the results is impossible. However, this will be expected in most cases (IASB, 2011; KPMG, 2011).

The aim of this study is to answer the following questions:

1. What practical relevance do joint ventures have for European companies, i.e. how many European companies account for joint ventures in their consolidated financial statements?
2. Which accounting method do European companies use for joint ventures, i.e. what accounting method is relevant in practice and how many European companies account for their joint ventures
3. using the PC method and therefore were affected by the transition to the equity method?
4. How does the transition affect the selected statement figures according to the concerned European companies in point two, i.e. to what extent do financial statement figures change?
5. What quantitative impacts do the changes in financial statement figures have on key financial ratios, i.e. to what extent do key financial ratios change due to the transition?

## RESULTS AND DISCUSSION

This section evaluates the impacts on the consolidated financial statement figures caused by a change from the PC method to the equity method for the financial year 2010 (see Table 1).

Based on the changes in financial statement figures, the impacts on key financial ratios can be derived. In this regard, each financial ratio was calculated twice, first using the PC data and second using the data from the conversion to the equity method. Thus, the analysis of the impact of conversion was possible. We concentrate on financial ratios according to the advanced DuPont model, as the cause and effects of the impacts can be shown with this model. Table 2 presents the differences in financial ratios based on the financial data for 2010.

Table 1: Descriptive Statistics of the Effects of Conversion on Selected Financial Statement Figures

	Impact on total assets in %	Impact on liabilities in %	Impact on sales in %	Impact on EBIT in %
n*	82	80	54	64
Mean	-3.17	-5.75	-7.87	-16.51
Median	-1.70	-3.13	-4.43	-2.75
Std. Deviation	5.24	9.20	9.38	83.70
Maximum	-39.70	-58.21	-43.40	-662.50/+85.75
Null hypothesis	rejected	confirmed	confirmed	confirmed
<b>Impact according to industry</b>				
Oil & Gas	immaterial	material**	immaterial	material
Basic Materials	immaterial	material	material	immaterial
Industrials	immaterial	immaterial	material	material
Consumer Goods	immaterial	immaterial	immaterial	material
Health Care	immaterial	immaterial	immaterial	immaterial
Consumer Services	immaterial	material	immaterial	material
Telecommunications	immaterial	immaterial	material	material
Utilities	immaterial	material	material	material
Finance	immaterial	material	material	material
Technology	immaterial	immaterial	no information***	material

Based on financial data for 2010, Table 1 points out the relative differences between financial data under the equity method and under the PC method \*n means the number of companies using the PC method and disclosing the data required for the financial year 2010 \*\*material means that the impact was more than 5% on average \*\*\*no information means that none of the companies in the industry selected disclosed the information required

Table 2: Descriptive Statistics of the Effects of Conversion on Key Financial Ratios

	Impact on ROE II	Impact on profit margin I	Impact on profit margin II	Impact on asset turnover	Impact on financial leverage
n*	39	54	39	54	82
Mean	-1.90	2.84	1.16	-2.05	-13.62
Median	-0.88	0.39	-0.01	-0.85	-4.47
Std. Deviation	2.63	12.86	9.75	3.07	33.02
Maximum	-11.00/+0.05	-0.21/+94.61	-4.34/+59.70	-13.76/+0.20	-272.72
Null hypothesis	rejected	rejected		rejected	confirmed
<b>Impact according to industry</b>					
Oil & Gas	immaterial	immaterial	immaterial	immaterial	material
Basic Materials	immaterial	immaterial	immaterial	immaterial	immaterial
Industrials	immaterial	immaterial	immaterial	immaterial	material
Consumer Goods	immaterial	immaterial	immaterial	immaterial	immaterial
Health Care	immaterial	immaterial	immaterial	immaterial	immaterial
Consumer Services	immaterial	immaterial	immaterial	immaterial	material
Telecommunications	immaterial	immaterial	immaterial	immaterial	immaterial
Utilities	immaterial	immaterial	immaterial	immaterial	material
Finance	not material	material**	material	material	material
Technology	no information***	no information	no information	no information	material

Based on financial data for 2010, Table 2 points out the relative differences between financial data under the equity method and under the PC method \*n means the number of companies using the PC method and disclosing the data required for the financial year 2010 \*\*material means that the impact was more than 5 percentage points on average \*\*\*no information means that none of the companies in the industry selected disclosed the information required

## CONCLUSION

As shown herein, the application of IFRS 11 influences European companies. First, they have to re-evaluate all their joint arrangements due to the new classification rules on rights and obligations. Second, European companies using the PC method are affected by the change in accounting method. Hence, financial statement figures and key financial ratios will change following the transition from the PC method to the equity method. The presented empirical results indicate that joint ventures are highly relevant in practice because approximately 70% of

the European companies sampled account for at least one joint venture. In particular, in the materials, consumer goods, consumer services, utilities and finance industries, more than 75% of the European companies sampled account for joint ventures in their consolidated financial statements. The results also show that the equity method is preferred for accounting for joint ventures. Nevertheless, approximately 40% of sampled firms use the PC method, and therefore they are concerned with the impact of the change to the equity method. In particular, more than half of the companies listed on the Euronext 100 index and those from the basic materials, industrials, utilities and finance industries have to change their accounting methods and are facing impacts due to that fact.

By analyzing the impacts on selected financial statement figures, H<sub>2</sub>, H<sub>3</sub> and H<sub>4</sub> were confirmed, which means that liabilities, sales and EBIT are all influenced materially by the discussed change. H<sub>1</sub> was rejected, however, meaning that there is no material impact on total assets. These results also indicate that in several industries changing from the PC method to the equity method causes material impacts on selected financial statement figures. However, not all industries are affected in the same way. Owing to these changes in financial statement figures, the impacts on key financial ratios using an advanced DuPont model were then derived. The results show that these impacts are in the single-digit range on average, except for financial leverage. As a consequence, H<sub>5</sub>, H<sub>6</sub> and H<sub>8</sub> were rejected, which implies no material impact on profit margin I and II, asset turnover and ROE II. However, H<sub>7</sub> was confirmed, suggesting that financial leverage changes materially due to an accounting change.

It must be noted here that in single cases impacts were material on both financial statement figures and key financial ratios; therefore, these cases are relevant for the companies and stakeholders involved. Although the results of the present study provide the first evidence of the expected effects, the extent of the impact still depends on the year of transition. As this study was designed as a cross-sectional investigation, further research is thus necessary. For example, the methodology of this study could be changed to a longitudinal study design to measure, for example, the correlations between accounting methods and their predictive power, or to analyze the impacts of economic development on the accounting change. In summary, the results of this paper are highly relevant for practice and for scientific discourse. On one hand, they provide a first reference point on the impacts that can be expected when applying IFRS 11 for the first time. On the other hand, they open up further scientific discussion on the impacts of changing from the PC method to the equity method.

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# **BUILDING AN ETHICAL CIVIL SERVICE IN THE PACIFIC: EXPLORING THE EFFECTIVENESS OF FIJI'S PUBLIC SERVICE CODE OF CONDUCT**

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## **ABSTRACT**

*In the Pacific region, public service codes of conduct often establish standards by which behavior is often judged proper, or otherwise, for public service officials. However, current research indicates there is very little evidence within Pacific Island Countries (PICs) to demonstrate whether approved Public Service Commission (PSC) codes of conduct are really ensuring that public service officials are able to maintain even minimal standards of professional and personal conduct. One of the promises of the early 1990's civil service reform in Fiji was to build a highly ethical and professional civil service. A Code of Conduct for all public service officials in Fiji came into effect under the Public Service Act of 1999. This study aims to examine and describe the perceived effectiveness of code of conduct in Fiji's public service. There are in fact external controls in place to keep public officials in line; however, there seems to be limited awareness and weak monitoring of the code in individual ministries and line departments to ensure it is strictly and constantly upheld. Special measure to support understanding, awareness and adherence to code of conduct also seems to be missing.*

## **INTRODUCTION**

Contemporary social psychological research indicates that proper codes of conduct can often guide behaviors in developing countries that are essential to a functioning civil service (White, 1999 cited in Gilman, 2005). In fact, such codes are often the first formal structure that is established and recognized when attempt is made to elevate the profile of an organization (Larmour, 2001). Within the Pacific region, public service codes of conduct establish standards by which behavior is often judged proper or otherwise. In this line, it is anticipated that an effective code of conduct will promote good governance, transparency, accountability and integrity among public officials of the Pacific Island Countries (PICs) whilst improving the reputation of the public service among the community and current and potential international partners, on who support for public officials depend. Previous studies on codes of ethics or codes of conduct, (Cressy & Moore, 1983; Mathews, 1987; Weave *et al*, 1999) have targeted private sectors in more developed economies like the United States of America (USA) or the United Kingdom. Only more recent studies (Svensson & Wood, 2004; Svensson & Wood, 2009) have targeted code of ethics studies in the public sector organizations of Sweden.

While the above studies were carried out mostly in the developed economies, no study, to this date, has been carried out on the codes of conduct for public sector organizations in Fiji. Fiji's civil service has been subjected to public criticism and humiliation for unethical acts in the past and in recent years. The Commodity Development Framework scandal in the late 1990s; the Agriculture scam in 2001; and the Water and Sewerage Department mishap in 2003 are some of the many incidents that reflect unscrupulous practices in the country's public service. In aggravating the situation, most of those senior officials at the centre of these scams were spared while their junior colleagues were taken to task. It is evident that such an environment is conducive to encouraging unethical conduct in the country's civil service. In light of the recurring dishonest practices in the country's civil service in the past, the numerous declarations by successive governments including the present regime to build an ethical and professional civil

service; what then are the changes that have been made in recent years to combat corrupt and unethical behavior in the civil service; and how effective are such measures? This is the query that is central to this investigation. It is beyond contention that unethical conduct is a concern in Fiji's civil service and if the words of successive governments and the current regime are to take seriously, one would assume that this area should be one of the priorities. The main objective of this investigation is to examine and describe the perceived effectiveness of the Fiji's public service code of conduct. It is hoped that the findings will provide the various Ministries and enforcing authorities with the necessary information to be able to strengthen and improve their internal control mechanisms to better enforce and promote the ethical values enshrined into their codes of conduct.

## **METHODOLOGY**

An essential part of this task included carrying out interpersonal interviews with the senior officials of the Public Service Commission (PSC), Fiji and various other ministries that are bound by the Fiji public service code of conduct. Meeting appointments were made over emails and phone, and the researchers themselves were available to carry out the interviews at the scheduled times. Face to face interviews were mostly carried out with the deputy secretaries of the various ministries overseeing the affairs of the corporate and administration divisions. Where deputy secretaries were unavailable for the interviews, officials mainly responsible for the human resources and disciplinary sections were interviewed. Our target group was mostly deputy secretaries, as they are entrusted with the power by the Public Service Commission (PSC) of Fiji, to oversee the awareness, monitoring, consultation and enforcement of the public service code of conduct within their individual ministries.

Each of the interviewees was briefly introduced to the research study to stimulate their interest and willingness to be interviewed. The interview questions were mostly semi-structured in nature, with both open and closed ended questions. Where there were closed-ended questions, respondents were requested to provide further explanations. For example, if an answer is restricted to "Yes / No / Don't Know" then further "Why" or "Please Explain" questions followed. Some of the areas of questioning were: Year of establishment? What are the mechanisms used to enforce the code? Who is responsible for its enforcement? What oversight mechanisms are there to ensure this enforcement process within their ministry? How often is the code of conduct reviewed or re-adopted? What are the possible consequences of non-compliance or breach of the code by public officials? There are a total of eighteen (18) amalgamated government ministries in Fiji. This was our initial sample size for the interviews which later got reduced to twelve (12) because six (6) other ministries were unavailable for interviews despite repeated calls and emails.

## **RESULTS AND DISCUSSION**

### Mechanisms Used For Effective Enforcement of the Code

Different mechanisms are employed by ministries to effectively enforce the code of conduct within their individual ministries. 67% of the ministries utilize disciplinary committees. The methods that organizations institute to enforce their codes tend to reveal their level of commitment to the process. If they adapt to existing processes, then it is indicative of their level of commitment and if new processes are created, then there is visibility of higher level of commitment towards implementation or enforcement of the code. Wood and Rimmer (2003) related existing processes to things like discipline, communication of the code to employees, induction, staff appraisal and strategic planning. A higher level of commitment, on the other

hand, is associated with new initiatives like ethics committees, ethics education committees and ethics education.

#### Dissemination of Information About the Code

Respondents were asked to state the channels through which they disseminated information to their ministry staff on the requirements of the code of conduct. 50% of the respondents revealed that they do it by uploading the code of conduct on the ministry website or advise staff to visit the Public Service Commission (PSC) website for information about the requirements of the code. 42% of the respondents stated that a major way of dissemination of this information was by way of “issuing a copy of the booklet”. Many ministries seem to be more reliant on internet technology and most of their responses being “code is on the website” is a bit worrying. Follow-up trainings and discussions on the code of conduct with existing employees is also seems to be lacking. How an employee is then meant to know that their code of conduct is important, if it is not discussed or timely education not given or feedback taken?

#### Consequence or Discipline For The Breach of the Code

The most common consequence for breaching the code is suspension being at 40%. 15% of the ministries highlighted termination as the most common outcome of a breach of code, within their ministries, while 25% of the respondents also talked about prosecution as one of the consequences. Some 12% and 8% of the ministries highlighted most common consequence or disciplinary action as counseling and caution letters, respectively. Several studies, Sims (1991), Fraedrich (1992), and Stoner (1989) suggests that within a code, enforcement provisions for those that do not uphold the code should be outlined. The organization, by having these types of procedures will signal to the employees the significance of the need to abide by the code for both themselves and the organization. It seems that the code currently adopts a reactive rather than a pro-active approach. Whilst most employees get punished for breaching the code by way of suspension, termination and/or prosecution, no employee is rewarded for adherence to the code or reporting others on the breaches.

### **CONCLUDING COMMENTS**

The results seem to indicate that while Fiji’s public service code of conduct has been in formal existence since 1999, it does not sufficiently detain a formalized periodic and comprehensive review process for a timely review and re-adoption of their code. Whilst more emphasis is placed on disciplining staff and employing basic means of communicating the code to employees, there is still an absence of other informal methods like social norms of the organization, ethics education committees and ethics education, which are likely to yield greater awareness about the code and its importance, and greater commitment by staff to its values.

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# EXPORTS AND ECONOMIC GRWOTH IN SAUDI ARABIA NEW EVIDENCE FROM NONLINEAR AUTOREGRESSIVE DISTRBUTED LAG (NARDL)

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## ABSTRACT

*This paper investigates the dynamic relationship between Exports and Economic growth, in addition to some other macroeconomic variables in Saudi Arabia, a major developing country and oil exporter. We use a non-linear ARDL approach to investigate the asymmetric relationship and the difference in the changes in economic growth rates due to the nature of macroeconomic shocks. We find evidence that the impact of changes in exports, and the other macroeconomic variables, varies given the nature of the change (whether positive or negative). Such asymmetry exists in both the long and short run. We also discuss the dynamics of the transmission of economic growth from one equilibrium point to another by constructing the cumulative multiplier effect for each explanatory variable.*

**JEL:** F140

**KEYWORDS:**Exports, Economic growth,Non-linear ARDL

## INTRODUCTION

The role of export in economic growth in developing countries has become a major concern in the literature of international trade especially as degree of openness and market liberalization significantly increased during the last few decades. On first instinct, it was natural to refer to international trade theories when examining such relationship. Research, in deed, confirmed the argument that exports growth has a significant positive impact on output growth. However, that trade theories has not offered enough guidance in regards to the direction of the causal relationship between the two variables. Consequently, two streams of thoughts in regards to the causality direction emerged that are essentially opposite to each other. The export-led growth (ELG) claims that exports are a determinant of economic growth. That is, faster growth is an outcome of more exports. On the other hand, the growth-led exports hypothesis assumes the reverse and states that higher growth rates allow for more exporting activities.

Our intention in this paper is to address the non-linearity issue between exports and economic growth in Saudi Arabia. We use a non-linear ARDL approach to investigate the asymmetric relationship and the difference in the changes in economic growth rates due to the nature of macroeconomic shocks.

## LITERATURE REVIEW

The starting point of investigating the issue of exports and economic growth, in the literature, was to employ standard regression techniques and analyse the correlation coefficient between the two variables (see for example, Balassa, 1978; and Krueger, 1978). These studies however were still imposing a priori assumption on the direction of causality (mainly enforcing the ELG hypothesis). However with the introduction of time series analysis, researchers began to apply cointegration analysis and causality test to examine the validity of these hypothesis (see among

others; Love and Chandran, 2005; Huang and Wang, 2007; Nain and Ahmad, 2010; Kubo, 2011; and Pistoresi and Rinaldi, 2012). Such, relatively, new approaches were able to reveal new evidence in regards to the causality direction between exports and output growth. Yet, they still suffered some shortfalls. First, most studies that followed these approaches were focused on bivariate correlation analysis between the two variables ignoring the possibility of some omitted variables and a multivariate relationships. This, as Edwards (1993) indicate, may result in misleading findings. Second, the time series data and techniques used in early studies were not capable of addressing both causality and reverse causality issues together. Last, but not least, it has been realized that up to the last few years, most, if not all, of the studies focused on a linear causality relationship avoiding the possibility that variables may be non-linearly related. Such linearity assumption may cause total invalidation of the any findings, had the assumption proved to be untrue. Consequently, the case of non-linearity must be considered or at least tested for before assuming otherwise.

Some of the recent ELG studies have encountered the first two shortcomings by working within the framework of the neoclassical production functions as well as using econometric models that account for some time series properties such as cointegration and non-stationarity (see for example Marin, 1992; Yamada, 1998; Awokuse, 2003). However, the third critique was not explored in recent literature even though many, such as Ocampo (1986), Kohli and Singh (1989), and Edwards (1993), claimed that a possible nonlinear relationship, such as a diminishing return relationship, may very well exist between exports and economic growth.

## METHODOLOGY

Following the work of Shin, Yu, and Greenwood-Nimmo (2011), the empirical analysis in this paper is based on the nonlinear cointegration framework and applies the asymmetric ARDL cointegration methodology.

### Model

In the empirical analysis we apply dynamic time series methods for examining the linkage between Exports and economic growth. The basis of the model is the general aggregate production function:

$$Y = [(K, L)EX, G, IM] \quad (1)$$

where Y represents real GDP, K is real gross capital, L is labour force. Following the previous literature such as (Balassa 1978, Feder 1982, sheehey, 1992; Awokuse 2008), the export variable has been added. G is real government expenditure and IM is real imports. We test for nonlinear cointegration by estimating the following general form *NARDL* (*p,q*) models as follows:

$$\Delta \ln GDP_t = cons + \rho \ln GDP_{t-1} + \theta_1^+ \ln K_{t-1}^+ + \theta_1^- \ln K_{t-1}^- + \theta_2^+ \ln L_{t-1}^+ + \theta_2^- \ln L_{t-1}^-$$

$$\begin{aligned}
& +\theta_3^+ LnEX_{t-1}^+ + \theta_3^- LnEX_{t-1}^- + \theta_4^+ LnG_{t-1}^+ + \theta_4^- LnG_{t-1}^- + \theta_5^+ LnIM_{t-1}^+ + \theta_5^- LnIM_{t-1}^- \\
& + \sum_{i=1}^{p-1} \varphi_i \Delta LnGDP_{t-i} + \sum_{i=0}^q \pi_{1,i}^+ \Delta LnK_{t-i}^+ + \sum_{i=0}^q \pi_{1,i}^- \Delta LnK_{t-i}^- + \sum_{i=0}^q \pi_{2,i}^+ \Delta LnL_{t-i}^+ \\
& + \sum_{i=0}^q \pi_{2,i}^- \Delta LnL_{t-i}^- + \sum_{i=0}^q \pi_{3,i}^+ \Delta LnEX_{t-i}^+ + \sum_{i=0}^q \pi_{3,i}^- \Delta LnEX_{t-i}^- + \sum_{i=0}^q \pi_{4,i}^+ \Delta LnG_{t-i}^+ \\
& + \sum_{i=0}^q \pi_{4,i}^- \Delta LnG_{t-i}^- + \sum_{i=0}^q \pi_{5,i}^+ \Delta LnIM_{t-i}^+ + \sum_{i=0}^q \pi_{5,i}^- \Delta LnIM_{t-i}^- + e_t. \quad (2)
\end{aligned}$$

Where  $LnK_t^+, LnK_t^-, \dots, LnIM_t^+, LnIM_t^-$  are partial sums of positive and negative changes in  $\ln K, \dots, \ln IM$  respectively, where  $Ln$  is the natural logarithm.

## CONCLUSION

The present paper investigates the dynamic relationship between exports and economic growth in Saudi Arabia, along with some other macroeconomic variables. We propose to the account for the asymmetric impact by applying the non-linear ARDL approach recently proposed by Shin et al (2011) on macroeconomic time series, to study the impact of such variables on the rates of growth in the Saudi Arabian economy. The data spans a forty year period from 1970 to 2010. Our investigation reveals that there is significant asymmetry in the reaction of economic growth to positive and negative shocks in major macroeconomic variables. in the short-run time, we find statistically significant evidence of asymmetric effects of several macroeconomic variables on economic growth.

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# PERSONAL FINANCIAL DECISIONS: A STUDY OF CHANGES IN HOMESTEAD EXEMPTION LEVELS AND CONSUMER BANKRUPTCY CHOICES

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## ABSTRACT

*This study examines the impact of changes in homestead exemption levels upon the consumer bankruptcy filing rate. This relationship is examined through the creation of an interrupted time-series multiple regression model. Regression analyses were implemented using several predictor variables to detect any relationship between changes in homestead exemption levels and their effect on the applicable dependent variable. Four dependent bankruptcy variables were employed: per capita total consumer-bankruptcy filings, per capita Chapter 7 consumer-bankruptcy filing rate, per capita Chapter 13 bankruptcy filing rate, and Chapter 7 consumer-bankruptcy filings as a percentage of aggregate consumer-bankruptcy filing rates. Analyses indicate that consumers clearly prefer utilizing a Chapter 7 discharge method over Chapter 13. Additionally, these consumers do not find changes in homestead exemption levels as a source of wealth insurance to the extent that filings are significantly increased. Finally, consumer filing rates do not appear to be positively affected by the wealth effect that a risk-averse consumer might choose in bankruptcy choice.*

**JEL:** G, K

**KEYWORDS:** Bankruptcy, Chapter 7, Chapter 13, Homestead Exemption

## INTRODUCTION

Exemptions laws occupy a long and varied history as state and federal laws developed in America. These laws grew from a basic protection of a debtor's property from legal collection practices during the 1800s to myriad additions developed and implemented at the state level during the 1900s (Hansen & Hansen, 2012). Sullivan, Warren, and Westbrook (1989) identify exemption laws as a method of protecting a debtor such that he or she has the necessary property for survival, although this is subjective across states and other jurisdictions. (Buckley & Brinig, 1998). Bankruptcy exemption laws follow largely the same logic in protecting and supporting the basic premise of survival and are intended to protect debtor assets from liquidation with the intent of allowing the debtor and family a sustainable basis for emerging from discharge (White, 2007; Fay, Hurst, & White, 2002). Exemption protection is normally 100 percent for basic items such as clothes, but varies widely from state to state for homesteads (White, 1998). Federal exemption levels are constant across all states. Most states require that debtors use state exemption levels but some states allow the use of the federal exemption (Sullivan, Warren, & Westbrook, 1989).

The fact that state laws are not uniform and offer higher or lower levels of debtor protection, especially when expressed in terms of the value of the home (Landry, Boozer, & Lowe, 2012), suggests that variations in homestead exemption levels may affect consumer decision-making. Logically, consumers make financial decisions that maximize their financial benefit relative to cost. The decision to file consumer bankruptcy or to what extent that a consumer will file chapter 7 as opposed to chapter 13 rests in part on these financial incentives. In fact, when considering the process of filing bankruptcy as a consumer choice, homestead exemption levels appear to

impact behavior as a major financial incentive. Higher homestead exemption levels apply to both chapter of consumer bankruptcy and are positively correlated with higher filing rates (Domowitz & Sartain, 1999a). Households as well as individuals are impacted by this incentive in individual states and in the aggregate (Fay, Hurst, White, 2002). A point of discussion, however, is to what extent the incentive shifts filing between bankruptcy chapters, especially when a change in the exemption level occurs. Several states increased their homestead exemption levels in the early to mid-1990s and have often increased again in the 2000s or been indexed.

Financial incentives may be static at an initial level or may change over time, thus affecting the relative benefit of bankruptcy protection. A key component of this argument is to what extent changes in financial benefits affect consumer decision-making not only after the incentive changes, but also preceding and during the change. Homestead exemption levels are normally relatively static but have been increased in several states (White, 1998), allowing for measure of this changing incentive on the decision to file consumer bankruptcy. Ample research has identified homestead exemption levels in relation to consumer bankruptcy filing rates (Domowitz & Sartain, 1999a; Shepard, 1984), but relatively sparse research in changes in the level of homestead exemption. From this aspect this research analysis proceeds. The research questions are as follows: 1) To what extent do changes in homestead exemption levels impact consumer bankruptcy filing rates in selected states? 2) To what extent do changes in aggregate homestead exemption levels impact aggregate consumer bankruptcy filing rates? For each research question these relationships will be explored in terms of total consumer filings for each chapter (chapter 7 and chapter 13) and as a percent of chapter 7 and percent of chapter 13 for a period of time before and after a change in state level exemptions. The next section reviews prior literature pertaining to the measurement of homestead exemption levels in emphasizing consumer choice. To follow an interrupted time series model is developed that measures changes in filing rates before, during, and after a change in homestead exemption levels for selected states and in the aggregate. Lastly, findings of the research are expressed and concluding remarks are offered.

## LITERATURE REVIEW

Consumer bankruptcy filings have maintained a steady increase over the last several decades. Numerous studies have examined the relationship between filing rates and legal changes surrounding bankruptcy code amendments, while others introduce socio-economic variables in explaining the increase (Buckley & Brinig, 1998). Chapter 7 and Chapter 13 are the two primary procedures by which consumer debtors address obligations that they have to their creditors. The primary difference between the two chapters is that Chapter 13 requires debtor repayment from future income, while Chapter 7 only requires repayment from assets or relinquish through discharge. Provisions of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 replaced the debtor's freedom to choose either chapter with a means test for determining eligibility (White, 2007).

Financial incentives drive and promote behavior to the extent that consumer choice impacts bankruptcy filing, especially regarding the choice of chapter and the level of resources at stake (Domowitz & Sartain, 1999a). For Chapter 7 cases the financial benefit of filing is the difference between the value of the outstanding debt that will be discharged and the cost of the non-exempt assets that must be relinquished. Homeownership is only protected to the extent of the homestead exemption relative to home equity, with no limit on the amount of debt that may be discharged (Domowitz & Sartain, 1999a). Conversely, Chapter 13 cases do not require that debtors relinquish assets but as part of their plan they must repay a portion of their debts from future income over a time period of up to five years. Debtors have a financial incentive to choose Chapter 7 over Chapter 13 if debtor assets are less than the level of exemption allowed within their state of filing (Faye, Hurst, & White, 2002). Individuals or households will only file

bankruptcy if the amount of debt discharged exceeds the amount of non-exempt assets that they must relinquish. Before changes in bankruptcy law in 2005 consumers had a choice and thus this logic applied to both chapters 7 and 13, while after 2005 the choice of chapter is based on the ability to repay debt. When considering this financial benefit to filing over a ten year period from 1984 to 1994, about 18 percent of households would experience a financial benefit of up to \$2500 to filing, while ten percent would gain between \$2500 and \$10,000. Three percent would gain more than \$10,000 from filing. In each case the relationship was statistically significant and indicated that financial incentives guide bankruptcy decision-making (p. 712).

Two primary approaches to measuring exemptions are by the use of dichotomous variables or by using the actual dollar amount of the exemption, with the former limited in capturing the change in dollar amounts of the exemption level (Fisher, 2001). Hynes (1998) concurred with this measure and favored the use of dummy variables, although with reservations about shortcomings surrounding the use of either a dummy variable or a continuous variable. Shifting the incidence of Chapter 13 filing relative to Chapter 7 is a desirable trend before 2005 but gained traction when means testing factors were applied (White, 2007). Nevertheless, property exemption levels may be used as a tool to manipulate the choice, with lower exemption levels associated with higher incidences of Chapter 13 filings. In fact, if exemption levels were lowered across the board by 50 percent, the result suggests that the probability of choosing Chapter 13 over Chapter 7 would increase by 18 percent (Domowitz & Sartain, 1999b).

## METHODOLOGY

For the model six states are considered, AK, CO, MN, MS, and NH, where changes in the level of homestead exemption were made. AK and MN allow filers to choose the federal exemption, but in each state the state level exemption is larger; thus, filers would choose the state exemption. In four of the five states the level of homestead exemption was increased; the only exception is MN, where the level decreased from unlimited to \$200,000. For each state the year that the homestead exemption changed was in the early 1990s, thereby minimizing the effect of national economic trends across different periods of time. For each state chosen other changes in state exemption levels did not occur within a six year period of time before or after the change indicated in the early 1990s. Additionally, this selection was made to avoid factors associated with the tremendous jump and subsequent decline in the number of consumer bankruptcies filed leading up to and after the Bankruptcy Reform Act of 2005 (Evans & Lewis, 2008). Representing a broad footprint of the U.S., through the dispersion of states the model tests each research question for each state and compares to aggregate totals. Table 1 offers a summary of each state chosen that includes the following: the name of the state chosen; the change year for exemption allowed; and exemption levels for six years before and six years after the change year. The nominal exemption level listed represents the amount of each state level exemption.

Table 1: Nominal State Exemption Levels Analyzed

State	Pre-change exemption	Change year	exemption	Post-change exemption level
AK	\$27,000	1991		\$54,000
CO	\$20,000	1992		\$30,000
MN	unlimited	1993		\$200,000
MS	\$30,000	1992		\$75,000
NH	\$5,000	1993		\$30,000

Source: U.S. Courts

This study employs a methodology that is similar to the interrupted time-series analysis model used by Kellough (1990); Netter, Wasserman, and Kutner (1990, pp. 370-375); and Miller and Pierce (1997). As Kellough noted, the limited number of pre and post data points suggests that

time-series is preferred to another modeling technique known as autoregressive integrated moving average (ARIMA). The interruption in the model for this study is the change in homestead exemption levels for the selected states as illustrated in Table 1. The model examines if the change in homestead exemption changes the bankruptcy filing rate or shifts the filing rate from one bankruptcy chapter to another. Changes to the applicable bankruptcy filing rate may be short or long-term depending on the impact of changes in homestead exemption on consumer personal financial choice.

Data are entered as cases in a year-by-year format for a total of 13 years for each state: six years before the change in homestead exemption; the contemporaneous year of the change in homestead exemption; and six years after the change in homestead exemption. Each state is considered independently. Four independent variables are employed. A counter variable is employed that is coded one for the first year of the analysis, two for the second year, and three for the third year, four for the fourth year, etc. This counter variable is called BEFORE. The second independent variable is dichotomous in nature and is coded zero for the six years of analysis before and including the year of the change in homestead EXEMPTION (Table 1), and one for observations for the six years immediately after the change year. This variable is called CHANGE. The remaining independent variable is a post-intervention counter that is also coded in the following manner: coded as zero for observations six years prior to and including the contemporaneous year of change of homestead exemption, one for first year after change in homestead exemption, two for the next year, three for the next year, and so forth. This variable is called AFTER.

The intercept for the multiple regression equation describes the value of the dependent variable at the beginning of the time period. The coefficient, or slope, for the BEFORE variable describes the annual increase or decrease in the dependent variable that was happening before the change in homestead exemption. The estimated increase or decrease in those years is unaffected by the counter AFTER variable, as that variable is coded zero for all years prior to the change in homestead exemption. The coefficient for the policy variable (CHANGE) estimates the one-time increase or decrease in the value of the independent variable that came about in the first year following the change in exemption levels. The coefficient, or slope, of the AFTER variable estimates the increase or decrease in slope that occurred after the change in homestead exemption. The coefficient for the counter AFTER variable must be added to the coefficient for BEFORE to get the estimated slope after the change.

For the analysis four interrupted time-series regression analyses were run for four dependent variables: per-capita total consumer filings, per capita Chapter 7 consumer-bankruptcy filing rate, per-capita Chapter 13 bankruptcy filing rate, and Chapter 7 consumer-bankruptcy filings as a percentage of aggregate consumer-bankruptcy filing rates. The bankruptcy filing rates were collected from the Administrative Office of U.S. Courts and population data from various editions of the Statistical Abstract of the United States. Autocorrelation may be present in a model when serial data is utilized (Miller & Pierce, 1997). The existence of autocorrelation violates a basic assumption of Ordinary Least Squares (OLS) regression. Autocorrelation leads to an underestimation of the variance of the error terms and an overestimation of the significance of the coefficients. The Durbin-Watson statistic is a test statistic used to detect the presence of autocorrelation in the residuals from a regression analysis (Durbin & Watson, 1950) and is used in this study to indicate if autocorrelation is present. If the Durbin-Watson statistic is outside an acceptable range, transformation of the data, through the Cochrane-Orcutt (CORC) estimation procedure, is necessary to take into account the correlation of the error terms (Cochrane & Orcutt, 1949).

### Research Findings & Analyses

The results of this study are grouped and presented in an analysis for the four multiple regression analyses performed. Each individual multiple regression equation employs the same four predictor variables and compares them to a different dependent variable. Table 2 reports the regression results for the interrupted time-series analysis of the reform act and the per-capita total consumer-bankruptcy filings employing Kellough's regression model. Both the BEFORE and CHANGE coefficients are statistically significant at the 5% level, one tail, in the model. The EXEMPTION and AFTER variables are not statistically significant. The Durbin-Watson statistic (1.4695) is within an acceptable range.

Based on the BEFORE coefficient the per-capita total consumer-bankruptcy filing rate was increasing .314 per one thousand people per year prior to the change in homestead exemption. This is expected and consistent with the trend of increasing rates most years from the 1990s until today. The CHANGE coefficient reflects a large drop in the per-capita total consumer-bankruptcy filing rate of -1.356. This decline is unexpected in that more individuals would be expected to seek bankruptcy relief in anticipation of financial benefits to be gained from an increase in homestead exemption. Although the AFTER variable is not significant, the coefficient is negative and this is slightly inconsistent with an expected upward trend in filings after the one time drop. However, this negative trend is very small. Table 3 reports the regression results for the interrupted time-series analysis of changes in homestead exemption and the per-capita Chapter 7 consumer-bankruptcy filings. Both the BEFORE and CHANGE coefficients are statistically significant at the 5% level, one tail, in the model. The EXEMPTION and AFTER variables are not statistically significant. The Durbin-Watson statistic (1.5356) is within an acceptable range.

Table 2: Time-Series Regression – Total Consumer Filings (Per 1000)

Regression Variables	Coefficient	<i>t</i> -statistic	<i>p</i> -value	Durbin-Watson	R-square
Consumer Filings (per 1000)			$p < .01^*$	1.4695	.225
Constant	1.518	3.18	$p < .01$		
EXEMPTION	0.000	0.23	.822		
BEFORE	0.314	3.05	$p < .01^*$		
CHANGE	-1.356	-2.15	.035		
AFTER	-0.033	-0.20	.845		

\* significant at the .05 level

Table 3: Time-Series Regression – Chapter 7 Bankruptcy

Regression Variables	Coefficient	<i>t</i> -statistic	<i>p</i> -value	Durbin-Watson	R-square
Chapter 7 Bankruptcy			$p < .01^*$	1.5356	.330
Constant	1.164	4.09	$p < .01$		
EXEMPTION	-0.000	-0.09	.927		
BEFORE	0.236	3.84	$p < .01^*$		
CHANGE	-1.047	-2.79	$p < .01^*$		
AFTER	-0.010	-0.10	.919		

\* significant at the .05 level

Based on the BEFORE coefficient the per-capita Chapter 7 consumer-bankruptcy filing rate was increasing .236 per one thousand people per a year prior to the change in homestead exemption. This is expected and consistent with the trend of increasing rates most years from the 1990s until

today. The CHANGE coefficient reflects a large drop in the per-capita Chapter 7 consumer-bankruptcy filing rate of -1.047. Like the analysis of total consumer filings, this decline was not expected. Although the AFTER variable is not significant, the coefficient is negative. Although this is slightly inconsistent with an expected upward trend in filings after the one time drop, this coefficient is quite small.

Table 4 reports the regression results for the interrupted time-series analysis of changes in homestead exemption and the per-capita Chapter 13 bankruptcy filing rate. Overall, the multiple regression model was found to be statistically insignificant. The high p-value (.537) indicates the four independent variables used in the model are not valid predictors of explained variance in per-capita Chapter 13 bankruptcy filing rates. This analysis is strengthened in that none of the predictor variables are individually significant and contribute to a robust regression model. Additionally, the Durbin-Watson statistic (0.2918) is near an acceptable range at the 10% level. As such, it is possible that autocorrelation exists in the model.

These results are contrary to the expected results. It is logical for Chapter 13 filing to be increasing before a change in homestead exemption, but at a rate less than increases in Chapter 7 filings that allow discharge of the entire debt. We expected the CHANGE coefficient and the AFTER coefficient to be positive and reflect increases in filing with a higher level of homestead protection afforded. Chapter 7 filers typically experience greater benefit from higher homestead exemption levels. Therefore, we are not surprised that these variables were found to be insignificant, essentially not adding to the robustness of the regression model. Chapter 13 filing would not necessarily be expected to change greatly with changes in homestead exemption, so the lack of statistical significance for CHANGE and AFTER is logical.

Table 4: Time-Series Regression – Chapter 13 Bankruptcy

Regression Variables	Coefficient	<i>t</i> -statistic	<i>p</i> -value	Durbin-Watson	R-square
Chapter 13 Bankruptcy			.537	0.2918	.050
Constant	0.356	1.35	.181		
EXEMPTION	0.000	0.51	.610		
BEFORE	0.078	1.39	.170		
CHANGE	-0.309	-0.90	.373		
AFTER	-0.022	-0.25	.806		

\* significant at the .05 level

Table 5 reports the regression results for the interrupted time-series analysis of changes in homestead exemption and Chapter 7 consumer-bankruptcy filings as a percentage of aggregate consumer-bankruptcy filings. The regression model was not found to be statistically significant at the 5% level. The high p-value (.594) indicates the independent variables used in the model are not valid predictors of explained variance in per-capita Chapter 7 filings as a percentage of aggregate consumer-bankruptcy filings. Often in a multiple regression model that is insignificant, certain variables could be individually significant and strengthen the overall model. Unfortunately, none of the four independent variables were found to be significant. The Durbin-Watson statistic (0.1999) is far outside an acceptable range indicating that autocorrelation among the four independent variables is almost certain.

Table 5: Time-Series Regression – Chapter 7 Bankruptcy Percentage

Regression Variables	Coefficient	<i>t</i> -statistic	<i>p</i> -value	Durbin-Watson	R-square
Chapter 7 Bankruptcy Percent			.594	0.1999	.045
Constant	82.411	16.73	<i>p</i> < .01		

EXEMPTION	-0.000	-1.48	.143
BEFORE	-0.530	-0.50	.619
CHANGE	-0.999	-0.15	.878
AFTER	1.304	0.76	.449

\* significant at the .05 level

## CONCLUSIONS AND FUTURE RESEARCH

The purpose of this study was as follows: 1) To examine to what extent do changes in homestead exemption levels impact consumer bankruptcy filing rates and 2) To what extent do changes in aggregate homestead exemption levels impact aggregate consumer bankruptcy filing rates? These relationships were explored in terms of total consumer filings for each chapter (Chapter 7 and Chapter 13) and for Chapter 7 as a percent of aggregate consumer bankruptcy filing rates. Homestead exemptions offer a level of protection to debtors that protect the value of the home (Landry, Boozer, & Lowe, 2012) in similar ways that exemption laws in general protect and support debtor survival after discharge by offering a level of financial sustainability (White, 2007). Finding that a positive correlation exists between homestead exemption levels and consumer filing rates (Domowitz & Sartain, 1999a), it is logical to expect consumers to find a financial benefit from higher levels of homestead exemption. Whether changes in state-level homestead exemption levels produce an incentive for consumers to change filing behavior as a consequence was a key area to this analysis.

Results of this analysis reflect that total consumer filings in the aggregate were increasing before the change in bankruptcy exemption, but then decline during the change in exemption and slightly thereafter. The decline in coefficient both during and after the change in exemption was not statistically significant as a predictor but should be addressed, nonetheless. These results are consistent with increases in aggregate filing rates (White, 2007), but do not explain why filing rates do not maintain the level of increase or even accelerate after a higher homestead exemption level was implemented (Faye, Hurst, & White, 2002). Domowitz and Sartain (1999a) offer a possible explanation in that the consumer choice of filing or not filing bankruptcy is a function of the level of equity protected. Thus, homeowners with more equity experience a greater benefit from higher homestead exemption levels. Landry, Boozer, & Lowe (2012) introduced a novel approach for considering this variable from the perspective of a rational consumer and found that the value of the home protected increases the validity of empirical results by offering a more accurate measure of what is actually protected. The logic extends to this analysis, but is not reflected statistically when measuring changes in homestead exemption levels over time.

Although this analysis avoided the changes in bankruptcy reform and filing by considering states that made changes in their homestead exemption levels more than a decade before implementation of the 2005 Bankruptcy Abuse Prevention and Consumer Protection Act, one of the major provisions of the Act was addressed in our analysis of selection of bankruptcy chapter before, concurrently, and after changes in state-level homestead exemption levels. White (2007) found that the implementation of a means test replaced the debtor's freedom to choose whether they would seek discharge of all debts through a Chapter 7 or make repayment of a least some level of future income through a Chapter 13.

Our analysis considers changes in consumer filing rates by chapter to the extent that consumers have a financial incentive to file Chapter 7 as opposed to Chapter 13. The results of our analysis reflect that consumers were filing more Chapter 7 petitions before the change in homestead exemption. However, in a manner similar to aggregate effects, filing rates declined during the change in exemption and after. The fact that no variables in the model were statistically significant when considering Chapter 13 filing rates shows that consumers clearly prefer a

Chapter 7 discharge of consumer debt but that consumers do not find changes in homestead exemption levels as a source of wealth insurance (Fay & White, 2003) to the extent that they file more actively. These findings are consistent with Domowitz and Sartain (1999b) in that if exemption levels were lowered consumers would file Chapter 13 rather than Chapter 7 in increasing numbers. That our analysis of consumer bankruptcy filing rates as a function of changes in homestead exemption levels did not indicate a strong association between consumer choice and assets protected indicates that this variable (i.e. changes in homestead exemption levels) may not capture other financial incentives surrounding this issue. It is clear that borrowers will act rationally and make financial decisions for their benefit. Gropp, Scholz, and White (1997) show this through the supply and demand for credit, where higher exemption levels redistribute assets from borrowers with fewer assets to borrowers with more assets. Thus, our analysis offers evidence that consumer bankruptcy filing rates are not positively affected by the wealth effect that a risk-averse consumer (Fan & White, 2003) would seek when making consumer choices, but establishes a foundation for future research.

Prior research shows that aggregate economic and financial conditions play a role in consumer filing rates (Berkowitz & Hynes, 1999; Domowitz & Sartain, 1999b) that may validate the expected positive relationship with higher homestead exemption levels. From our model that established the role of homestead exemption levels as a predictor variable, future research could address cross-sectional changes in filing rates after the 2005 Act. Other opportunities are beginning to materialize to analyze if the Act has increased the level of Chapter 13 petitions relative to Chapter 7 over time. Comparisons of post 2005 reforms with homestead exemption changes in the 1990s could offer a method for testing and isolating individual states, by controlling for state level effects and capturing if bankruptcy reform initiatives to change consumer behavior are challenged by homestead assets protected.

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# INDIA'S SATYAM SCANDAL: SOME EVIDENCE THAT THE TOO LARGE TO INDICT MINDSET OF ACCOUNTING REGULATORS IS A GLOBAL PHENOMENON

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## ABSTRACT

*This paper examines the capture of government regulators using the case of Satyam Computer Services Ltd., one of India's largest software and services companies, which disclosed a \$1.47 billion fraud on its balance sheet on January 7, 2009. The firm, which traded on the New York and Bombay Stock Exchanges, was required to file financial reports with the SEC. Price Waterhouse of India, the local member of PricewaterhouseCoopers (PWC), served as its auditor. After news of the scandal hit the airwaves, Price Waterhouse of India issued a press release and stated that its audit was conducted in accordance with applicable auditing standards and was supported by sufficient audit evidence. Because Satyam shares were quoted on Wall Street, SEC rules prohibited auditors from having business relations with their clients. U.S. regulators failed to take action against PWC. Is this lack of enforcement related to PWC's size and the impact that the failure of a Big 4 firm would have on the global financial marketplace? We question whether government regulators have been captured by the key market players in the auditing services market. One outcome of this "capture" is moral hazard, which implies that the Big 4 accounting firms, or their local affiliates, may place less emphasis on quality audits. Such an approach to the audit function places the self-interests of the audit firm above the public interest. We also question whether foreign companies that are listed on US Stock Exchanges fall under the purview of US Laws and if these companies and their auditors face the same regulatory scrutiny as publicly-traded US Corporations. In addition, the paper provides suggestions to protect the public interest while citing lessons learned from this scandal.*

**JEL:** M42, M48, M41

**KEYWORDS:** Auditing, Capture theory, accounting regulation

## INTRODUCTION

Regulation of business has always been a topic of considerable debate. Regulatory proponents call for more regulation of the private sector in order to protect the public good, while regulatory opponents claim that additional regulation further damages a free-market economy by unduly constraining business. The *theory* of regulatory *capture* posits that regulators, including government bureaucrats who oversee the regulatory process and legislators who write the regulations, are routinely and predictably "captured" and manipulated to serve the interests of those who are supposed to be subject to them.

For public choice theorists, regulatory capture occurs because groups or individuals with a high-stakes interest in the outcome of policy or regulatory decisions can be expected to focus their resources and energies to gain their preferential policy. Meanwhile, members of the public, each with an insignificant individual stake in the regulatory outcome, will either ignore or pay scant attention to the regulatory process altogether. Regulatory capture results when this imbalance of focused resources devoted to a particular policy outcome is successful at "capturing" influence

with elected officials or regulatory agency bureaucrats so that the preferred policy outcomes of the special interest(s) are implemented. A captured regulatory agency serving the interests of its invested patrons and wielding the power of the government behind its decisions is often worse than no regulation. Galbraith (1955) posited that captured regulators were part of the problem rather than the solution. He suggested that regulators were vigorous in their youth, moving to complacency in middle age, until they became in old age either senile or arms of the sector they are supposed to regulate.

Ample evidence suggests that regulatory *capture* is indeed widespread and takes a variety of forms. The Big 5 accounting firms were reduced to the Big 4 with the criminal indictment of Arthur Andersen in 2002 and the firm's ultimate collapse. The vacuum created by the demise of Arthur Andersen and, ironically, the constraints of the Sarbanes-Oxley Act of 2002 (SOX), i.e., the unlinking of audit and consulting services, have contributed to increased market power for the remaining Big 4 firms. One negative aspect of this increased market power is the reluctance of government regulators to indict any of the Big 4 for criminal actions, creating moral hazard. Corporate executives, government regulators and politicians have all expressed concerns about the lack of choices that large public companies have when selecting a public accounting firm. In response to these concerns, the U.S. Congress, as part of the Sarbanes-Oxley Act of 2002, required the General Accounting Office, now the General Accountability Office (GAO), to examine the effects of the consolidation on competitive forces, audit costs and quality, and audit independence in the public accounting industry.

Since the initial charge by Congress for the GAO to examine the market structure of audits for large public companies, the GAO has issued two reports, the first *Public Accounting Firms: Mandated Study on Consolidation and Competition* (GAO, 2003) and a second *Audits of Public Companies: Continued Concentration in Audit Market for Large Public Companies Does Not Call for Immediate Action* (GAO, 2008). Among other findings, both of these reports stated that the Big 4 audit 97% of all public companies with sales between \$250 million and \$5 billion dollars (GAO, 2003, 2008). Dominance by the Big 4 is global in scope, not just a U.S. phenomenon. Affiliates of the Big 4 are also the largest auditing firms in Turkey, South Korea, India and the Philippines. The Big 4 audit all of the Financial Times Stock Exchange (FTSE) 100 companies in England (Simms & Oram, 2002). They also audit more than 80% of the public companies in Japan and two-thirds of those in Canada. According to the International Accounting Bulletin, they hold over 70% of the European market by fee income (The Economist, 2004). Although the collapse of one of the Big 4 firms could have dire consequences for participants in the financial markets, it appears that the GAO has discounted the impact of not only the current lack of competition facing the Big 4 but also the possible capture by the Big 4 of government regulators charged with the oversight of the accounting profession.

The authors provide anecdotal evidence that the capture of accounting regulators by special interests is a global phenomenon. The Satyam case is presented as an example. Societal implications of moral hazard are discussed and in the last section, the authors discuss the implications for the public interest and propose alternatives for accounting regulators and their "captured" mindset.

#### Evidence of Regulatory Capture: Too Large to Indict

When the U.S. government deems that a company's failure would have significant ramifications for the national economy, elected officials make the argument that the company is "too big to fail." This reasoning is used to justify government bailouts and, in some cases, the loosening or repeal of regulatory policies. The bailouts of Chrysler in the late 1970s and Long Term Capital Management in the late 1990s provide examples (Cunningham 2006). More recently, the U.S.

Treasury loaned in excess of \$700 billion to several of the nation's largest financial institutions and other large non-banking companies such as American Insurance Group, General Motors and Chrysler. Once again, government officials argued that the failure of these large corporations, either together or individually, would have a dire negative impact on the economy. Once the "too big to fail" mentality becomes the modus operandi of government, large firms may get a "leg up" on their smaller competitors. In other words, government regulators give the special interests favorable differential treatment.

In July of 2002, the Financial Economists Roundtable met to discuss the crisis in corporate governance, auditing and accounting that followed the scandals at Enron, Adelphia and WorldCom. As part of their deliberations, the attendees asked... "might they [the Big 4] perceive that they were 'too-big-to-fail' and, consequently, have incentives to engage in moral hazard behavior?" (*Journal of Applied Finance*, 2002) Perhaps the engagement in moral hazard behavior came sooner rather than later. Recently, global financial markets were sent into a tailspin by the subprime mortgage crisis. One of the first investment banks to fail as a result of this crisis was Lehman Brothers. On December 21, 2010, Andrew Cuomo, New York Attorney General, filed a lawsuit accusing Ernst & Young (E&Y) of helping Lehman Brothers hide its declining financial health for several months before its implosion in September 2008. Cuomo's suit against E&Y is a civil suit, not a criminal indictment like the one brought against Arthur Andersen, and may, as many suggest, be settled out of court. E&Y responded by stating that the Lehman bankruptcy resulted from a series of unprecedented adverse events in the financial markets. A spokesman stated that E&Y stood by its December 31, 2007 audit of the company (Frean and Spence, 2010).

A couple of observations are in order. First, the Arthur Andersen (AA) effect appears to be impacting regulators. Once AA was served with a criminal indictment, SEC rules prohibited the firm from auditing SEC registered companies. As a result, most of its large clients (and some partners) left AA in search of one of the other four international audit firms. Regulators learned their lesson. Repetition of this scenario with E&Y would create turmoil in global financial markets which are just now beginning to show signs of recovery from the subprime mortgage crises. Regulators have decided to bring a civil indictment against E&Y rather than a criminal indictment, allowing the firm to continue auditing its SEC clients. Second, the disintegration of one of the remaining Big 4 firms would result in an audit services market that would be even more concentrated than it is today. An increase of just 50 points in the Herfindahl-Hirschman Index (HHI) would put the accounting industry in violation of antitrust guidelines (Sloan 2010). Feldman (2010) estimated that the failure of E&Y would add 733 points to the HHI, unacceptable to the Department of Justice's Antitrust Division. Regulators may punish E&Y with significant monetary fines and perhaps suspend them from accepting new clients for a short period of time, but regulators and those clients seeking the services of one of the Big 4 accounting firms want E&Y to survive. Once again, it appears that one of the Big 4 accounting firms is too big for a regulator to protect the public interest, i.e., serve E&Y a criminal indictment.

#### Global Phenomenon: the Satyam Case

The Satyam scandal highlights the importance of securities laws and accounting regulation in emerging markets. It provides insight into the problems that emerging markets face when they transition from locally controlled corporations to globally traded corporations. There is wide consensus that emerging markets must strive to create a regulatory environment in their securities markets that fosters effective corporate governance. India has managed its transition into a global economy well, and although it suffers from corporate governance issues, it is not alone as both developed countries and emerging countries experience accounting and corporate governance scandals (Winkler 2010).

In October 2009, the World Bank accused Satyam of installing spy systems on its computers and stealing assets and issued an eight-year ban against the company. In December 2008, Ramalinga Raju, the Chairman of Satyam, announced that Satyam would spend \$1.6 billion to purchase Maytas Properties and Maytas Infrastructure, two companies unrelated to the information technology field. Efforts in this direction were withdrawn under pressure from shareholders who viewed the transactions as an attempt to siphon money out of Satyam into the hands of the Raju family since the Raju family held a larger stake in Maytas Properties and Maytas Infrastructure than it did in Satyam. On December 30, analysts with Forrester Research advised clients to stop doing business with Satyam because of the fear of widespread fraud. Satyam hired Merrill Lynch to advise it on ways to increase shareholder value. On January 7, just hours before Mr. Raju disclosed the fraud, Merrill Lynch sent a letter to the stock exchange indicating that it was withdrawing from its engagement with Satyam because during the course of its representation it learned of material accounting irregularities (Winkler 2010).

Mr. Raju claimed that he overstated assets on Satyam's balance sheet by \$1.47 billion. Nearly \$1.04 billion in bank loans and cash that the company claimed to own was nonexistent. Satyam also underreported liabilities on its balance sheet. Satyam overstated income nearly every quarter over the course of several years in order to meet analyst expectations. The results announced on October 17, 2009 overstated quarterly revenues by 75 percent and profits by 97 percent. For the third quarter, Satyam reported 50.4 billion rupees (\$1.03 billion) of cash and 3.76 billion rupees of earned interest that were fictitious. Receivables were overstated and liabilities were understated by 4.9 billion rupees and 12.3 billion rupees, respectively.<sup>1</sup> Numerous bank statements were created to advance the fraud and bank accounts were falsified to inflate the balance sheet with balances that did not exist. The income statement was inflated by claiming interest income from the fake bank accounts. Fake salary accounts were created and the money in them was appropriated after the company deposited the salaries. The company's global head of internal audit created fake customer identities, generated fake invoices against their names to inflate revenue, forged board resolutions and illegally obtained loans for the company. It also appeared that the cash that the company raised through American Depository Receipts (ADRs) in the United States never made it to the balance sheets (Kahn 2009).

Global auditing firm PWC audited Satyam's books from June 2000 until the discovery of the fraud. PWC signed Satyam's financial statements and was responsible for the numbers under Indian law. Cash is one of the easiest accounts to audit. The question of how the audit of a cash account failed to disclose a shortage of \$1.03 billion dollars remains unanswered. The auditors also did not independently verify with the banks in which Satyam claimed to have deposits (Winkler 2010). Suspiciously, Satyam also paid PWC twice what other firms would charge for the audit, which raises questions about whether PWC was complicit in the fraud. Furthermore, PWC audited the company for nearly 9 years and did not uncover the fraud, whereas Merrill Lynch discovered the fraud as part of its due diligence in merely 10 days. Missing these red flags implied either that the auditors were grossly inept or in collusion with the company in committing the fraud. PWC initially asserted that it performed all of the company's audits in accordance with applicable auditing standards (Winkler 2010).

Immediately following the news of the fraud, Merrill Lynch terminated its engagement with Satyam, Credit Suisse suspended its coverage of Satyam, and PWC came under intense scrutiny and its license to operate was revoked. Coveted awards won by Satyam and its executive management were stripped from the company (Agarwal and Sharma 2009). Satyam's shares fell to 11.50 rupees on January 10, 2009, their lowest level since March 1998, compared to a high of 544 rupees in 2008. In the New York Stock Exchange, Satyam shares peaked in 2008 at US\$ 29.10; by March 2009 they were trading around US \$1.80. Thus, investors lost \$2.82 billion in

Satyam (BBC News, 2009). Criminal charges were brought against Mr. Raju, including: criminal conspiracy, breach of trust, and forgery.

Although Mr. Raju initially asserted that he acted alone in perpetrating the fraud, the Indian authorities also charged Mr. Raju's brother, the company's CFO, the company's global head of internal audit and one of the company's managing directors. Indian officials acted quickly to try to save Satyam from the same fate that met Enron and WorldCom, when they experienced large accounting scandals. The Indian government appointed a new board of directors for Satyam to try to save the company. The Board worked diligently to bring stability and confidence back to the company to ensure the sale of the company within the 100-day time frame assigned by the Indian Government. The Securities and Exchange Board of India (SEBI) appointed a retired Supreme Court Justice, Justice Bharucha, to oversee the process of an auction for Satyam and instill confidence in the transaction. Several companies bid on Satyam on April 13, 2009. The winning bidder, Tech Mahindra, bought Satyam for \$1.13 per share—less than a third of its stock market value before Mr. Raju revealed the fraud—and salvaged its operations (Dagar 2009).

There were also several civil charges filed in the U.S. against Satyam by the holders of its ADRs. Both civil and criminal litigation cases continue in India and civil litigation continues in the United States. The SEC and the PCAOB fined the affiliate, PW India, \$7.5 million in what was described as the largest American penalty ever against a foreign accounting firm (Norris, 2011). According to President of the Institute of Chartered Accountants of India (ICAI), “The Satyam scam was not an accounting or auditing failure, but one of corporate governance. This apex body had found the two PWC auditors prima-facie guilty of professional misconduct.” The Central Bureau of Investigation (CBI – India), which investigated the Satyam fraud case, also charged the two auditors with “complicity in the commission of the fraud by consciously overlooking the accounting irregularities”. The Registrar of Companies report in India, stated that the directors and senior officials at Satyam, sold shares ahead of the fraud revelation by Mr. Raju.

The firm, which trades on the New York and Bombay Stock Exchanges, is required to file financial reports with the SEC. After news of the scandal hit the airwaves, PW India issued a press release and stated that its audit was conducted in accordance with applicable auditing standards and was supported by sufficient audit evidence. In 2008, the Public Company Accounting Oversight Board of the U.S. (PCAOB) had inspected selected audits of PW India, but the PCAOB's findings were not released.<sup>2</sup>

The Big Four – Deloitte & Touche LLP, Ernst & Young LLP, KPMG LLP and PricewaterhouseCoopers LLP – have long distinguished themselves from second- and third-tier assurance services firms by marketing themselves as global entities with specific-industry skills that international companies need in highly competitive markets. The Big Four boast of their numerous global affiliates and tout the efficiency and responsiveness of these affiliate offices to current and potential clients. These global professional services firms state that their affiliate offices provide a global network with tens of thousands of employees who can meet the accounting, auditing and consulting needs of the world's largest companies. In essence, the Big Four sell the idea of a global affiliate network as “we are family,” with each affiliate office working together to take care of the needs of their international clients. Ironically, the Big Four quickly disavow this “we are family” concept when a problem surfaces in one of their affiliate offices. When an audit failure occurs, the international offices of the Big Four issue public statements reminding accounting regulators that the numerous firms which comprise their affiliate networks are legally independent. In Satyam's case, the PWC affiliate was PW of India. When news of the Satyam scandal broke, PWC's international headquarters office in London quickly distanced itself from PW of India and stated that local Indian affiliate offices had conducted the Satyam audit.

These PW India affiliates were Lovelock & Lewes, Price Waterhouse Bangalore, Price Waterhouse & Co. Bangalore, Price Waterhouse Calcutta and Price Waterhouse & Co. Calcutta. The US Securities and Stock Exchange Commission (SEC) eventually sanctioned these five PWC affiliates and fined them \$10 million, the largest fine the SEC has ever issued to a foreign-based accounting firm ([www.indianexpress.com](http://www.indianexpress.com)). Upon payment of the fine, PW India stated that it neither admitted nor denied wrongdoing in the Satyam case. The PWC affiliate emphasized that no American accounting regulator “found that PW India or any of its professionals engaged in any intentional wrongdoing or was otherwise involved in the fraud perpetrated by Satyam management.” The PCAOB barred two PW India accountants from taking part in audits of American companies but said it did so because they had refused to cooperate with its investigation. The \$10 million fine, however, pales in comparison to the losses suffered by Satyam investors and creditors. PWC’s affiliate gladly paid the fine. PWC still has its Indian affiliates in spite of the fact that “PW India failed to conduct even the most fundamental audit procedures” (Scarboro 2011). PWC still advertises the expertise and skill set of its global affiliates found in 159 countries and 776 cities. Given the “slap on the wrist” that PWC received from accounting regulators, a skeptic might ask if PWC and its global affiliate network, which comprise the world’s largest professional services firm, have become too big of an international player to indict for its audit of India’s Enron. Further compounding PWC’s troubles, was the business relationship between PWC and Satyam in the U.S. Both firms worked on a major IT contract for Idearc, a spinoff of telecom firm Verizon. Because Satyam shares are quoted on Wall Street, SEC rules prohibit auditors from having business relations with their clients. U.S. regulators have yet to take action against PWC. Once again, is this lack of enforcement related to PWC’s size and the impact that the failure of a Big 4 firm would have on the global financial marketplace?

#### Moral Hazard Behavior: Societal Implications

One form of moral hazard behavior may be less quality audits. The absence of quality audits increases the probability of audit failures. Auditor silence in the face of inordinate corporate risk taking may also imply moral hazard behavior on the part of auditors. Such actions by auditors are more than a social issue such as the environment or sustainability. The failure of one large, publicly traded bank or brokerage house may set up a chain reaction that brings global financial markets to the brink of ruin (Roth, 2008). The collapse of The Bank of Credit and Commerce International in 1991, Barings Bank in 1995, and Bear Stearns and Lehman Brothers both in 2008 provide examples. Each of these collapses rattled the financial markets and spurred global anxiety. Governments and financial regulators around the world coordinated their efforts to prevent panic and to resolve the financial crisis (Nanto, 2009).

The attitude of the Big 4 toward their social responsibility for quality audits or alerting a board of directors to an unhealthy level of financial management risk is more than just about the reputational capital of the Big 4. It has implications for world-wide financial stability. Writing on the great financial crash of 1929 in the United States, J.K. Galbraith saw the crash as a symptom of a wider problem. Galbraith believed that the world of finance was incapable of expressing even the most basic and necessary self-criticism. “The sense of responsibility in the financial community for the community as a whole is not small,” he observed, “it is nearly nil” (Galbraith, 1955). Turner (2006) noted the fact that Big 4 firm-on-firm peer reviews never resulted in a negative or qualified report on one of the major international accounting firms, and had engrained a culture in which one firm had agreed not to tell on the other. When Galbraith’s observation is combined with Turner’s statement, marketplace stakeholders could question if the Big 4 view audit quality with a critical eye.

Neither the global community nor government regulators can afford for the Big 4 to disregard legal, regulatory and ethical standards. Galbraith (1955) also posited that regulators were part of the problem rather than the solution. They were, he thought, vigorous in their youth, moving to complacency in middle age, until they became in old age either senile, or arms of the sector they are supposed to regulate. A major concern in the marketplace is over the possible demise of one of the remaining Big 4 firms, especially if one of the firms faces a criminal indictment. Friedland (2004) noted that the break-up of Arthur Andersen unfolded in a relatively smooth manner. With this in mind, the authors posit that rather than forming the mentality of “too concentrated to indict,” government agencies, particularly the SEC, should inform the Big 4 and large corporations that the agency has formed a mentality of “here is the plan” in case one or more of the Big 4 are brought to court on criminal charges.

#### Endnotes

<sup>1</sup> [http://www.economist.com/businessfinance/displayStory.cfm?story\\_id=12898777](http://www.economist.com/businessfinance/displayStory.cfm?story_id=12898777)

<sup>2</sup> [http://www.bloomberg.com/apps/news?sid=aov\\_laRpSmno&pid=20601109](http://www.bloomberg.com/apps/news?sid=aov_laRpSmno&pid=20601109)

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# IMPROVE THE TARGET PRICE PERFORMANCE BY THE ENHANCED COMPANY VALUATION TECHNIQUES

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## ABSTRACT

*The target prices issued by analysts have often been suspected by the market participants and most of them actually have been found unachievable. This study investigates the underlying reasons for the underperformance of the target price and attempts to improve its reliability via the enhanced valuation methods. First, this study improves the performance of the target price by enhancing the discount rate estimation method. An expanded CAPM model which contains the shrunk beta, beta-adjusted size premium and firm-specific risk premium has been suggested to estimate the cost of equity. In this model, the sum of the risk-free rate and the industry systematic risk premium is actually the average required return on large-cap public equity in a particular industry, then adding an beta-adjusted average size premium to reflect the average incremental return on micro-cap peer group, finally the premium to represent the firm-specific risk is added to arrive at the cost of equity for a particular (smaller) company. In addition, this study recommends a target price-based multistage Gordon growth model as another cost of equity estimation method. This method adapts the consensus target price as a proxy of the intrinsic value per share to better consistent with the assumption of basic Gordon growth model. Second, due to the limits of absolute and relative valuation models and the different industries have differing characteristics, this study proposes a so-called industry-specific combined valuation approach which not only takes advantage of the benefit from the combination of the absolute and relative models, but also consistent with the unique features of different industries. Third, this study presents an enhanced target price setting method and provides effective solutions to the common but unsolved question faced by many equity analysts: how to combine a range of value estimates when more than one model are used in the valuation. The partial least square regression approach has been recommended to combine various value estimates, this approach is more logical than the recent weighted average method and easy to use, automatically generates time-varying weights and allows the users to customize it by adding or removing any model to satisfy specific valuation needs. Besides, the Bayesian triangulation approach has also been suggested as an alternative method to deal with a range of value estimates. After that, the case-by-case adjustments of combined value estimate have been emphasized and recommended to better reflect the expected highest price level. Fourth, this study distinguishes the value estimate with target price (the target price is actually the value estimate after qualitative adjustment), a reliability testing technique has been introduced to test the performance of both value estimate and target price. This technique measures the performance of the value estimates based on their accuracy and explanatory power, and tests the reliability of the target prices by classifying them into five explicit recommendation groups and then measure their reliability respectively. This reliability testing technique can also be used to test the reliability of target prices issued by equity analysts, it helps investors to better understand the information contained in the equity reports and better measure the performance of equity analysts.*

**JEL:** G12, G14, C10

**KEYWORDS:** Target Price Performance, Enhanced Valuation Methods



# EXPORT MARKET ORIENTATION, INTERFIRM COMMUNICATION, INTERFIRM COOPERATION AND EXPORT PERFORMANCE

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## ABSTRACT

*The purpose of this study is to assess the role of export market orientation on interfirm communication and cooperation, and ultimately, on export performance. Drawing upon the resource-based view, cognitive structures in social psychology, and relationship marketing theory a conceptual model is developed and relationships are tested empirically from a sample of 242 exporters based in Thailand exporting products that represent 10 industries. Structural equation modeling was used to analyze the data and to determine the relations between these major constructs. The results show that exporter market orientation is strongly related to communication frequency and communication quality. However, only communication quality is related to cooperation, which in turn is positively related to export performance. These results have significant theoretical implications for academics of international business and practical implications for Thai exporters.*

**KEYWORDS:** Export market orientation, exporters, communication quality, communication frequency, interfirm cooperation, emerging market

## INTRODUCTION

Exporting is a key activity in most economies, particularly in emerging markets. Many academics and practitioners have encouraged exporting firms to become more market orientated so as to develop the necessary organizational capabilities that can lead to better knowledge of export markets. In addition, with the emergence of the relationship marketing paradigm, relational behaviors of the exporter-importer dyad have been given a significant amount of academic attention in the past decade (e.g. Lages et al., 2005, Lages et al., 2009, Nguyen & Nguyen, 2010, Racela et al., 2007). Although valuable insights have been gained from such prior studies, there has been very limited attention given to relationship determinants, such as those relevant to interfirm communication.

Communication has long been recognized as a relational driver in seller-buyer relationships (Griffith, 2002, Palmatier, 2008). However, much of the relationship marketing research literature has downgraded the role of communication to a minor component of relational behaviors. There is prior research to suggest that interfirm communication serves as a primary driver to sustaining business relationships, with empirical support found from studies conducted in manufacturer-retailer contexts (e.g. Holden and O'Toole, 2004), industrial marketing settings (e.g. Denize and Young, 2007) and business partnerships (e.g. Gray, 2005). Consideration of interfirm communication in export market ventures has only recently been posited in the international marketing literature (e.g. Oh and Moon 2010). A deeper understanding of the communication—relationship behavior link in an exporter-importer context would be worthwhile, especially since engaging in such behaviors may involve considerable organizational resources.

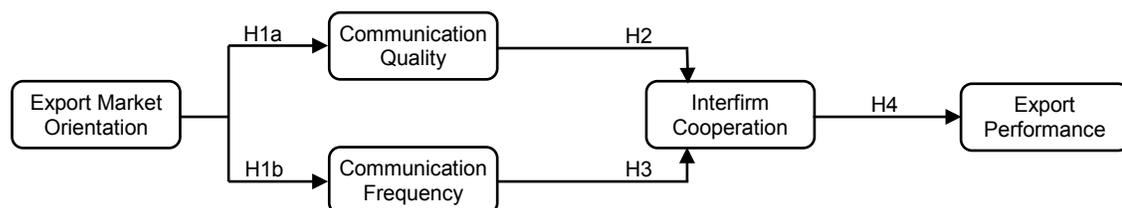
This paper aims to fill this void in the marketing literature by examining the role of interfirm communication and relational behaviors in the export market orientation—export performance relationship. Although the export marketing literature has identified numerous relationship

constructs (e.g. Leonidou and Kaleka, 1998, Sutton-Brady, 2001), we specifically focus on examining the role of communication quality, communication frequency and the relational aspect of interfirm cooperation. Our selection of these behaviors is based on their noted significance in the existing literature, and the sparse attention they have been given in the exporter-importer business relationship. The context of this study is Thailand, which is an emerging market that is highly dependent on exports. The country's exports account for roughly two-thirds of the country's GDP. As a result of the global economic slowdown that began around mid-2012, Thailand's export growth from January-August 2013 reached a mere one percent, well below the target of 7.0-7.5 percent (Sriring and Thaicharoen, 2013). Given the importance of the export sector to Thailand's growth and the challenges Thai exporters face under a dynamic and fast changing global environment, this study is not only timely, but provides valuable insights into firm resources and behaviors that influence the export performance of Thai firms. Thus, our study contributes to the international marketing literature in two major ways. First, it delineates the concept of communication from that of relationship, in line with a more detailed perspective of the two distinct sets of behaviors. Second, our study empirically examines the mediating effects of communication and relational behaviors that have received little attention in the export market orientation literature.

### Conceptual Model and Hypotheses Development

The development of the conceptual model shown in Figure 1 takes an interdisciplinary approach, integrating several different theoretical perspectives, including the resource-based view (RBV) of the firm, cognitive psychology and relationship marketing theory. The model conceptualizes exporter market orientation as an antecedent of communication frequency and communication quality, which then lead to interfirm cooperation, which in turn has an influence on export performance.

Figure 1: Conceptual Model



### Export Market Orientation

Export market orientation refers to the activities that firms perform in their efforts to incorporate the marketing concept into their export operations (Cadogan, Kuivalainen and Sundqvist, 2009). Behaviors that are associated with an export market orientation include export-focused intelligence generation, intelligence dissemination, and responsiveness to export market intelligence, which influences the firm's ability to develop and offer superior value for its export customers (Cadogan, Diamantopoulos and Siguaw, 2002). Much of the strategy and marketing literature recognizes market orientation as an essential marketing capability or strategic marketing resource that has the potential to enable a firm to gain a positional advantage and to achieve superior firm performance (e.g. Hult and Ketchen, 2001). According to the resource-based view (RBV) of firms, resources that are valuable, rare, inimitable, and nonsubstitutable enable the firm to better perform strategic actions that create a competitive advantage and ultimately enhanced firm performance (Wernerfelt, 1984, Barney 1991). When an organization adopts and implements a market orientation, albeit an export market orientation, it adopts an information processing

perspective, thereby making a market orientation an indigenous key market-based asset in the form of unique customer and competitor market intelligence that enable the firm to achieve superior performance (Morgan, Vorhies and Mason, 2009).

A review of prior research on the export market orientation—export performance link reveals that the relationship is generally a positive one. More recent studies of export market orientation have focused on examining specific organizational processes through which it influences performance. For instance, Murray, Gao and Kotabe (2011) found that marketing capabilities (i.e. pricing capability, new product development capability, and marketing communication capability) mediate the export market orientation-performance relationship while competitive advantages (i.e. low-cost advantage, differentiation advantage) partially mediate it. Similar studies have been conducted to examine the mediating role of relational behaviors (i.e. relationship distance, cooperation, dependence) (Racela et al., 2007), and relationship quality (e.g. Lages et al., 2009, Nguyen & Nguyen, 2010). This paper follows this line of inquiry and considers the exporter's market orientation as an antecedent of other organizational behaviors rather than as a direct determinant of export performance.

### Interfirm Communication

Interfirm communication, therefore, can be defined broadly as the amount, frequency, and quality of information shared between exchange partners (Mohr and Sohi, 1996). Successful interfirm exchanges, which are highly contingent upon good, frequent communication (Bleeke and Ernst, 1993). Generally, communication as a concept is often described as a multidimensional global construct. However, much of the prior research examines only the dimension of communication frequency. Although this dimension has been defined in several ways, in this paper, interfirm communication frequency refers to the number of contacts made between members of the different parties (Mohr and Nevin, 1990). 'Good' communication corresponds mainly with the concept of communication quality. Many studies in relationship marketing have identified communication quality as a dimension of a relationship construct. For instance, in the context of supplier-buyer relationships, Roehrich, Spencer and Florence (2002) find the emergence of a 'communication quality' dimension as part of their exploratory study of the relationship atmosphere construct.

Inadequate communication with exporters has long been identified as a major problem facing importers (Katsikeas, 1995). Views of cognitive structures from the field of social psychology may be useful to explain the communication interaction between an exporter and its overseas distributors. Cognitive structures describe the basic mental processes people use to make sense of information and give meaning to it. When people with different cognitive structures engage in interpersonal communication, their differences in knowledge and of meanings often necessitates greater communication effort to ensure sufficient encoding and decoding of transmitted messages. In a study of manufacturer-retailer relationships, Hakkio and Laaksonen (1996) found that differences in the product meanings between manufacturers and those of its retail customers facilitated more meaningful and frequent communication for the purpose of clarifying and reconciling product meanings into a shared and common understanding.

In an exporter-importer relationship where cognitive knowledge structures may differ, greater communication quality and more frequent communication interaction could be more prevalent. Firms with a strong export market orientation would engage in a form of organizational information gathering and processing that enhances information quality and information utilization. This information processing enables the exporter to familiarize itself with the general cultural peculiarities and specific social exchange norms of its importers. Highly export market oriented firms are not likely to keep their key importers at arms-length, but rather, would engage

in more relevant and frequent communications and interactions with them in order for both parties to gain a common understanding of the foreign market in which the importer is more knowledgeable and the exporter is less familiar. Therefore, the following is hypothesized:

- H1a: Export market oriented firms will have a higher degree of communication frequency with their overseas distributor.
- H1b: Export market oriented firms will have a higher degree of communication quality with their overseas distributor.

#### Communication Quality, Communication Frequency and Interfirm Cooperation

Cooperation can be broadly described as the process of several parties working together to the same end. Definitions of cooperation found in the marketing literature are consistent with this broad description (e.g. Morgan and Hunt, 1994, Leonidou, Katsikeas, and Hadjimarcou, 2002). The underlying themes of these definitions of interfirm cooperation are that it is a process by which individuals, groups and organizations come together, interact and that they form psychological relationships for mutual gain or benefit (Smith, Carroll and Ashford, 1995). Cooperation is often included in marketing studies as a component or an item of a higher-order relationship construct, such as relationship quality (Lages et al 2005, Lages et al. 2009) or relationship atmosphere (Roehrich et al., 2002), implying that cooperation is distinct from other relationship marketing constructs such as power, conflict, coordination, trust, and commitment.

Communication between two firms is a necessary element of relationship-building. Based on the relationship marketing paradigm (Morgan and Hunt, 1994), communication helps to build trust between firms and provides the information and knowledge that is required in order for cooperative activities to take place. In exporter-importer relationships, cooperation is shaped by particular norms of behavior, which may differ between the two parties, particularly when cultural or psychic distance is large. Such differences present major challenges in exporter-importer relationships to achieving a productive level of cooperation. However, in a study of international trade intermediaries, it was found that frequent, bi-directional and informal communication between firms improves cooperation (Balabanis, 1998). Based on this discussion, the following hypotheses are advanced:

- H2: Exporter-importer communication frequency has a positive relationship with interfirm cooperation.
- H3: Exporter-importer communication quality has a positive relationship with interfirm cooperation.

#### Interfirm Cooperation and Export Performance

Interfirm cooperation reflects expectations that the parties have about working together in order to achieve mutual and individual goals jointly. Firms may be motivated to cooperate with their business customers or strategic partners in order to gain certain benefits such as stretching their resources, enhancing their knowledge, reducing their costs and improving their performance in general. Based on the RBV, a firm that is resource-constrained may engage in interfirm cooperation to overcome related barriers to the firm's growth (e.g. Zhang et al., 2010). In an exporter-importer context, an exporter may be resource constrained in terms of market or financial resources, while an overseas distributor may lack its own manufacturing resources. In essence, the exporter and their overseas distributor share their resources, with the exporter sharing its inventory and the importer sharing its market knowledge or financial resources. Accordingly,

the RBV encourages interfirm cooperation as a means for firms to grow with the aid of a partner firm's resources (Combs and Ketchen, 1999).

In terms of the influence of cooperation on firm performance, much of the empirical evidence supports a positive influence, with a few exceptions of studies that find mixed results. For instance, Horta, Brito and Brito (2009) find that a firm's cooperation with its customers positively influenced firm growth (i.e. market share), but cooperation did not have any influence on the firm's profitability. However, in the international marketing literature, the view that exporter-importer cooperation would have a positive influence on the exporter's firm performance has been supported by several prior studies (e.g. Jungbok, 2011, Racela et al., 2007). As a result, it is hypothesized that:

H4: Interfirm cooperation has a positive relationship with export performance.

## RESEARCH METHODOLOGY

The Thailand Exporter Directory, which lists over 4,000 firms, was used as the sampling frame for this study. Our questionnaire was sent to identified informants of a randomly selected 445 export firms, most of which were situated in the greater Bangkok metropolitan area. From the initial mailing, 253 questionnaires were returned for a response rate of 56.8 percent. Six questionnaires had excessive missing values and were dropped from further consideration in the analysis. The final sample is 247 SBUs within 174 companies representing over 10 industries. A comparison between 'first-two weeks' and 'after-two weeks' responses on several firm characteristics indicated that nonresponse bias was not a concern in this study (Armstrong and Overton, 1977). Table 1 presents the sample characteristics.

Table 1: Sample Characteristics

Characteristic	Proportion (no.) n=247
<b>Functional Area of Respondent</b>	
Top-management (e.g. Owner, SBU head, GM, MD, V.P.)	47.8% (118)
Export	23.1% (57)
Marketing	14.2% (35)
Sales	9.7% (24)
Logistics	1.6% (4)
International	1.6% (4)
Other (e.g. IT, Accounting, Product design)	2.0% (5)
<b>No. of full time employees</b>	
1 to 60	38.1% (94)
61 to 120	18.6% (46)
More than 120	43.3% (107)
<b>Industry</b>	
Garments, Textiles, and Clothing	44.1% (109)
Automotive Parts/Accessories	15.0% (37)
Electronics, Electrical Products and Parts	13.8% (34)
Construction/Industrial//Machinery & Equipment Products	7.7% (19)
Chemicals/Medical Supplies/Hygiene Products	5.7% (14)
Household/Consumer Products	5.7% (14)
Agriculture/Food Products	4.4% (11)
All others (i.e. Gems/jewelry, Gifts/Handicrafts)	3.6% (9)

### Questionnaire Development and Construct Operationalization

A back translation procedure was employed to translate the original English language scales to Thai in order to ensure conceptual and functional equivalence (Cavusgil and Das, 1997). The question sequence and item wording in the questionnaire were refined by a pretest of 10 managers and marketing experts.

Existing measures were sought and adapted for this study. All multi-item constructs were measured using a 7-point scale. *Export Market Orientation* (EXPORTMO) was measured from the 32-item MARKOR scale of Kohli, Jaworski and Kumar (1993), with the items being adapted to suit the context of an export firm. The EXPORTMO scale was used as a second-order construct, with three first-order factors: *Export intelligence generation* (EXPINTGEN) comprising 10 items, *Export Intelligence Dissemination* (EXPINTDISS) comprising 8 items, and *Export Responsiveness* (EXPRESP) comprising 14 items.

For the exporter's interfirm interactions, the respondent was instructed to refer to a key overseas distributor (i.e. importer) of the firm. *Communication Frequency* (COMMFREQ) was measured by a single-item ratio scale in terms of the average number of personal contacts the exporter makes with the importer within a year. *Communication Quality* (COMMQUAL) was measured using the 5-item scale of Roehrich et al. (2002), which indicates the degree to which communications with the importer are amiable and clear. *Interfirm Cooperation* (INTERCOOP) was measured by the 6-item cooperation scale developed by Roehrich and Spencer (2003), which indicates the extent to which the exporter works closely, shares technical and commercial information and has compatible goals with the importer.

*Export Performance* (EXPPERF) was measured using 4-items to assess the exporter's performance in terms export sales, export market share, export profits, and rate of new market entry in relation to the exporter's major competitors.

### Data Analysis and Results

An initial check of the data revealed five outliers, which led to the omission of those responses from the analysis. From confirmatory factor analysis (CFA), items with factor loadings below 0.50, mostly items that were reverse-worded, were dropped from further analysis. Four items were used to measure EXPINTGEN. Four items were used to assess EXPINTDISS. Five items were used to measure EXPRESP. Each of these three refined components shows acceptable internal consistency: EXPINTGEN ( $\alpha = .71$ ), EXPINTDISS ( $\alpha = .81$ ), and EXPRESP ( $\alpha = .78$ ). The measures of each component were summated and used as indicators for the EXPORTMO latent construct. In aggregate, the EXPORTMO construct has adequate internal consistency ( $\alpha = .62$ ). Of the six items used to measure INTERCOOP, two were dropped. The CFA measurement model including EXPORTMO, COMMQUAL, COMMFREQ, INTERCOOP and EXPPERF was estimated using AMOS v.17. The factor loadings of each individual indicator on its respective construct are statistically significant ( $p < .001$ ), presenting support of the dimensionality and convergent validity of the constructs (Anderson & Gerbing, 1988). Additional analysis of correlations between items satisfied the  $r = .85$  cutoff (Garson, 2001), indicating the model demonstrates adequate discriminant validity. Overall, the results indicate that the measurement model fits the data well and the constructs possess adequate measurement properties for further analyses. The construct descriptive statistics and correlations are presented in Table 2.

Table 2: Construct Descriptive Statistics and Correlation Matrix

Construct	Items Used	Mean	Std. Dev	1	2	3	4	5
1. EXPORTMO	3	4.80	.87	0.62				
2. COMMQUAL	5	4.96	1.10	0.35***	0.81			

3. COMMFREQ	1	13.95	22.21	0.09	0.12*	--		
4. INTERCOOP	4	4.91	1.17	0.46***	0.62***	0.14**	0.78	
5. EXPPERF	4	4.51	1.22	0.36***	0.22***	0.10	0.31***	0.87

\*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.10$  Cronbach's alphas are placed in the diagonal.

### Structural Model Estimation and Results

Having achieved satisfactory fit in the measurement model, the structural model was then analyzed. A direct path from EXPMO to INTERCOOP was included in the model although it is not hypothesized. The EXPMO-INTERCOOP parameter estimate is intended to serve as a baseline to compare direct and indirect effects of EXPMO on INTERCOOP. Path coefficients were estimated using maximum likelihood estimation. The overall fitness indices suggest good fit for the construct model ( $\chi^2_{(111)} = 230.36$ ,  $p < .01$ ; GFI = .90; TLI = .91; CFI = .93; RMSEA = .067).

Table 3: Summary of Results for Hypotheses Testing

Hypothesis	Expected	Standardized	t-value	Results
	Sign	Regression		
H1a: EXPORTMO -> COMMQUAL	+	0.45	4.21	Supported
H1b: EXPORTMO -> COMMFREQ	+	0.16	2.07	Supported
H2: Commqual -> Intercoop	+	0.64	6.87	Supported
H3: Commfreq -> Intercoop	+	0.02	0.47	Not Supported
H4: Intercoop -> Expperf	+	0.39	5.23	Supported

Empirical support was found for all but one of the proposed hypotheses. Specifically, H1a, which predicted that export market orientation would have a positive relationship with communication quality, is supported with a highly significant effect (0.45,  $p < .01$ ). H1b predicted that export market orientation would have a positive relationship with communication frequency. Moderate support is found for H1b (0.16,  $p < .04$ ). H2 predicted a positive relationship between communication quality and interfirm cooperation, which is supported with a highly significant effect (0.64,  $p < .01$ ). H3 predicted a positive relationship between communication frequency and interfirm communication. The data provided no support, with a nonsignificant effect (0.02,  $p > .10$ ). Finally, H4 predicted a positive relationship between interfirm cooperation and export performance. H4 is fully supported through a highly significant effect (0.39,  $p < .01$ ). The results of the hypotheses testing are presented in Table 3. The additional path of the direct effect of export market orientation on interfirm cooperation is highly significant (0.35,  $p < .01$ ).

### DISCUSSION AND CONCLUSION

This study was motivated by a desire to gain a better understanding of the relationships between export market orientation, interfirm communication, interfirm cooperation, and export performance. In doing so, we integrated the resource-based view, perspectives of cognitive structures from social psychology, and relationship marketing theory to justify the relationships among our constructs of interest. Our interdisciplinary approach contributes to the fields of strategic management, international marketing, and relationship marketing. Our study found that highly export market oriented firms engage in higher levels of communication frequency and communication quality with their major overseas distributor. This indicates that exporters with a strong market orientation have fewer misunderstandings, easily reach agreements on contract terms, provide sufficient attention to and conduct a higher number of personal meetings per year with their overseas distributor. While interfirm communication quality has a strong positive relationship with cooperation in terms of the exporter and importer working more closely

together, the importer more willingly sharing technical or commercial information, setting compatible goals with one another, and putting cooperation before one another's short-term profits, communication frequency did not. In other words, our data indicate that the number of personal meetings that the exporter has with its overseas distributor is in no way related to interfirm cooperation. Lastly, our findings are consistent with much of the prior research, revealing a strong positive relationship between cooperation and firm performance, at least in terms of the Thai exporter achieving export sales, export market share, export financial performance, and export market entry at a level higher than their competitors.

These results also present two additional meaningful practical insights for Thai managers. One implication of the results is that exporters should establish a high level of cooperation with their overseas distributor since cooperation positively contributes to firm export performance. An exporter's cooperation with their overseas distributor can be improved when the exporter focuses on communication behaviors that foster clear and relevant information exchanges, which are based on the exporter's acquired and utilized market intelligence. The other implication of these results is that exporters must focus on 'quality' rather than 'quantity' in communication behaviors and interactions with their overseas distributors. Export market oriented firms are better off engaging in purposeful personal meetings (i.e. quality communication) rather than making personal contacts with their overseas distributor perhaps merely for the sake of 'keeping in touch.' Excessive or unnecessary personal meetings between the exporter and the importer may simply increase the exporter's administrative or selling costs as well as serve as a misallocation of resources (i.e. time, effort) that could be better spent elsewhere in the export operation.

#### Limitations and Directions for Future Research

Although the findings of this study have provided useful insights for academics and managers, several limitations should be kept in mind. First, although the empirical evidence provided support for most of the hypothesized relationships between the variables, the cross-sectional nature of the data cannot be used to establish such relationships over time. Replications of this study and longitudinal research methods can help to determine the existence of any temporal impacts. Second, the nonsignificant result of the relationship between interfirm communication frequency and interfirm cooperation should be given further attention. Though our study could not identify why the data refutes theory, future consideration of other potential moderating variables, such as those relating to cultural differences (e.g. psychic distance) or industry characteristics (e.g. industry type) may lend valuable insights. Third, the study has only examined the perspective of the exporter. A multiple response method from both parties would provide a richer understanding of the dyad relationship.

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# UNDERPRICING THE PRIVATIZED STATE-OWNED EGYPTIAN ENTERPRISES: WAS IT MISLEADING?

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## ABSTRACT

*According to the poor performance of the State-owned Privatized Egyptian enterprises. And, as many studies proved the negative influence of underpricing these initial public offerings on the Enterprises value. This study therefore, examined the relationship between Underpricing and the informational content of the Initial Public Offerings enterprise's statements. We conducted this study on 53 State-owned Egyptian Enterprises Privatized during the period (1994/2010) and, collected All Data needed from Published Statements. By using Correlation and Multiple Regression, we found: (1) the key determinants interpreting Initial returns were: Volatility, Proceeds, Offer Ratio, and Timing. (2) The Egyptian Government attracted and compensated investors to participate by Underpricing to cover the whole offer. (3) Signaling, Winner Curse Explanation, and Timing participate at interpreting Initial returns respectively.*

**JEL:** G020, G120, G240, G320

**KEY WORDS:** IPO stock price, Underpricing, Information Asymmetry, Winner curse, Timing, Signaling, Offer Ratio, Privatization, IPO's Poor Performance

## INTRODUCTION

By 1990, The State-Owned Egyptian Enterprises portfolio consisted of 260 enterprises making profits and 56 enterprises making losses. It is worth mentioning that this portfolio financed from the government budget. Despite achieving LE 1.2 Billion as a superficial profit, the accumulated losses were LE 47 Billion (PSCU, 2002). So, this poor performance of The Egyptian public enterprises prompted the Government to improve it by carrying out the Privatization program at the early of 1991. However, not only had the program made a slow progress, but it also couldn't get the consent of the public opinion. Then, many voices rose and referred the program failure to the reduced prices these enterprises have sold by. So, this created a long and serious controversy over the effectiveness of this program. This argument was that we used to draw our main research question: Does the Initial Public Offering stock price reflect the informational content of the Initial Public Offerings enterprises's financial statements? To answer this question, this study mainly focuses on the initial public offerings or IPOs as an effective tool for privatization. Any entity wants to issue its capital or part of it; firstly it must value its performance to reveal it to the potential investors in the market.

Many studies showed the issuing firms underpriced their stocks before issuing. So, at the first day of trading on their stocks, they have found achieving high initial returns. These high initial returns began to decline as time passed and finally, causing sharp declines in performance at the long run (Ritter, 1998, Matecon, Poon, 2009). Regarding to the privatized state-owned enterprises, it have found to achieve high initial returns too ( Perotti, Oijen, , Tinbergen Ins 1999, Al-Gezeri, 2001). Many studies showed several explanations interpreting these initial returns. For example; (Rock, 1986) interpreted the underpricing and initial returns as remuneration for the ex-anti uncertainty of the issuing firm. Benvensite, Wilhelm (1997) backed them to the desire of the issuing firm or

the desire of the underwriter for compensating the informed investors who revealed their information. Reuter (2004) interpreted the underpricing using the agency concept. He found the issuing firm had to underprice its stock when selling it to the underwriter considering it as a proxy of the cost of this relation regarding to the agency problem. None of these studies addressed the full explanation for why the issuing firm underprices their stock before issuing direct. The value of this study lies in two main contributions. The first is interpreting the short run phenomenon which has a bad impact at the long run in the Egyptian context. In other word; why the issuing enterprise underprices its issue resulting in high initial returns which declines after a while and causing the poor performance at the long run. And the second is examining the actual reason lies behind the ineffectiveness of the Egyptian privatization program. We put four goals to answer the main research question. First, measuring the initial returns as a proxy for underpricing for the state-owned enterprises privatized by issuing IPOs. Second, determining the key factors which may interpret the initial returns. Third, testing the relationship between the initial returns measured in the first goal and the key factors explored in the second goal. Fourth, exploring practices that took place in the Egyptian market and the extent of its agreement with the theory of finance.

We find that: (1) the initial returns of the privatized companies is .036%. (2) The key determinants interpreting Initial returns were: Volatility, Proceeds, Offer Ratio, and Timing. (3) The Egyptian Government attracted and compensated investors to participate by Underpricing to cover the whole offer. (4) Signaling, Winner Curse Explanation, and Timing participate at interpreting Initial returns respectively. The remainder of the paper is organized as follows. The next section discusses the relevant literature to the theories interpreting the underpricing phenomenon. Next in the third section we discuss the data and methodology used in this study. The fourth section next we discuss the results .Ending our paper with our conclusion.

## LITERATURE REVIEW

There were many theoretical explanations interpreting the underpricing phenomenon. Ljungqvist (2006) divided them into two main approaches; one imposes information asymmetry as a condition. And the other approach does not need that. The first approach addressed the information asymmetry between the main participants in the issuing process, in other word the issuing firm, the investors, and the underwriter. Rock (1986) introduced the Winner curse Explanation and argued the issuing firm underpricing to compensate the two types of investors; the informed investors and non-informed investors. It underpriced to compensate the informed investors to make them stop doing efforts and producing information about the value of the issue. It compensated the non-informed investors by underpricing because of their lack of information about the value of the issue. From another perspective, (Benvensite, Wilhelm, 1997) interpreted the underpricing as a compensation for the informed investors who revealed their private information about the potential demand of the issue. Consequently the issuer could make changes in the price range according to this information in the preliminary prospectus as the Information Revelation Explanation. Reuter (2004) interpreted the underpricing using the agency concept.

He found the informed participant here was the underwriter so, the issuing firm had to underprice its stock when selling it to the underwriter considering it as a proxy for the cost of this relation regarding to the agency problem. Another explanation introduced by (Welch, 1989) argued the issuing firm was the informed participant. So, it did know its performance well and underpriced its issue to give the market positive signs about its solid performance. So, he linked between the level of underpricing and the existence of succeeding secondary offerings. He found them related positively. The other theoretical explanations do not impose existence of information asymmetry as a condition. Ljungqvist (2006) pointed out to the Tonic's explanation (1988). He argued that

investment banks became after passing a banking law at 1933 more cautious in case of accepting the underwriting of small offering, they seemed avoiding any Legal accountability in case the offering became overpriced. Another explanation provided by (Ruud, 1993) who found the initial return consisted of two parts. One represented the real initial return and the second was resulting from the price supporting activity. The underwriters tended to support the price when falling under the issuing price.

All theoretical explanations discussed above imposed that all participants in the issuing process are rationale. So, (Welch, 1992) introduced the cascades explanation. The issuing firm or the underwriter underpriced the offering more for the earliest investors who participated and subscribed first to affect with their optimistic opinion about the issue on the next investors. Then the later investors affected in their turn with their opinion on investors next to them. Loughran and Ritter (2002, 2004) pointed out to the prospect theory as it can predict the increases in the level of underpricing for the next periods. This explanation tried to interpret changes in the level of underpricing as time passes. So, (Loughran, Ritter, 2004) showed the higher the market returns raise, the higher the initial returns achieved for a period ranging between one to two months after issuing. The investor sentiment was introduced by (Ljungqvist, Nanda, signs, 2006) as another behavioral explanation for underpricing in which the issuer exploited investors optimism about the future of the issuing company performance and picked up their demand which driven under the demand curve and thus set a high price for the issue.

According to that a large number of investors buying in large quantities until the price had risen and thereafter, they sold their shares. It is noted from the previous discussion the essential role played by the underwriter of the IPO. But it is worth mentioning that the role of underwriter in the Egyptian market differs from his counterpart in other markets. The only role of the underwriter in the Egyptian market is being a broker who markets the offer. If the offer is not fully covered, he must turn it back to the issuer as in the case of this study. These underwriters are under control of the government and thus the interpretation of the agency problem does not exist here. Therefore, the study will focus on testing the winner curse hypothesis, the signaling hypothesis and the Timing hypothesis.

## **DATA AND METHODOLOGY**

### Hypotheses

Ritter (1998) found that most initial public offerings issued in more than 25 countries around the world as America, Canada, Brazil, Singapore, Germany underpriced. And all achieved initial returns at the first day of trading. In the context of privatization, the issues were underpriced and the level of underpricing is much higher than the other IPOs. ( Perotti, Oijen, , Tinbergen Ins, 1999 and Al-Gezeri, 2001). So, we can draw the first hypothesis:

H<sub>A</sub>: there is a significant differentiation between the mean of initial returns of Egyptian State-owned privatized Enterprises and the mean of Market returns. Loughran and Ritter (2004) proved the positive relationship between Returns on Equity before issuing and initial returns, while (Barber, Lyon, 1997) used returns on Assets to capture the operating performance avoiding any effect from the capital structure decisions. Su (2004) also, found a negative relationship between the initial returns and the degree of leverage, but he did not interpret it as a signal of a solid performance of the issuing firm. On the contrary, he interpreted this negative relation as a signal of the poor performance of the issuer.

To capture the operating efficiency of the issuing firm and as once the firm issue completed successfully it will be a market oriented after issuing, so we can measure its operating efficiency through examining the relationship between its size as a proxy to the operating efficiency.

Despite the consensus of most studies on the negative relationship between the issuer size and the initial returns, (Al-Gezeri, 2001) argued that size cannot interpret the initial returns in the context of privatization. Jovanic, Rousseau (2003) examined the purpose of issuing and found that if the purpose from issuing was to raise a new capital, the Tobin Q ratio then, can interpret the issuing behavior especially the secondary issue.

Adding to these potential proxies the book value of equity to the market value of equity ratio, as (George, Huang, 2009) proved that despite the lower degree of leverage and the lower potential of financial distress, the book value of equity to the market value of equity ratio remained keeping its significance in interpreting the initial returns. And they argued this ratio can capture the risks of exposure about existing financial distress rather than risks of the financial distress itself. As for the age of issuer, despite agreeing most studies the older the issuer was, the lower the ex-ante uncertainty was (Lewellen, 2006.); age cannot interpret the initial returns of the state-owned privatized enterprises (Al-Gezeri, 2001). Type of industry also could interpret the initial returns as if the industry was new, the issuer expected to underprice more to remunerate the potential investors the inability of gathering information about the industry (Sherman, Titman, 2002). Adding to all proxies mentioned above what (Lie, Masulis, 2007) founded. They found investors have different beliefs about paying out dividends which affect the returns to become a high volatile. So, we can expect a positive relationship between volatility and initial returns as (Kumar, 2010) founding's. Despite all factors discussed above were used as proxies for the ex-ante uncertainty, none of these studies introduce a full explanation for underpricing. This prompted others to think about the ex-post uncertainty as (Falconieri, Murphy, Weaver, 2009) and found a significance relation. So, we can draw the second hypothesis:

H<sub>B</sub>: Basic IPO Enterprises's Characteristics have a significant impact on Initial Return of the Egyptian

Sate-owned privatized Enterprises

H<sub>B1</sub>: Profitability has a significant impact on Initial Returns.

H<sub>B2</sub>: Solvency has a significant impact on Initial Returns.

H<sub>B3</sub>: Operating efficiency has a significant impact on Initial Returns.

H<sub>B4</sub>: TQ has a significant impact on Initial Returns.

H<sub>B5</sub>: BM: EM has a significant impact on Initial Returns.

H<sub>B6</sub>: Industry Classification has a significant impact on Initial Returns.

H<sub>B7</sub>: Volatility has a significant impact on Initial Returns.

H<sub>B8</sub>: Age has a significant impact on Initial Returns.

Beatty and Ritter (1986) found the positive relationship between the inverse of proceeds and the initial returns. And (Kumar, 2010) interpret that as the higher the issue size, the higher the analysts following it, the lesser the guessing side of the returns manipulation, the higher possibility of issuing a secondary offerings. Chemmanur (1993) pointed out to the issuer as the most informed participant in the issuing process, so, it tended to underprice as a positive signal of its solid performance. Perotti and Oijen (1999) , Al-Gezeri (2001) and found the higher the Offering ratio was, the higher the solid performance of the issuing firm. And this had its reflection on the government desire to expand the ownership. Kenourgous, Papathasiou, Rafail (2007) used the coverage ratio as a proxy which reflected the investors perception about the offering was underpriced. So, we can draw the third hypothesis:

H<sub>C</sub>: Basic IPO Offering's Characteristics have a significant impact on the initial returns of the Egyptian Sate-owned privatized companies.

H<sub>C1</sub>: The size of the offering has a significant impact on Initial Returns.

H<sub>C2</sub>: The offer Ratio has a significant impact on Initial Returns.

H<sub>C3</sub>: The existence of secondary offering has a significant impact on initial returns.

The issuer may exploit the times the market is flourishing to issue his offering. In other words there were times the investors were optimistic about the future returns in the market. As this optimism increases, the price of the issue became away from the fair price and rose. Then the issuer carried out the issuing. And it can be inferred through the accumulated returns achieved by the market during month before the issuance. (Loughran, Ritter, 2004). So, we can draw the third hypothesis:

H<sub>D</sub>: Timing has a significant impact on Initial Return of the Egyptian State-owned privatized companies.

The dependent variable of this study is the initial return was computed for 60 trading days beginning from the first day of trading as all previous studies did as follows:

Initial Return

$$IR_{i,t} = \frac{\{ P_{i,t} - P_{i,t-1} \}}{P_{i,t-1}} \quad (1)$$

Where;

$P_{i,t}$  = the closing price for the firm I, at date t

$P_{i,t-1}$  = the offer price at first then, Using the closing price of the firm I, at date t-1

The Accumulated Initial Return

$$Acc. IR_{i,t} = \frac{\{ P_{i,t} - P_{i,0} \}}{P_{i,0}} \quad (2)$$

Where;

$P_{i,t}$  = the closing price for the firm I, at date t

$P_{i,0}$  = the offer price

The Adjusted Initial Return with Change in Market Index computed firstly, by using the Egyptian financial supervising authority Index we computed Percentage of Change in the Capital Market Index by:

$$IR_{CMI} = \frac{\{ I_{i,t} - I_{i,t-1} \}}{I_{i,t-1}}$$

Where;

$IR_{CMI}$  = Percentage of Change in the Capital Market Index

$I_{i,t}$  = The Capital Market Index at date t

$I_{i,t-1}$  = The Capital Market Index at date t-1

Second, we computed the adjusted initial Return with change in Market Index by:

$$Adj. IR_{CMI} = IR_{i,t} - IR_{CMI} \quad (3)$$

The Adjusted Initial Return with Change in Sector Index First, by using The Egyptian financial supervising authority Sector Index we computed Percentage of Change in the Industry Sector Index by:

$$IR_{ISI} = \frac{\{I_{i,t} - I_{i,t-1}\}}{I_{i,t-1}}$$

Where;

$IR_{ISI}$  = Percentage of Change in the Industry Sector Index

$I_{i,t}$  = The Industry Sector Index at date t

$I_{i,t-1}$  = The Industry Sector Index at date t-1

Second, we computed the adjusted initial Return with change in Sector Index by:

$$Adj. IR_{ISI} = IR_{i,t} - IR_{ISI} \quad (4)$$

The study has 3 independent variables; Basic IPO Enterprises's Characteristics, Basic IPO Offering's Characteristics, Timing. We measured the basic IPO enterprises's characteristics by using the following:

Profitability:

ROE= Return on Equity= % (Net Profit ÷ Book Value of Equity)

ROA= Return on Assets= % (operating profits ÷ Book Value of Equity)

Sales= Annual Sales= Natural Logarithm for net sales

Net Income= Natural Logarithm for net income

Operating Income = Natural Logarithm for operating income

Solvency: Liquidation Ratio = (Current Assets ÷ Current Liabilities)

Degree of Financial Leverage=

$DOL_1 = (\text{Book value of debt before issuing} \div \text{Book Value of Equity})$

$DOL_2 = (\text{Book Value of debt before issuing} \div \text{Net Assets}); \text{Net Assets} = (\text{Total Assets} - (\text{Accounts Payable} + \text{any other current liabilities}))$

$DOL_3 = \left( \frac{\{\text{Book value of debt}\}}{\{\text{Book value of debt} + \text{Market value of Equity}\}} \right)$

Market Value of Equity= total number of common shares × the annual closing price

Operating Efficiency: Assets Turn over=

$AT_1 = \%[\text{operating Sales} \div (\text{Book value of equity} + \text{Long term Debt})]$

$AT_2 = \%[\text{operating Sales} \div (\text{Market value of equity} + \text{Long term Debt})]$

Total Assets = Natural Logarithm of Book value of total assets

= Market Capitalization for assets= (number of issued stocks × annual closing price)

Tobin Q=  $TQ = [\text{Market value of Equity} \div \text{substitution cost of Equity}]$ ; Where substitution cost of Equity is the Book value of Equity.

Book Value of Equity: Market Value of Equity [BE: ME] =

$$\frac{\text{Total Assets} - (\text{Total liabilities} + \text{Deferred Taxes})}{\text{Total number of common stocks} \times \text{the annual closing price}}$$

Age: the natural logarithm for the difference between issuing data and the birth date for the issuer

Industry Classification: we talked in to account the industry classification by computing the adjusted initial return with Change in the Sector Index. Volatility : as a proxy of the ex-ante uncertainty and computed as the standard deviation for the initial returns for 30 trading days after beginning the trading on the stock Liquidity: Stock turn over as a proxy for the ex-post uncertainty =

$$\frac{\text{the value (number) of the traded stocks for a specific firm at time } t}{\text{Total Value (Number) of the same spicific firm at time } t}$$

The second independent variable: Basic IPO Offering's Characteristics:

Proceeds: Natural Logarithm for the proceeds of the offerings (kimaz, 2000, Khalid, Nasr, 2007), The inverse of the proceeds (Beatty and Ritter, 1986)

$$\text{Offering Ratio} = \frac{\text{the value (number) of the issued stocks for a specific firm at time } t}{\text{Total Value (Number) of the stocks for same spicific firm at time } t}$$

Dummy Variable for existing of any secondary offerings: talked value of (0) if the firm did not issue any secondary offerings, and value of (1) if the firm issued a secondary offering The third independent variable: Timing: The standard deviation for the market return for 30 trading days before the issuing direct began with the day thirty and ended with the day before issuing. We used the Capital Market Index of The Egyptian financial supervising authority. This study conducted on the Egyptian state-owned enterprises privatized between (1994-2010). Issuing a public offering was the basic condition for any state-owned enterprise to be considered in the community of this study. Despite the total numbers of the state-owned enterprises issued public offerings was 64 enterprises, we used 53 state-owned enterprises due to the availability of data needed to Make the necessary statistical analyzes. All data needed was a secondary data in published statements for each enterprise and in its prospectus which we obtained from the Egyptian Stock Exchange and from the Egyptian financial supervising authority. To test the hypotheses drawn above and perform the statistical analysis such as Pearson correlation analysis and Stepwise Multiple regression, we used the statistical software SPSS 18.0.

## RESULTS AND DISCUSSION

Results of testing the first hypothesis showed there was a significant differentiation between the mean of initial returns of Egyptian Sate-owned privatized Enterprises and the mean of Market returns at (0.05) significance level. The initial returns mean were (0.036%) and this consisted with the previous studies conducted in the privatization context. When testing the second hypothesis we found Volatility contributed mainly in interpreting the initial return. The enterprise size, turnover rates and degree of financial leverage registered serious consequences which may predict with an existence of a serious internal problem in the enterprise. But this effect disappeared after controlling for the industry sector effect. This result pointed out to a conclusion there are certain sectors affect the overall performance of the market. We cannot consider the enterprise age a measurement interpreting the initial return.

We also found sales, return on equity and return on assets contributed to the interpretation of the initial return. This result suggests doing a future research examining the existence of any earning management in these enterprises. We may say that the winner curse explanation could be considered appropriate in interpreting the initial return. For the third hypothesis, we found

that no relation between conducting secondary offerings and the initial return. But we can consider the proceeding is the second key determinant after Volatility interpreting the initial return and thus the underpricing phenomenon. As the higher the proceeding was, the higher the risks were of being the government not able to cover the whole issue. So, many marketing efforts will be required. We can conclude from the low offering ratio and its significant relation with the initial return the government carried out the privatization program gradually. Last, we found a significant and a positive relationship between timing variable and the accumulated initial return only. All results are significant at level of (0.05%) or less.

## CONCLUSION

This study aimed to address the real reasons behind the poor performance of Privatized state-owned enterprises in the Egyptian market. Our foundation was (1) the initial returns of the privatized companies is .036%. (2) The key determinants interpreting Initial returns were: Volatility, Proceeds, Offer Ratio, and Timing. (3) The Egyptian Government attracted and compensated investors to participate by Underpricing to cover the whole offer and to reduce the uncertainty of these offerings because of their ex-ante poor performance in other word before issuing. (4) Signaling, Winner Curse Explanation, and Timing participate at interpreting Initial returns respectively.

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# THE GAME-CHANGERS: EXPLORING RADICALLY TRANSFORMATIONAL CHALLENGES CONFRONTING EDUCATION BUSINESS LEADERSHIP

Karen Starr, Victoria Teachers Mutual Bank

## ABSTRACT

*This paper highlights the radical and rapid changes occurring at all levels of education that are having a profound impact on educational leadership, governance, business and administration. These far-reaching transformations include: competition from a rapidly expanding unregulated private sector; the international impact of de-regulation; the demise of union power, secure education jobs, time-honored hours and working conditions; constant, rapid education policy change and the proliferation of open access technologies which are rendering physical education campuses less relevant or obsolete. The paper suggests that at this stage in history we are witnessing game-changing forces that are fundamentally altering educational provision, the nature of education work, the education workforce, educational outcomes, educational leadership, governance and business. Most importantly, it argues that educational leaders and education business managers need to be ready for them and more instrumental in policy debates arising in their wake. The paper concludes with ideas for responsive action from education business leaders.*

**JEL:** H830; I210; O33

**KEYWORDS:** Education Game-Changers; Education Business; Educational Change

## INTRODUCTION

Worldwide, education is BIG BUSINESS. From kindergarten to higher education, from basic training to the most sophisticated professional learning, from knowledge transfer to knowledge creation – no matter what form it takes, where it is conducted or at what level – education globally is a multi-trillion dollar industry (Everett, Johnson and Madden, 2007). Education employs millions of people and entails countless assets to supply the world's insatiable appetite for learning consumption and production. With formal education requirements expanding to subsume much of our individual lives and knowledge being in constant need of updating, education is now an ongoing, lifelong pursuit. The overwhelming scale of demand for education across the globe is staggering, heightening the impetus for significant transformation at a time when universal primary education for all the world's children has still not been achieved (Brown, 2011). There will never be a time when education ceases to be an expanding and integral component of life and work (Starr, 2012).

Right now, however, educational institutions are experiencing enormous flux and change, the likes of which have never been so wide reaching and disruptive. Powerful and pervasive impetuses for change are significantly altering the status quo, prevailing customs, current thinking, long-held traditions and assumptions, and the way societies work and do things. Concomitantly we are witnessing education policy and practice transformations that may be colloquially referred to as 'game changers' or 'rule breakers'. For the purposes of this paper a 'game-changer' is defined as: "an event, idea, or procedure that effects a significant shift in the

current way of doing or thinking about something” (Oxford Dictionary). Education is a globalized activity, and the impact of globalization provides a rationale for the game-changers and their rapid emergence. Globalization has intensified international economic competition spurring governments to increase national growth, productivity, efficiency and knowledge yield via a well-educated, innovative workforce and citizenry. Education is seen to play a major role in enhancing the nation’s competitiveness and productivity in a global marketplace (e.g. Productivity Commission, 2013). As a result, education policies throughout the developed world have increasingly subsumed economic imperatives. As a result of globalization, governments of all persuasions have instigated structural reforms to align national education agendas with the demands of intensified international competition. Education policy is, therefore, consistent with the needs, values and underlying philosophy of market economics and neo-liberal political agendas that valorize a clear set of premises and values: sovereign individualism, competition, consumer choice, institutional differentiation, innovation/entrepreneurialism, cost efficiency, user-pays principles, small government and institutional autonomy. In this context, governments (state and federal) and education “consumers” (parents and students) require greater transparency and more information to aid choice and accountability in autonomous, locally managed institutional arrangements, hence the introduction of comparative education websites (e.g. Australia’s My School website that broadcasts the statistics and test results of every school in the nation). After the catastrophic and ongoing effects of the global financial crisis (GFC) in 2008, education has been even more clearly in the sights of governments as a major vehicle for economic reform, national productivity and growth.

A reinvigorated and fortified *laissez-faire* free market economic and neo-liberal policy hegemony is rapidly changing the operations and behaviors of educational programs and institutions. Education’s role in national economic fortunes has assumed primacy over its individual, civic or social benefits (Reid, Gill & Sears, 2010; Smyth & Shacklock, 2004). Education is a contested and highly political realm of social life. Reforms are “deeply political”, and raise questions about the fundamental purposes of education (Woods, 2008, p. 80). Globalization has had a profound effect, forcing education institutions to rethink their operations and behaviours as the world becomes smarter, faster and smaller (Bush, 2008). In the face of globalization, education is as fallible and vulnerable, yet as propitiously and opportunely placed to benefit as any other essential human enterprise. Through the forces of globalization, education everywhere confronts new challenges and uncertainties (Held & McGrew, 2004), although there are opportunities: decisions about what to do, how and when rest with educational leaders. In order to achieve positive outcomes, there are ‘wicked’ determinations to be made at the local level (Kets de Vries, 2001).

## LITERATURE REVIEW

A general literature search will attest to the assertion that ‘the business of education’ yields very little – mostly texts about Business Education. A literature review revealed research that relates to aspects of the current study, but none that traverses the same territory in its entirety. Researchers covering complementary terrain include Bonk (2009) whose book *The World is Open: How Web Technology is Revolutionizing Education* discusses developments in e-learning and e-demand. This phenomena raises questions as to how much, if any, physical infrastructure in the way of campuses and buildings, and features such as rigid timetables and on-site teaching staff may be necessary for education to occur. In similar vein, Kamenetz (2010) suggests that e-learning and e-demand are producing the DIY U (do-it-yourself university), with ‘edupunks’ and ‘edupreneurs’ creating coming shifts in higher education. Kamenetz’s research raises issues concerning educational access and costs associated with traditional universities while focusing on inevitable transformations created through interactive technologies while providing advice about DIY education.

Knight (2008) extends this theme by exposing the rapid changes that are occurring as universities embrace internationalization and its attendant accouterments such as commercialization, international institutional competition and quality assurance. Globalizing tendencies are changing educational leadership, business and governance irrevocably, with universities traversing uncharted territory as they respond to rampant change. Rothstein, Heywood, Adams & Scott's (2009) research focuses on the schooling sector and challenges current strictures around teachers' employment, including remuneration, employment conditions, vacations, health and retirement plans, as well as teaching mores, dominant education cultures and the practices of teacher unions (see also Maslen, 2113). This book discusses increasing needs for educational performance accountability and its implications, including methods of evaluating teacher performance and payment by results. Likewise, Meister & Willyerd's (2010) research on future work and impending workforce needs canvass emerging employment/employee trends and the challenges they present for employers. Like Rothstein et al (2009), the authors argue for drastic employment changes, including increasing mobility, 24/7 global accessibility, flexible hours, work location, contractual arrangements, and shifts in expectations around entitlements, promotion and retirement age. Darling-Hammond (2010) raises the issue of closely the achievement gaps between various classes and segments of American society, finding that current policies and practices for educational equity in USA – including incessant testing regimes - are failing and creating further problems. She posits why this is the case and proposes strategies for educational reform based on improvements achieved elsewhere in the world.

While not solely focused on education, there is much research from the fields of economics and finance describing their social influences that are also of relevant to this study. For example: Shiller (2012) describes how finance can be used to create social good. He focuses on re-defining and re-thinking finance and its role for a good society and interrogates the meaning of social stewardship for positive social outcomes. Chomsky (1999) analyzes current policies underpinned by neoliberalism and economic rationalism, the interests they serve and their social and ecological consequences. Chomsky suggests that transformation towards equality will require organized social and political activism. To achieve similar ends, Sukhdev (2012) proposes new business models to redress 'market-centricity' and problems associated with social inequalities, environmental degradation and political interference in corporate life.

Watson & Freemand (2012) study the trends, opportunities and challenges presented by relentless, rapid major change. They ponder possible future scenarios and potential problems while suggesting social actors must actively shape the future to overcome looking problems and to generate constructive, positive change. Winter (2012) writing on the same theme argues that organizations must be nimble – adaptive, innovative and high-performing to survive in a volatile, unpredictable global business environment and provides a 'blueprint' for coping with fast, frequent change to achieve business agility. Currently, the "business of education" is not a common research area. However, as education both recognizes and seeks to confront unprecedented business challenges, there is a rapidly growing recognition of its importance by governments, education systems and policy makers, educational boards and councils, students and parents and the media.

## **DATA AND METHODOLOGY**

This research involved interview and focus group data gathered from 2010 to 2013. Face-to-face, semi-structured interviews and focus groups were conducted with 199 participants, digitally recorded and transcribed. This study originally occurred in Australia but was broadened to include information from the United Kingdom, the United States, Canada, South Africa and New Zealand, through participation in international conferences for education business managers, and

through the Association of School Business Officials' International Aspects Committee. The research is an exercise in grounded theory building (Glaser and Strauss, 1967), which supports examination of individual standpoints within complex contexts. Grounded theory research considers the inextricability of the macro- (international and national), meso- (state and district) and micro- (institutional) connections and their effects on the experiences of individuals and groups. Real life experience is the starting point, connecting individuals with broader structural arrangements, such as global economics, government policies, national social issues and historical events. In other words, large-scale social structures affect tangible realities that are inseparable from contextualized practice or history (Ball, 1994). In this case, for example, micro-level experience is where the business effects of macro and meso actions, innovations and decisions are sensed and site-based responses instigated, with institutional experience being influenced by local, systemic, national or global decisions and events. In grounded theory building, theory is generated from the data gathered through an inductive process - a process whereby emerging research insights are analyzed and continually tested, producing further evidence and/or new theoretical insights (Corbin and Strauss, 2008). Data were categorized and analyzed, with similarities and differences enabling the construction of propositions. As themes emerged 'loudly and clearly' through the data, a theory or picture of the actual situation could be produced. Thus a recursive relationship between data collection, analysis, and theory occurs until the data are 'saturated' - that is when similar instances appear and re-appear over and over again (Glaser and Strauss, 1967). Hence the iterative processes of developing claims and interpretations within a grounded theory approach is responsive to research situations and the multiple levels of meaning produced by the people in them (Gray, 2009). Finally, emerging theories were compared with extant literature from across the world.

## RESULTS AND DISCUSSION

The most often-cited game-changing challenges raised by interviewees are described below under thematic headings and include the implications for educators and educational institutions. As will be demonstrated, these game-changers are inextricably inter-linked and mutually influential and often comprise paradoxical, inconsistent and contradictory tendencies. They are altering or will alter education such that it will never be the same again, providing much grist for important decision making in educational leadership, business and governance. The major themes include the impact of increasing de-regulation in education, constant rapid policy change and disruptive technologies.

### De-Regulation and Default Autonomy

Increasingly governments are devolving authority and responsibility to the education site level. Greater de-regulation and policies of 'default autonomy' refer decision-making, risk management, accountability and liability to site leaders and governors. Proponents of expanding 'devolution' include those claiming such policies aid educational improvement, increasing student learning attainment and raising standards (e.g. OECD, 2010). Opponents are cynical about 'default autonomy' occurring simultaneously with downwards pressures on budgets and upwards pressures on standards after governments themselves have failed on both counts - in other words, 'pushing problems down the line' (e.g. Marginson, 2010).

Fewer government impediments to operations, however, come at the price of increasing interventions in the form of new accountabilities, regulatory compliance and mandatory audit reporting. Governments promoting autonomous educational institutions, "steer at a distance" (Kickert, 1995), mandating policy agendas and quality assurance mechanisms, devolving all operational activities to individual sites and averting risk through intensive regulatory, compliance, audit and accountability schemes. Therefore, while bureaucracies may be smaller,

government interventions in education are increasing. The current education funding focus is on outputs rather than inputs; public-private partnerships and sponsorship; a ‘hand up’ rather than a ‘hand out’. Public investment in education is squeezed with constant Treasury pressures to reduce education spending, while value-for-money (VPM) and return-on-investment are highlighted. Previously dominant social democratic agendas have been marginalized, including overt equity and social justice policies in education (although lip service is paid to them).

A corollary impact of de-regulation is the arrival of new players in the education market - a burgeoning ‘for-profit’ sector with an escalating market share and a new labor supply of non-qualified or semi-skilled and casually-employed staff. Some governments are contemplating increasing this movement by appointing non-educators to be educational CEOs, replacing school principals and academics in top education leadership posts (e.g. Preiss, 2013). The rise of nimble, flexible, low cost, low bureaucracy, ‘for profit’ education providers in a deregulated market with online or low rent changeable premises, movable product & incentivized enrollments are challenging traditional educational institutions which are highly regulated, expensive to operate, with extensive premises and infrastructure; tenured, unionized staff; rigid operational hours and standard program offerings. In the United States alone, this growing sector represents 8% of all post-secondary enrolments as online education services burgeon (The Economist, 2010a). Unregulated education markets such as the private tutoring industry, charging fees from \$25 to \$100 per hour, are flourishing (Australian Broadcasting Corporation, 2011). Sponsors clamor for naming rights and corporate social responsibility recognition, seeking reputational benefits and future custom. There are public-private partnerships, cross-level education provisioning and multi-service hub developments, which are changing the way education is delivered and operationalized.

De-regulatory activities have also fuelled the internationalization of education, including the enrolment of full-fee paying international students and a concomitant movement of students and teachers across the globe. Education has thereby become a tradable commodity as international student markets become critical to nations’ gross domestic product. International education testing regimes and league tables for schooling and higher education (a huge education industry in itself), provide measurable and comparable outputs as a barometer of educational effectiveness. This exercise also assists potential international students in making choices about where to study, which is significant in countries such as Australia where education is the nation’s third largest export earner, and for the state of Victoria, the largest income earner.

#### Constant Rapid Policy Turnaround

Incoming governments focusing on short-term political agendas change the education policies of their predecessors, often appealing to populist concerns through negative political and media commentary. A general distrust of educators is perpetrated with criticisms generally concerning ‘provider capture’, inadequate standards, the need for “back-to-basics” programs or poor returns on education investments. These disparagements serve to legitimate educational policy reforms amongst education ‘consumers’ whose expectations are constantly growing. Politically appointed bureaucrats ensure education policy aims and their implementation are pursued (a major change since the days of permanent bureaucratic appointments serving the government of the day irrespective of its political persuasion). Government funded ‘think tanks’ and independent consultants assist the pursuit of goal achievement, policy legitimation and cost savings, amidst a distrust of educational research emanating from independent university researchers. A consequence is that education policy changes constantly which makes full implementation impossible and policy effects inestimable while ensuring that educational institutions are constantly responding to externally imposed change.

With rapid technological innovation and stakeholders at every level and angle, emerging educational responses are often un-tested and disruptive to conventional practices and assumptions within educational leadership, business and governance. The longevity of formal policies, business models and governance cycles has never been shorter and the work of educational leaders, education business managers and governing councilors has never been more uncertain, experimental and equivocal. Fluidity and constant major change is the new norm making leadership and governance challenging, demanding and inherently riskier. Most frustrating for educators are policies that “come and go”, wasting enormous amounts of energy and taking time and focus away from teaching and learning. Further criticisms arise when policy mandates paradoxically contradict each other and produce unintended consequences. For example, interviewees spoke about cost-cutting policies (“efficiency dividends”) such as re-engineered education workplaces, replacing people with DIY technology with the result that efforts to raise productivity are frustrated. The use of technology in rapid policy upheaval provides a segue into the final major game-changer – that of disruptive technologies.

### Disruptive Technologies

This game-changer represents the largest challenge and concern for the educational leaders interviewed. Research respondents were concerned about a general inability in education to quickly adopt and adapt quickly enough to emerging disruptive technologies. Costs, capacity and the adaptability of staff are hindrances to the current ‘Old World’ (industrial thinking), which is increasingly outmoded and outdated, being replaced with New World, digital thinking and networked behaviors. Education can’t keep up with constant change and innovation and is seen to be still deep-rooted in the industrial factory age, with government policies reinforcing this business model. Research commentators referred to the difficulty of promoting creativity, problem-solving, critical thinking and teamwork in schools – New World skills – while politicians are calling for ‘back-to-basics’ reforms and reinvigorated standardized testing regimes that narrowly focus the curriculum on Mathematics, Reading and Science.

Unwittingly an insatiable appetite for testing and comparative world rankings is creating a ‘core-and options’ curriculum, with the three test areas being ‘core’ and all other learning areas ‘optional’. This reversion to the 1960s elides arguments and constrains educational aims. These aims include providing a broad and balanced education in all areas of knowledge during the compulsory years of schooling, leaving specialization until senior secondary and tertiary years; meeting the learning needs to diverse talents and interests; and developing students’ capacity to apply knowledge to real world problems through interdisciplinary learning applications. The proliferation of technologies enabling education to occur anytime, anywhere, on any device make physical attendance in classrooms and lecture theaters unnecessary, although educators concede that on-site attendance is beneficial, especially for the compulsory schooling years. One professor said:

A new lecture theater has been built right next to the building where my office is located. It’s beautiful – a magnificent piece of architecture and the technological equipment is amazing. It’s a joy to be in and work in. BUT, last week was the first week of Semester. Of the 123 students in my course, only 32 turned up... Why would they turn up when the lecture is recorded and can be downloaded at any time? And it’s down hill from here because attendance goes down as the semester progresses. Why are we are still building lecture theaters and wasting millions of dollars? Our students are in a different era...Kurzweil’s (2005) prophecy about ‘singularity’ whereby technology and biology merge to augment our physical lives, senses and experiences, is almost complete. We carry or wear digital devices that have transformed the world in every way, providing constant access to reality and virtual reality. Technologies such as Google Glass, the hands-free multi-function internet device worn like eyeglasses enables simultaneous reality and

virtual reality experience, challenging the usefulness or necessity of traditional textbooks and the didactic rote learning of facts. At the time of writing the release of this amazing development is imminent, with global demands expected to rival the advent of smart phones and i-pads. Take-up will no doubt be speedy as Google Glass becomes the next ‘must-have’ device. Social media enables anyone with a web 2.0 enabled device to create, share and comment on content from anyone anywhere else. Interviewees referred to Tumblr, Gowalla, Foursquare, Posterous, Quantcast, Friendster, Fromspring, Quora.com, Hunch.com, Facebook and Twitter which are consuming increasing amounts of students’ time while creating anxiety for many educators who feel overwhelmed and out-of-date.

Educators were aware of emerging technologies that will be commonplace in no time. The advent of 3D printing challenges traditional manufacturing, providing the means by which a massive range of physical objects can be created onsite, tailored and individualized, as needed by anyone, anywhere. The specter of 4D printing that enables material objects to change their properties like chameleons to suit varying conditions (for example, glass could become opaque or transparent, clothing could become cooler or warmer as required) will have even more impact. The first generation of quantum computers are appearing - computers based on quantum mechanics that have such enormous capacity, are so fast and powerful, they will challenge human intelligence as they solve problems in seconds that would require eons through conventional computers. The developers of this D-Wave technology admit themselves that it is difficult to imagine how quantum computers or ‘genius machines’ will be used or their effects, but there is no doubt they will and the impacts will be astonishing and inconceivable in terms of current understandings about the world. The Kahn Academy offers free self-paced online courses, materials, resources and assessment tools in a wide range of subjects at varying education levels and offers ‘badges’ for achievement. Massive Online Open Courses (MOOCs) are open-license e-learning courses offered free of charge to anyone (without pre-requisites), anywhere in the world via the internet that have rapidly swept through the global higher education landscape. MOOCs are credited with opening up Ivy-league universities and high-profile professors to the masses (Bohle, 2013). The take-up of these self-directed courses has quickly run into the millions – faster than Twitter or Facebook (Lewin, 2013).

The business model behind MOOCs might appear perplexing because the courses on offer cost around \$50,000 to produce (with videography being the biggest cost), still require staff to monitor discussion forums, yet they are free to students. However, revenue streams can be generated through licensing, assessment fees, fees for certificates of completion, provision of recruitment data to potential employers, kick-backs from recommended text book sales, and through generating recruits into degree courses through MOOC credits. Further revenues are being canvassed through advertising or sponsorships on MOOC sites and through the development of paid introductory and remedial courses. MOOCs enable students to ‘dip in and out’ of education courses and coordinate the attainment of education credentials around their life events and activities. Friedman (2013) sums up the fears of many interviewees when he says:

*I can see a day soon where you'll create your own college degree by taking the best online courses from the best professors from around the world ... paying only the nominal fee for the certificates of completion. It will change teaching, learning and the pathway to employment. There is a new world unfolding and everyone will have to adapt.*

While universities are currently the most affected by MOOCs, there are moves for their introduction for school age children as a means of providing education in developing countries. For example, Mitra (2013) asks, “What is going to be the future of learning?” to which his answer

is free, open courses in the cloud.

These enabling technologies are democratizing, empowering networks and friendship groups and supporting people power. But there are downsides. Educators speak of increasing problems with cyber-bullying and rising litigation for technologically created problems. Many young people are living hyper-connected lives. Educators are concerned about continuous connectivity and 'always-on' tech-savvy lifestyles that are influencing students and their learning. Concerns include students becoming easily bored or impatient with traditional teaching and learning activities, needing 'quick-fixes', instant gratification and being disinclined towards deep-thinking and time-consuming lengthy learning tasks. This new generation of students is challenging the technological capabilities of many teachers, a fact highlighted by the OECD (2010).

The cost of technological provisioning which is quickly out-of-date is taking increasing percentages of education budgets. Further worries for education business leaders concern privacy and data security that are enormous new realms of risk to be managed. Finally educators are aware that these game-changers raise the question – are educational institutions necessary? For example, Michigan state is enabling students from Grades 5 – 12 to take two online subjects per semester through Michigan Virtual University. And if we decide that schools, training colleges and universities are necessary, how many are necessary?

### Implications

In the high-stakes environment of educational leadership, business management and governance, the overwhelming sense derived from the interviews was a sense of the demise of 'the way we were' amidst concerns about 'the way we are' and 'are becoming'. There is much fear and anxiety about rapid, complex change and uncertainty. At the same time, there is optimism and amazement about the possibilities inherent in these game-changing forces. It would be fair to say, however, that feelings about being pushed outside of 'comfort zones' are having corporeal effects.

Interviewees mentioned the need for educational institutions to collaborate more in order to survive. Viability is strengthened through networks, federations, amalgamations amidst a larger number of educational institutions going into receivership or closing; or the closure of less popular courses or having to implement staff redundancies. Ironically, this need arises as there is more competition between educational institutions and less co-operation as they battle for market share and as educational leaders are consumed with issues about individual sites and not about 'the system'. Simultaneously there are increasing calls for individualized student programming (while the curriculum and assessment instruments are standardized) and for specializations across education facilities. Interviewees argue that implementing 'individuation' policies is frustrated by educators having less time and focus on teaching and learning as more time and effort is spent on test ranking attainment and compliance mandates.

Educators believe that this testing emphasis is 'dumbing down' the curriculum and, ironically, causing standards to drop. Teaching is being de-professionalized in the process with respondents arguing that teachers are well aware of what students know and do not know – standardized tests produce information that is already known within educational institutions. There were concerns raised about the diminishing worth of education qualifications as the numbers of unemployed graduates grow.

Cheaper 'efficient' provisioning makes education 'mean and lean' but staff cuts and redundancies are occurring at the same time as education work is intensifying, with expectations of 24/7 availability, more unpaid out-of-hours work and reduced work-life balance. Educational institutions are becoming more flexible to cater for twenty-first century lifestyles (for example,

Free Schools in England establish operational hours and school calendars based on the needs of working parents). Teleworking is being promoted in universities as a means of relieving car parking and office space provisions and utilities costs. Ironically, devolved authority, responsibility and default autonomy at the site level is perceived to create a center – periphery power structure, relegating the position of educational leaders to that of perfunctory middle managers with little time or incentive to pursue institutionally inspired major change.

## CONCLUSION

Many ideas about responding to game-changing challenges were recorded in the research. These mostly concerned areas for contemplation and action. These ideas are summarized below under three main organizing themes for educational business leadership: discover, educate, advocate.

Discover:

- How worldwide pervasive changes are affecting and are likely to affect education.
- What the challenges will mean for education business, education business models.
- The short, medium and longer term implication of challenges for educational institutions.
- Imminent and current education policy and take a position on how policy agendas should change.

### Educate

- Work alongside educational leaders and their national professional associations to form alliances for policy change.
- Educate educators about education business and business implications.
- Overcome the education business ‘backlash’ (business is a ‘dirty’ word in education): re-brand ‘business’ as the means by which education happens and demonstrates how education business can improve education.
- Promote distributed leadership in education and demonstrate how the business side of schooling can create more time for teaching, learning and educational leadership

### Advocate

- Re-think the purposes of education: the economic/vocational vision needs to be balanced by notions about the intrinsic worth of education.
- Take a proactive stance on education policy.
- Develop alternative measures of institutional and student success and educational ‘quality’.
- Question the equity impact of education policies. Denounce assumptions about a ‘level-playing field’ that underpin testing, rankings and institutional funding.
- Promote ‘prosumption’ in its broadest sense so that educational facilities, knowledge and resources are more evenly shared and costs lowered.
- Create commercial partnerships and networks for school sustainability.
- Broadcast education’s good news and great achievements.
- Refuse to implement policy that we know to be ‘bad’ – en masse.
- Take political action, including making public pronouncements, political lobbying, press statements and media announcements – telling it as it is and what is required to fix problems (and pushing for fewer interventions, greater trust and not simply more money).
- Stick up for education, educators, students – everywhere.

The educational business leaders in this research argue most emphatically for a re-thinking of educational leadership and education business, including the need for wresting education out of political realm and the short-term agendas of politicians, to pursue education business ‘for good’.

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## **BIOGRAPHY**

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# THE INFLUENCE OF CULTURE, GENDER AND EDUCATIONAL LEVEL ON ESCALATION OF COMMITMENT: COMPARISON JAPAN AND INDONESIA

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## ABSTRACT

*This study explores the effects of national culture, educational level and gender on willingness to escalate commitment. Using samples of students in undergraduate of Japan and Indonesia, we confirmed that the influence of culture were significant in explaining escalation of commitment. Respondents from Indonesia are more likely to escalate their decision than Japanese. The other results also show that gender and educational level also influence on escalation commitment. Moreover, even the gender, based on regression, does not show the influence, however, we find significantly different. We found that female tend to take riskier decision, compared it with male after we compare the choices between male and female.*

**KEYWORDS:** Escalation of Commitment, Hofstede's Culture, Nationality, Gender, Educational Level

## INTRODUCTION

We extend the prior research by testing for the influence of culture and gender on an economical behavior for judgment, which is escalation of commitment, between accounting students. They would be the preliminary managers to make a decision for investment as well as auditors to advise for their activity. If we can find the cultural influence on how people make decision in this paper, it might give the possibility to develop good method to teach logical and ethical thinking for students. The prior research regarding with the behavior of decision makers over incremental resource to failing investments ("escalation commitment"), still limited in their generalizability. One of the reasons is why it depends on truly differentiating the national culture of decision makers. Prior studies have compared North America with Asian countries (such as Hong Kong, Singapore and Taiwan) and US and Canada (Salter & Sharp, 1996), and found that agency and framing effects were significant in explaining escalation of commitment. Curtis, Conover & Chui (2012) examines the significance of national culture on ethical decision making and finds that eastern countries consisted of Japan and China are higher than western countries, US and Mexico in power distance as suggested by Hofstede. But that study does not give empirical evidence based on differentiation between countries.

## THEORY AND HYPOTHESIS

This study is organized by examining the effects of national culture, educational level and gender on willingness to escalate commitment between Japan and Indonesia. Historically, Indonesian education has been influenced by Japanese culture and tradition, because during the World War II most Japanese teach Indonesian people the significance of education. Indonesian people still remember in their minds the spirit of "education for all," as a kind of 'historical commitment' based on the Japanese legacy. We suppose that Indonesian people might still remain the similar spirit to Japanese. This paper is based on prospect theory. Prospect theory is a behavioral economic theory and describes decisions between alternatives that include risk where the

probabilities of outcomes are known (Kahneman & Tversky, 1979). The theory indicates peoples' decisions based on the potential value of losses and gains rather than the final outcome, and that people use interesting heuristics to evaluate these losses and gains. Rietveldt (2012) suggests that there is no significance differences between women and men on the contestant's decision, but our suspicions are that the semifinal might play a role in this result. Five cultural dimensions by Geert Hofstede (Hofsted & Hofsted, 2005) are taken in our research.

## RESEARCH METHOD

Experiment is used to collect the data in this research. Several variables have manipulated to fit with the research objectives. We have dependent variable, Escalation Commitment, and independent variables are framing, adverse selection and culture. Those variables are measured by certain measurements through the instrument. Each subject was given to indicate their preference for making a choice on a ten scale point. 1 is strongly agree to stop X project (A choice); and 10 is strongly agree to continue the X project (B choice). Dependent variable was the score of escalation commitment from 1-10. The higher score shows the willingness respondent to escalate their commitment.

## RESULTS

We conclude that gender, nationality and level of education give significance influence on escalation commitment. Moreover, the decision makers from Indonesia tend to continue to invest time, money of effort into a bad decision or unproductive course of action but decision makers from Japanese will took the other choice. The results are in line with the Hofstede. It means that Japanese has the stronger feeling to avoid the uncertainty than Indonesia. The other result in riskier decision is statistically shown between two nationalities. We also tested the significance difference between male and female choices and the result supported our prior argument that female like to escalating their decision.

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# CHANGING PERSPECTIVES OF POLITICS MARKETING IN NIGERIA

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## ABSTRACT

*Politics marketing in recent years has attracted increasing attention from politicians all over the world, though not much from the academia. The fact that politics is about power and the distribution of scarce resources has created more concern on the subject of politics marketing. For a third world economy like, Nigeria the challenges are enormous, and can play a major role on how good leaders can be elected and invariably, how the scarce resources of the nation are distributed to achieve voter/consumer satisfaction and overall economic development. The paper looked at politics marketing from the perspective of the more developed economies and the model of a market-oriented party thus: use of market intelligence; adaptation of behaviour; organizational implementation and conveyance of new behaviour, and its implications for Nigeria. The paper also examined the evolution and development of party politics in Nigeria, where the political structure, with ethnic and religious slant were handed over by the British Colonial masters, leading to instability, military intervention and still an evolving political culture, after over 53 years of independence. For the way forward the paper recommended among others, an independent electoral body; an incorruptible judiciary; enlightened electorate and de-registering mushroom parties.*

**JEL:** L8, L89

**KEYWORDS:** Politics, Marketing, Electorate, Market-Oriented Party, Democracy.

## INTRODUCTION

The current interest in the field of politics by marketers may not be unconnected with the recent definition, importance, world view of politics in our daily life, and the misapplication of power politics by those in authority. Heywood (2007) defines politics as the activity through which people make, preserve and amend the general rule under which they live. However, looking at politics as power and the distribution of resources, he said that at its broadest sense, politics concerns the production, distribution and use of resources in the course of social existence. Politics therefore is, in essence, power: the ability to achieve a desired outcome, through whatever means. From this perspective, Lasswell (1936), summed it up by saying that, politics is about diversity and conflict, but the essential ingredient is the existence of scarcity: the simple fact that, while human needs and desires are infinite, the resources available to satisfy them are always limited. He also viewed the elite as the primary holders of power. Politics can therefore be seen as a struggle over scarce resources, and power can be seen as the means through which this struggle is conducted. From the above one can easily understand why the former president of Nigeria, Chief Olusegun Obasanjo described the 2007 general elections in Nigeria as: a matter of life and death, and a military warfare without weapons.

Marketing therefore, is increasingly becoming an inseparable aspect of politics since both marketing and politics have identical ultimate goal of attracting, holding and sustaining customers (voters and consumers) to their specific product or brand. The infiltration of politics by business

therefore, has attracted increasing attention of political commentators in recent years. According to Lee-Marshment (2001), research has been conducted into how politics marketing has permeated political communications with political parties making increasing use of professional advertising from the world of business as well as polling agencies to inform their campaign design. They equally use political marketing to inform all aspects of party behaviour and not just campaigning. Political parties also use marketing instrument as part of their electoral campaign activities (Kotler and Kotler, 1999; Scammell,1999). The literature on politics marketing has contributed considerable insight into how specific marketing instruments have been utilized to optimize tactical and strategic aspects of political campaigns (Newman,1994; Kavanagh,1995;Scammell,1995; Wring,1999; Wring,2002b). Besides parties and individual candidates, the employment of political marketing instruments can be noted for grass-roots organizations within a party (Franklin and Richardson (2002), single-issues groups (Lindsay,1999),or governments and executive bodies (Newman,1995; Nimmo ,1999; Buurma, 2001;Newman,2001; Harris,2001a).

Les-Marshment further explored the full potential of political marketing on a theoretical level, integrating both management and political science literature to create a model of how a political party can use marketing and become market-oriented. She also examined the extent to which Thatcher and the Conservatives in 1979 exhibited behaviour in line with this model and compared this with Blair and Labour in 1997. It showed how Thatcher used marketing to inform policy design, a model which Blair followed but to a greater extent, using results from market intelligence to push for changes in the role of party membership and further centralization of power to ensure a clear organizational structure within the party. Contributing, Nkamnebe (2003), reviewing Gamble (1990) said on their part, particularly in a developing country context like Nigeria, marketers are often occupied with increasing demand for basic needs to the extent that often they forget to think about the synergistic potentiality of studying marketing as a veritable tool for productive political process.

Most importantly perhaps is the general weak political behavior occasioned by frequent truncated democracy, which in the main is characterized by military dictatorship and pseudo-military democracies. He further discussed the similarities of marketing and politics on the basis of the obvious interface between the two, mentioning attempts made to conceptualize their resemblance. He then attempted to identify and discuss some of the obvious similarities between marketing and politics under the following themes: market problems; product development; purchasing; distribution and market communications. The differences include market, structure market periodicity and organizational objective. He also identified some factors that will influence the development of politics marketing in third world countries like Nigeria to include: illiteracy; poverty; corrupt bureaucracy; sit-tight syndrome; among others.

Citing (Beard, 2000; Chang and Park, 1998), Opeibi (2006) said that political advertising in the past two decades in Nigeria has assumed a new dimension with the increasing use of negative political advertising during electioneering campaigns. Continuing, he said that prior to this period in Nigeria, political candidates concentrated more on selling themselves and their programmes to the people with very few instances of the use of negative adverts. However, with the resuscitation of democratic activities in 1998, leading to elections in 1999, the competitive nature of electioneering campaigns and the 'winners-take-all-syndrome' that characterized that election and especially the 2003 elections, where many of the political candidates abandoned positive, issue-focused, image-building adverts for direct attacks on their opponents. Concluding, he said that based on data, taken from selected Nigerian newspapers, factors such as: level of education of voters; political literacy; content and structure of adverts; personality of the sponsor (and/or the political candidate) among others may influence the effect of negative campaign on the electorate. Other contributors on this topic of politics marketing include, Hennerberg (2003), using two

different perspectives of instrumental and functional views to analyse political marketing management. The analyses used existing instrumental (means-oriented) interpretations of political marketing activities and drive, as an alternative to 'managerial' orientation, an ends-oriented categorization of generic functions that will provide a new way of describing and characterizing political marketing management. Also Henneberg (2004), political marketing theory: hendiadyoin or oxymoron.

This paper however, in the main will look at the topic of politics marketing, first from the conceptual context and perspective of the developed economies of Europe and the United States of America (USA), with particular reference to how a party can achieve electoral victory through the use of marketing techniques to become a truly market-oriented party. Thereafter, the paper will look at the concept of politics marketing from the Nigerian perspective, through the evolution and development of party politics in the country and how the emerging political parties have embraced this concept in their quest for electoral victory. The paper will also take a holistic look at the Nigerian electoral process/umpire since it forms part of the changing perspectives of politics marketing especially for a third world country like Nigeria.

#### Politics Marketing: A Theoretical Discourse

According to Lees – Marshment (2001), marketing, itself is a form of management or approach used primarily by business organizations. It has evolved to include the design and promotion of a product to ensure that the goals of the organization, the prime one, being to make profit in the case of a business, are met, though marketing is not just about selling, or, in political terms, campaigning. Citing Levitt, (1960), Les-Marshment, observed that the difference between marketing and selling is more than semantics. Selling focuses on the needs of the seller, while marketing is focused on the needs of the buyer. Selling is preoccupied with the seller's need to convert his product into cash; marketing with the idea of satisfying the needs of the customer by means of the product and the whole cluster of things associated with creating, delivering, and finally consuming it. The current marketing–philosophy focuses on how firms can satisfy customers and adopt what is called a market–orientation as this is deemed the most effective way to meet the firms goals and also applies to politics marketing and political parties.

Other researches which had attempted to apply the theoretical basis of marketing for business to politics include (Niffenegger, 1989; Newman, 1994; O'Shaughnessy, 1990; Wring, 1994), among others, even though they focused more on the marketing functions of communications and selling. According to Kotler, Armstrong, Saunders, and Wong (1999), the selling concept is also practiced in the non–profit area. A political party, for example, will vigorously sell its candidate to voters as a fantastic person for the job. The candidate works hard at selling himself or herself–shaking hands, kissing babies, meeting donors and making speeches in addition to the use of public media like radio and television advertising, billboards, posters and mailing. Bovee and Thill (1992) may have been thinking in that direction when they posit that, a political party markets its people and its ideas. It produces candidates with distinct political points of view, and it promotes them through a variety of advertising techniques. The target market is registered voters, and marketing goals is to sell voters on the politician and the kind of re–presentation he or she would provide. The price is a vote.

Lees–Marshment (2001) seems to toe this line of marketing concept in politics marketing by arguing that if a political party implemented the marketing philosophy, it will seek to meet voters' needs and wants, thus producing voter satisfaction, and in doing so, satisfies its own goals. A market–oriented party, is not concerned with changing peoples' mind, but rather, in following them; instead of investing heavily in advertising, in order to convince voters that their party is the best one, or engage in arguing their particular ideology. A party would act in line with the

rational-choice notion as put forward by Downs (1957) that, parties need to move to a median position to win enough electoral support to get into office. The organizational focus of the party is on voter's needs and wants, and on the best way to satisfy those. A major party in Britain for instance would thus design its product or determine its behavior in a way that will attract support from those it needs – thus enough of the electorates to win office in a general election.

#### Model of a Market-Oriented Party

Lee – Marshment identified four main activities that a party attempting to use marketing in determining all aspect of its behavior would engage in, which include: use of market intelligence; adapting its behavior to suit those whose support it seeks; implementing this new behavior at all levels of the party organization; and conveying this to the electorate.

*(i) Use of Market Intelligence:* A party will invest significant efforts in discovering the needs, wants, behavior and the demands of the voters whose support it seeks. It is concerned with party-voter communication in its broadest sense, and can be derived from many sources and in different ways. All or any of these research methods formal/informal, quantitative/qualitative, primary/secondary may be employed by parties. The party leadership might create committees or task-forces to examine the party's problems, and look into what marketing could offer which should include both professionals with marketing expertise or outright Integrated Marketing Communication (IMC) Consultants. Today's, marketing is leaning towards seamless communication (viz, polling and advertising agencies, direct mail consultants, market analysis/statistical experts). These could either be outsourced, or from within the party or an admixture of both. This will help ensure the acceptance and thus the success of marketing as party members can also be made to become aware of the results of research by professionals. In seeing result of opinion polls, party members will accept that, despite the perceived value of the party's current policies, voters will not support them, if such policies do not match voter satisfaction, needs and wants.

*(ii) Adaptation of Behaviour:* The party would then adapt its behaviour or design its 'product' according to the findings from its market intelligence. A party's product would include more than just the slogans and posters it produces in a campaign, and should also include all aspects of its behavior at all times ( not just at election time), and at every level of the party ( not simply the leadership).

A party is a more complicated entity than a business, however, and thus needs not to simply follow voters but adjust this new product design to take into account various factors. First it will consider whether the product design is achievable. A market-oriented-party would not "promise-heaven on earth", but as much as possible; ensure that it can 'deliver' its promised product especially where policy proposals are concerned. Compare this with the ruling party Peoples Democratic Party (PDP) in Nigeria that promised zero power outage after six months it won an election in 1999. Eight years thereafter the power outage had gotten worse, but the party still contested and won elections in 2007 and 2011, and still preparing to contest and win in 2015. Interestingly, what is akin to a party adapting its behaviour or designing its product according to the findings from its market intelligence is evident as: The PDP, Nigerian ruling party's sudden investment of significant effort and financial resources in electric power generation and distribution, to achieve zero power outage in 2014, before the 2015 general election. Power supply is critical to winning electoral votes in 2015. Secondly, a party should estimate what likely reaction of internal support will be to the proposed changes in behavior.

A political party will normally engage in competition and support analysis. It will take into account the strengths and weakness of the opposition parties and should alter its design to ensure

that it has strength where the other party/parties are weak. The party may also adopt target marketing, if it already has long-term, loyal support from one section of the society, it may then reduce the aspect of the product design that suits its demand and alter its behavior to suit another section of the society which makes different demands but whose support the party does not yet have but needs to win powers as long as it can make these changes without alienating its existing support base. This is true for any party wanting to win electoral votes in the South-South/Niger-Delta region of Nigeria in all elections. One of Nigeria's political parties, the Action Congress of Nigeria (ACN), which has now merged with other opposition parties, to form the All Progressive Congress (APC), probably had this in mind due to the strategic nature of the South-South or Niger-Delta, where the party does not seem to have electoral strength. The party in the alternative, promised to set up a ministry of the Niger-Delta to more effectively tackle the problems of this region that produces more than eighty percent (80%) of the nation's resources in terms of crude oil resources.

*(iii) Organizational Implementation:* The party will then ensure that the new product design is implemented at all levels of the party. This is essential, if it is to be effective and attract support from voters, but this will necessitate careful organizational handling. The greater the degree of change in behaviour required, the harder the task for the party leadership to attract support for such change. Thus the party leadership will be aware of the potential problems and either take measures to avoid it or be ready to respond to such problems, while planning to carry the electorate or voters along in the implementation. Failure of organizational implementation is evident in the zero tolerance for corruption or anti graft policy and due process of the ruling party in Nigeria the PDP. It is rather embarrassing that a top party hierarchy, in fact the fourth in government could not adapt to such strategic and important party policy as was the situation some time ago, in the lower National Legislative House. How then can the party intend to carry the electorate along in future behaviour adaptation. However, the emergence of APC, has changed the political landscape and the need for all parties especially the ruling party to adapt a market-oriented party policy as the 2015 election approaches.

*(iv) Conveyance of New Behaviour:* A party should naturally communicate its new behavior or new product design in a positive way to voters. As Kotler and Andreasen (1987), argued that everything about an organization—its products, employees, facilities and actions communicate something. Not only could the nature of the leaders, but the behavior and rights of a party's members be influential in attracting or propelling voters. Shaw (1994), contended that the British labour party failed to win the 1992 general election because (amongst other factors), despite policy changes, Kinnock (party leader) has lacked the time and support to transform the party itself... its ethos, its language and rituals, and its close association with the unions, all alienated the electorate. So a party using marketing would attempt to display behaviour in line with the new product design at all levels and at all times.

Generally speaking, if a party engages in these four activities, the model contends that such party will win power, and then it would also deliver the product to voters and thus carry out its promise through into government. This though is arguably the most important and difficult part of marketing, though still a subject of much debate due to varying levels of success. From a pragmatic point of view, there are also arguments as to whether the use of marketing in this way can help to increase party's standings. Thatcher's Conservative Party successfully used the four models to win election in Britain in 1979. However by 1997, Blair's Labour Party through the use of a more effective combination of the four models took over the government from the conservatives. The Democratic Party in the USA, also effectively used the model to win the last two presidential elections.

#### Evolution of Party Politics in Nigeria

Serious party politics started in Nigeria in the 1950s in anticipation of independence from Britain in 1960. Then politics revolved around the major tribal leaders. Though there were other parties, the three major tribes Hausa, Igbo and Yoruba, formed the three major parties. The Northern Peoples Congress (NPC) with Alhaji Ahmadu Bello as the leader was the major party in the north; the National Congress of Nigeria Citizens (NCNC) with Dr. Nnamdi Azikiwe as the leader was the dominant party in the east while after some realignments Action Group (AG) with Chief Obafemi Awolowo as the leader was the major party in the west. As the nationalists' struggle for political power gathered momentum in the 1950s, Omoweh and Boom (2005), said that it was obvious that sooner than later, Nigeria would become politically independent. Consequent upon this, the colonialist handed over the reign of government to a class of politicians believed to be capable of protecting its economic interest in the post-colonial period. It was a political class not groomed for the political administration of the country, explaining its preference to continue with colonial policies, politics and structures of exploitation instead of changing them. Once in power, the dominant political class exhibited the features of the colonial state, relying on violence, repression and coercion to manage the polity, thereby attaching too much importance to political power, since their security and survival depended largely on it. Political competition then became very deadly, and those who had political power defended it at all cost and by all means, while those seeking to replace current holders of political power deployed all means within their reach. That was the foundation on which the Nigerian politics was built that eventually saw it through a series of military intrusions, civil war and few years of civilian administration since the year of independence in 1960.

### Analysing Political Market Opportunity

Having evolved through stages of colonial, military and civilian administrations, the current dispensation is the longest democratic administration the country had experienced since the 1960 independence. This political period tagged 4<sup>th</sup> Republic came into being in 1999 following a keenly contested presidential election between the Peoples Democratic Party (PDP) and the merged party, Alliance for Democracy (AD) and All Peoples Party (APP). Since then, three successive elections have been held; and political observers have opined that each successive election was an improvement on the previous one, especially the 2011 election which even international observers acknowledged to be credible. The PDP emerged the winning party in the 1999 election, and has remained the leading party since then controlling in all instances, more than 50 percent vital political positions in the nation. Table 1 below presents a picture of the results of presidential elections since 1999.

Table 1: Analysis of Voting Results and Voters Participation During Various Presidential Elections in Nigeria (1999 – 2011)

	1999	2003	2007	2011
Number of registered Political Parties	3	28	63	63
Percentage of votes won by:				
Leading Political Party	62.78 (PDP)	61.94 (PDP)	69.82 (PDP)	58.89 (PDP)
2 <sup>nd</sup> Leading Political Party	37.22 (AD/APP)	32.19 (ANPP)	18.72 (ANPP)	31.98 (CPC)
3 <sup>rd</sup> Leading Political Party	-	3.29 (APGA)	7.49 (AC)	5.41 (ACN)
Total Percentage of votes controlled by the three (3) leading	100	97.42	96.03	96.28

parties				
Turn out rates of voters	52.3	N.A	57.5	53.7

*Source: Authors' compilation from various public sources.*

It is easily observable from the table that although the PDP has remained the leading party all through this period but its market share, from the percentage of electoral votes has not been stable and actually declined by more than 10 percent in 2011 election which was adjudged to be the fairest of all elections so far. More interesting is the performance of the challenging parties. ANPP which had 32.19% in 2003 declined to 18.72% in 2007. It is clear therefore that while PDP is likely to retain its leadership position in 2015, but its share of the market is likely to reduce to the advantage of other contending parties.

Table 2: Percentage of Political Party Control of Seats in National Assembly and State Governorship Positions In 2011

Political Party	Senate	House of Representative	Governorship position
PDP	66	59	64
ACN	17	19	17
ANPP	6	9	8
CPC	6	8	3
LP	4	2	3
APGA	1	-	5
Others	-	3	-

*Source: INEC records.*

It is pertinent to note that more than 60 political parties are registered in Nigeria but not all participate in National elections. For instance, in 2011, only 56 out of the 63 registered political parties participated in the general election, and only 20 parties contested in the presidential election (INEC, 2011). Table 1 shows also that the number of participating political parties notwithstanding, only three parties control more than 95% of the votes cast in all the presidential elections; and in fact, only six of the parties are represented in the National Assembly as well as occupy governorship position in the States as shown in table 2 below.

### Implications of the Study

It is evident from the above presentation that the political environment is growing in maturity and competitiveness. This is a clear sign that the nation is likely to experience yet another keenly contested 2015 general election, especially with the merger of ACN, ANPP, CPC and a faction of APGA, to form the APC, (*see appendix 1*). As in other strong competitive situations, only the fittest survive. In marketing environment, it is known that companies that adopt marketing orientation usually survive and perform better than others who did not. Consequently, for any party to survive and remain active in Nigeria, the party must understand in content and context the principles guiding Market-Oriented-Party (MOP); and deliberately adopt and operate it as its organizational culture. Just like in conventional market where the consumer through his power of choice determine which manufacturer remains in the market; the political market has the power to reshape or prune out undeserving political parties, leaving only those that can dance to the tune of the marketplace. Presently, some parties are merging with others, while some are being reorganized for better results. Others who cannot attune themselves to cope with realities of the time have no choice but to face natural extinction.

Doghudje (1992:19) studied likely factors to influence voting decisions of voters in their choice of candidates during 1993 general election and reported that 70% would be influenced by tribe and religion and only 5% by party manifesto. Current development in the environment shows that people are gradually rejecting the ethnicity and religious influences and are giving more rational consideration to the candidates' attributes and party programmes. This means that political campaign that emphasizes tribe and religion may not get much attention. The implication is that parties would need to carefully package their brands for effective delivery to the market (the electorate). This will require parties to develop a market oriented manifesto and a candidate who can display a high degree of commitment to the party's manifesto. By doing so, parties would be developing their own brands rather than just accepting and supporting any person who thinks he has what it takes to contest an election.

The environment of marketing is ever changing but astute marketers continually adapt to and exploit the opportunities presented by the contemporary environment as they skillfully develop their marketing program based on the strengths and weaknesses of the organization in the context of the opportunities and threats of the environment. In the same vein, the political marketers should have a strategic team that analyzes the market with a view to discovering opportunities and strategies for winning them. For instance, table 2 above shows that the turn out rates of voters during previous elections were less than 60%; leaving more than 40% of untapped market each time. A creative and innovative party can target that opportunity and convert at least a portion of it to become its customers. Also there is high rate of brand switching in the politics market both among the political candidates and the electorate. Creative exploitation of these opportunities can significantly improve the returns (number of votes gained) of the political party. The use of political advertising is quite high in Nigeria given the level of various types of advertising that displayed during political campaigns. Studies have shown that quality of message content is important and critical to the effectiveness of the message. This means that political advert messages, rather than based on attacks on political opponents; should be based on trustworthy, relevant and realistic information correctly packaged and delivered to the target audience. This will likely generate acceptance and build better customer loyalty for the party than messages filled with empty promises and irrelevant bickering.

## CONCLUSIONS AND RECOMMENDATIONS

It is clear to see from the on-goings that Nigerian Political Market is due for change. Change, they say, is constant but it behooves the players in the market to follow this change in order to remain relevant. The challenge is that parties and political institutions who do not appreciate this changing political scene; and think that it is 'business as usual' will have so much to lose. Already the country is witnessing structural changes in legal/regulatory frameworks as well as the infrastructure to put the next general election in a good pedestal. For example, the electoral commission (INEC) and the electoral system as well as the judicial systems are being strengthened. This obviously is an opportunity for market oriented parties that would focus on the needs of the market rather than on the selfish ends of individuals. Parties should therefore set up machinery to analyze, develop and implement strategies in accordance with the current market perspective of political market in the country. This will help them to compete strongly in the next election. Professional institutions like the National Institute of Marketing of Nigeria (NIMN) as an umbrella Marketing Body in Nigeria has a very pioneering and vital role to play in all this.

The CNN, the Internet and all the other Interactive Media have changed the world of Politics Marketing in the USA and the other advanced economies of Europe. The last American election was virtually won during the live debate by the CNN. We are all aware of the influence of the live

broadcast by African Independent Television (AIT), in shaping Politics Marketing in Nigeria, especially during the National Assembly's Constitutional debate and tenure elongation of the former government of President Obasanjo. NIMN leadership, should partner with AIT and other virile media to put this issue in the front burner. NIMN should present a position paper/conference on: 'Politics Marketing and Election Process'. Anybody who wants to be President, Governor, etc, must face Nigerians and tell them where he is coming from. The resources of this country are so enormous, and since politics is about power and distribution of resources, it cannot be left in the hands of just anybody.

Merger and acquisition are common practices in the business environment and can be adopted in politics. The current trend towards merger or some kind of fusion of political parties to present a common formidable offer to the target market is generally welcome, provided the terms of such partnership is clearly spelt out and respected. Such re-engineered party and in fact any party that desires to survive should rather build itself into a very strong and vibrant party, rather than using all sorts of tactics, at times unethical, just to win in the 2015 general election. A more sustainable approach therefore is the concept of market-oriented party which will build a party of tomorrow.

## APPENDIX

Full Names Of Major Political Parties, In Nigeria..

1. AD - Alliance for Democracy.
2. ACN - Action Congress of Nigeria. (Formerly AD).
3. ANPP – All Nigerian Peoples Party. (Formerly APP)
4. APGA – All Progressive Grand Alliance.
5. APP – All Peoples Party.
6. CPC – Congress for Progressive Change.
7. LP – Labour Party.
8. PDP – Peoples Democratic Party.
9. APC – All Progressive Congress. (A new party registered in 2013, which is a merger of CAN, ANPP, CPC and a faction of, APGA).

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# CRM AND CUSTOMER SATISFACTION IN A SOUTH AFRICAN AGRICULTURAL BUSINESS: A DIFFERENT PERSPECTIVE

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## ABSTRACT

*Traditional customer satisfaction studies have focused typically on service quality, even though there are three other drivers of customer satisfaction. This study includes these three drivers in testing customer satisfaction of an agricultural business in Central South Africa with various business units with a mailed questionnaire to all of the active customers contributing more than R100 000 worth of business to the agricultural business. By using a simplified method in determining the customer satisfaction of the overall business, each individual business unit, the overall drivers, as well as the drivers inherent in each business unit, it was possible to establish an improved understanding of what satisfy customers in this unique industry. It was found that if customers are satisfied, they would have a higher overall level of satisfaction than when the business units' drivers are averaged; indicating that customers would fall back past experiences, rather than decrease their satisfaction due to a service failure.*

**JEL:** Q13

**KEYWORDS:** CRM, customer satisfaction, business units, agribusinesses

## INTRODUCTION

The importance of customer relationship management (CRM) cannot be contested, as the critical benefits gained are customer satisfaction and loyalty (Krasnikov, Jayachandran and Kumar, 2009). CRM, as an important focus within relationship management, can be defined as an approach used in collecting customer information and using this information in building improved relationships with different customers (Ernst, Hoyer, Krafft and Krieger, 2011). It has been proven that when CRM enhance both trust and commitment in the company, customers become more satisfied (Palmatier, Jarvis, Bechhoff and Karded, 2009) and more loyal. Customer satisfaction is the number one antecedent to retaining customers (Bodet, 2008). Traditional customer satisfaction studies focus mainly on using the well-known SERVQUAL method that is specifically focused on satisfaction towards service (Parasuraman, Zeithaml and Berry, 1994). However, there are three other factors, namely price, product and personnel, which also impact on customer satisfaction and should not be left by the wayside. If a customer perceives a business's price to be fair, it is positively correlated towards customer satisfaction (Martin-Consuegra, Molina and Esteban, 2007). The qualities of products provided by the business, as well as the quality of service, are both critical factors in establishing customer satisfaction (Nowak and Washburn, 1998). One of the strategies used by a business to compete more effectively is to improve personnel efficiency in an attempt to improve service delivery in order to maximize the satisfaction of the customer (Kotler, 2000).

One of the main reasons agricultural businesses were formed initially was to generate greater profits for farmers by obtaining services and inputs at lower cost and marketing of inputs at better prices (Ortmann and King, 2007[a]). An agricultural business is unique in the sense that the members of the organization can also be regarded as the owners, the customers, as well as the

suppliers - which creates a distinctive value-chain relationship between the organization and the customer. Because of these different and interrelated roles of the owners, customers and suppliers, the importance of customer satisfaction is multiplied. Government support in the form of tax concessions and subsidized interest rates made cooperatives a viable and lucrative business option up until 1994, for then the newly elected South African government decided to discontinue financial and developmental support. Due to this contraction in agricultural support, major cooperatives were converted to investor-oriented firms (IOFs) or companies, which ushered in a new era for agriculture (Ortmann and King, 2007[b]). Although the business format of agricultural businesses changed from conventional cooperatives to companies, in many cases the expectations of the farmers are still the same. Therefore, the main focus of agricultural businesses has shifted dramatically from being farmer-oriented to being corporate-oriented. However, with the conversion of these agricultural cooperatives to IOF's, the focus is primarily on profit and share price maximization (Harvey and Sykuta, 2006).

### Problem Statement and Objectives

According to Olson and Boehlje (2010) rivalry among agribusinesses is one of the fundamental factors affecting the survival of these firms. Also, it has been established that agribusiness firms would only be able to obtain customers from competitors and retain existing customers by competing on price and non-price factors, i.e. keeping customers satisfied. Customer relationship management therefore becomes an integral part in the organization in ensuring that customers are satisfied and loyal towards the organization (Liou, 2008). Business units, such as retail shops, grain marketing and financing within an agricultural business provide a unique opportunity to test customer satisfaction, as the customers, making use of the various business units, are relatively homogeneous. Also, the customers making use of the business units are business owners themselves (farmers), with the effect that this analysis becomes a business-to-business research study. Therefore, each business unit will be regarded as a business in its own right, under the 'umbrella' of the agricultural business.

Because of the unique nature of agribusinesses, it will be possible to determine customers' satisfaction with the overall business, as well as each individual business unit. Moreover, it will be possible to establish customers' satisfaction towards the various drivers of customer satisfaction (price, product, service and personnel) for the business as a whole, but also inherently in the various business units. The objectives of this paper are two-fold. The first objective is to test customers' satisfaction towards all of the business units and the organization as a whole, as well as all of the drivers inherent in the business units and the overall organization; and establish an improved understanding of what satisfy customers in the business units but also in this unique industry. The second objective is to determine whether customers rate a business unit on average better or worse than an average of all of the drivers inherent in each business unit.

### **LITERATURE REVIEW**

The objective of CRM strategies is to identify customers (customer segmentation), acquire knowledge about these customers, use the knowledge to build quality relationships (customer relationship management) and influence these customers' perception of the organization positively (customer satisfaction) (Richards and Jones, 2008). By making use of customer relationship management strategies and approaches it is possible to gain a competitive advantage in the market place (Torres, Akridge, Gray, Boehlje and Widdows, 2007) as the expectations of customers can be reached due to the manner in which the product and/or service are presented to the customer (Hardeep and Amandeep, 2011). When there is a difference between customers'

expectations and customers' perceptions, a customer gap emerges. Therefore, to manage customer relationships, it is necessary to decrease the gap between the customers' expectations and their perceptions (Zeitham, Bitner and Gremler, 2009). The focus of relationship marketing is on the customer, and ensuring that the relationship with the customer is enhanced in an effort to expand trust and commitment from the side of the customer, which would lead to customer loyalty and satisfaction (Brink and Berndt, 2009). The expectancy-perception model of satisfaction (Arnould, Price and Zinkhan, 2004; Zeithaml, et al., 2009) establishes that when pre-consumption expectations are not reached, or when it is indeed reached or even exceeded is a major component of customer satisfaction. On the one hand, if the perception of performance of a product or service exceeds the expectation, then customer satisfaction would be increased. However, two types of satisfaction might emerge. The customer might have assimilation tendencies, which would mean that he/she would try to ignore the discrepancy between expectations and perception of performance, or the customer might have contrast tendencies, where he/she exaggerates the discrepancy and makes it larger than reality. On the other hand, when the expectation of a customer exceeds the perception of performance, customer dissatisfaction would increase. If the customer has assimilation tendencies, he/she would try to ignore the discrepancy and, maybe, attempt to explain away the discrepancy. If the customer has a contrast tendency, then he/she would exaggerate the dissatisfaction actually experienced. If however, the perception of performance of the product or service is equal to the expectations of the customer, there would be a neutral confirmation and neither satisfaction nor dissatisfaction would prevail. Therefore, just meeting the expectations of the customer is not enough to lead to customer satisfaction (Wu, 2011).

Customer relationship management (CRM) has been commended as a technique to ensure that customers experience richer encounters with the organization, become satisfied and loyal. Loyalty towards the organization will increase the likelihood that customers would maintain a relationship with the organization (retention) and also urge new customers to the organization through positive word-of-mouth. The organization then has the opportunity to sell more products and/or services to the new and existing customers, which increase customers' profitability and eventually business profitability (Kumar, Pozza, Peterson and Shah, 2009). Customer satisfaction is the result of effective customer relationship management. Agricultural businesses could therefore customize products and services to suit customer needs and increase their perception of the service, product and/or experience (Mithas, Krishnan and Fornell, 2005:202). This would increase their trust and commitment towards the agricultural business and ultimately their satisfaction. Through building and maintaining relationships with customers, customer satisfaction can be increased. The field of customer satisfaction is one of the most important factors in any organization (Prabhakar, 2007). Customer satisfaction has been found to impact on purchase intentions, customer retention, reduced customer defections, share of wallet, increased responsiveness to cross-selling efforts, reduced complaints and word of mouth (Aksoy, Cooil, Groening, Keiningham and Yalçin, 2008). Satisfied customers could become loyal customers; and every opportunity to interact with the customer provides the business with the prospect of creating value due to a long-lasting relationship (Richards and Jones, 2008). A long-term relationship with customers could be even more important in agricultural businesses because of the rivalry amongst these companies (Olson and Boehlje, 2010).

In a long-term relationship a client will have overall satisfaction, as well as transaction-specific satisfaction. Very importantly, overall satisfaction acts as a moderator between transaction-specific satisfaction and repurchases intention. Previous studies (Parasuraman, et al., 1994; Anderson, Fornell and Lehmann, 1994) worked on the premise that transaction-specific satisfaction leads to overall satisfaction, which leads to repurchase intention. Also, it was found

that even though customers might experience a service failure occasionally, they will still continue to have a high repurchase intention. The model explains this phenomenon on the basis that overall satisfaction intercedes in the event of a transaction-specific dissatisfaction (or service failure) and the customer is retained due to their overall satisfaction as a result of previous experiences. Overall satisfaction is thus a better indicator of satisfaction than transaction-specific satisfaction, as it has a stronger influence on repurchases intention (Jones and Suh, 2000). An individual that has made use of the business over an accumulated time will use the performance history of the business when judging satisfaction and therefore would concentrate on a summary of all past transactions and service encounters, which could lead to a positive attitude and loyalty towards the business on the part of the customer. On the whole, customers' satisfaction also centres upon the average satisfaction experienced, as well as how the company ranks alongside competitors. High satisfaction rates could lead to increased profits and share prices (Oliver, 2009).

According to basic economic theory, if prices increase, a customer would just alter his/her consumption or usage, as displayed by the well-recognized downward-sloping demand curve. Basically, a higher price means less demand for a product. When prices increase, the product or service might become less attractive to the consumer and sales might fall. These negative consequences can, however, be made less substantial if customer satisfaction was high before the price increased. In essence, when a price increase occurs, there will be a negative effect on the consumers, but this negative effect will be weaker if the customers are satisfied and stronger if the customers are dissatisfied (Homburg, Hoyer and Koschate, 2005). A company should thus provide a product with the right quality at the right price in an effort to make customers feel that the price is fair for the quality that they receive. Consumers might perceive price as an external measure of quality. Price is linked to customer satisfaction in the sense that a customer has to feel satisfied that the investment made is equal to or less than the product or service received.

If customers perceive the price of a product or service as fair, then customer satisfaction will increase (Yieh, Chiao and Chiu, 2007). A decisive determinant of customer satisfaction is whether the customer perceives the performance of the product to be adequate during consumption, in other words, to be of quality (Blackwell, Miniard and Engel, 2006). A study done by Anderson and Sullivan (1993) confirmed that those firms that provide a consistently good quality product should have highly satisfied customers and those customers would be more likely retained within the company. If service quality is low, customer satisfaction will also be low and vice versa (Söderlund and Rosengren, 2010:162). For some time, SERVQUAL has been described as being an incomplete measure of the entire service experience. One of the main problems mentioned is that the product concept is excluded (Miller and Brooks, 2010). This study thus aims to include all the main drivers of customer satisfaction in order to improve understanding of customer satisfaction of an agricultural business. This is vital, specifically because agricultural businesses provide both products and services to customers and SERVQUAL as a customer satisfaction measure would therefore be lacking. Employee-customer interaction plays an indispensable role in the foundation of customer satisfaction (Yieh, et al., 2007). Employee satisfaction is significantly related to customer satisfaction, specifically if the employee is provided with a manageable workload, lower stress and opportunities for training and development. If the employee is happy and performs to the best of his/her abilities, then the probability that customer would be satisfied is very high (Brown and Lam, 2008). It is essential that there must be a solid and loyal relationship built on trust between the customer and the service-provider in order for the customer to make a purchase decision (Yieh, et al., 2007).

## RESEARCH METHODOLOGY

The research methodology employed in this study was of a quantitative nature. Structured questionnaires were distributed to the respondents by mail. The questions included in the questionnaire were mainly Likert-scale type questions where respondents had to rate the company as a whole, each business unit, the drivers of customer satisfaction for the company as a whole, as well as the drivers inherent in the business units on a scale from one to nine. The 9 points were divided into three main levels, namely poor (1 – 3), average (4 – 6) and good (7 – 9). The questionnaire was simplified in order to obtain streamlined information with regard to each driver of customer satisfaction and drivers inherent in each business unit. The target population was all active customers of a major agricultural business in Central South Africa that contributes more than R100 000 in business per annum to the agricultural business. A questionnaire was mailed to each of the customers and a return envelope was included in an effort to increase the response rate. The target population consisted of 963 customers and to make provision for non-response, the whole population that met these geographical and turnover criteria was used. A total of 345 useable questionnaires were returned; therefore the response rate was 35.8%.

The specific agricultural business that was examined has a variety of business units that aim to support all their customers. The main business units available (which can also be found in the majority of agricultural businesses in central South Africa) are retail shops, grain marketing, grain storage, financing, mechanization (workshops), mechanization (spare parts), mechanization (whole goods) and insurance. Reliability was tested through internal consistency, which provided a very high Cronbach Alpha of 0.982. Construct validity was tested and the results of the Kaiser-Meyer-Olken (KMO) and Bartlett's test for item validity were used. The results indicate that the KMO is very high for each question (all above 0.788) and the results are all statistically significant – indicating a high level of validity.

## RESULTS

### Demographic Profile of The Respondents

The respondents were asked to indicate the farming activity they are mainly involved in, the total years' of farming experience they have, as well as their age. The agricultural business provided information that made it possible to classify the respondents according to the size of their operation. The results indicated that the overall majority of the respondents were mainly grain farmers (45.0%), while a lesser percentage (31.0%) are mainly livestock farmers and the remaining 24.0% an even split. Respondents were asked to indicate the number of years that they have been farming to give an indication of their experience. The majority of the respondents (21.2%) have more than 41 years' experience, while a minority of 2.6% has less than 5 years' experience. It was found that the average years' experience is 29.4 years. It could therefore be assumed that the respondents have adequate knowledge with regard to agricultural businesses. The majority (79%) of the respondents were above the age of 46. The average age of the respondents was established to be 53.6 years. It is worth noting that less than 2% of the respondents were 30 and younger. This could be an indication that younger people might be avoiding farming as a career choice or that the younger customers are not yet big enough to contribute R100 000 and more volume of business to the organization. The respondents were classified according to the size of their contributions to the agricultural business into small customers (between R100 000 and R250 000 volume of business), medium customers (between R250 001 and R650 000 volume of business) and big customers (more than R650 000 volume of business). The three groups were roughly equally distributed with small customers being the

biggest group (38.8%), while 33.3% were medium customers' respondents and 27.8% small customers' respondents.

### Company and Business Unit Results

Respondents were asked to indicate their level of satisfaction with regard to the performance of the various business units provided by the agricultural business on a nine point Likert scale. The table below gives an indication of the percentage of respondents that indicated whether they perceived the business unit to perform poorly, average or good. The last column gives an indication of the order of business unit performance according to the mean value. The mean were calculated according to the values of the Likert scale (1 - 9); therefore the nearer to 9, the better the performance of the business unit with 5.00 as the middle value.

It is important to note that all the business units have mean values above the middle value of 5.00, indicating that all units' performance are above average to good. Grain storage performed the best of all of the business units with a mean of 7.3333. This is due to the fact that 80.4% of the respondents indicated that this business unit performs well. This is also a good result as the majority of the respondents (almost 75%) make use of this specific business unit. All three mechanization business units (workshops, spare parts and farm equipment) performed the worst of all the services provided by the agricultural business and these three business units also have the highest percentage of respondents indicating that they perform poorly. This could be a concern as mechanization (spare parts) is used by almost 90% of the total sample. Financing and insurance both performed relatively well since approximately 68% of the respondents that make use of these business units have the perception that they perform well. The last row gives an indication of how the respondents rated the agricultural business' performance as a whole. The results indicate a very good satisfaction level of performance by the majority of the respondents (81.7%). The mean is high (6.9354) in comparison to the majority of the services provided, therefore it can be assumed that the respondents regard the company as a whole to perform well above average. Table 2 presents the results for the performance of the four drivers of customer satisfaction, namely price, product, personnel, and service. The average mean for each driver were calculated and the last column indicates in rank order the performance of the various drivers.

Table 1: Satisfaction of Performance of Business Units and Company As a Whole

Business units	Poor	Average	Good	Mean	Rank
Retail shops	3.8%	33.1%	63.0%	6.7278	4
Grain storage	2.0%	17.6%	80.4%	7.3333	1
Grain marketing	6.8%	33.7%	59.5%	6.5895	5
Financing	7.9%	23.6%	68.5%	6.7879	3
Mechanization (workshops)	10.9%	44.6%	44.6%	5.9657	8
Mechanization (spare parts)	12.7%	38.8%	48.5%	5.9799	7
Mechanization (farm equipment)	11.0%	33.1%	55.8%	6.2652	6
Insurance	2.4%	30.2%	67.5%	6.9206	2
Agricultural business as a whole	4.1%	14.2%	81.7%	6.9354	

Table 2: Perception of the Performance of the Drivers of Customer Satisfaction for the Company As A Whole

Drivers	Poor	Average	Good	Mean	Rank
Price	14.3%	54.8%	31.0%	5.4940	4
Product	2.6%	60.2%	37.2%	6.0310	3
Personnel	0.9%	17.9%	81.2%	7.4164	1

Service	1.8%	23.6%	74.6%	7.1829	2
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The *performance* of the *personnel* of the agricultural business scored the highest with roughly 81% of the respondents indicating that the *personnel perform well*. *Service* scored the second highest, while *product* came third. *Price* scored the lowest, with more than 14% of the respondents indicating that they perceive *price* to be poor, almost 55% indicating that *price* are perceived as average and only 31% perceive *price* to be good. Even though *price* is rated well below the other drivers, it is still above the average of 5 (on a 9 point Likert scale). In addition to testing the drivers of the agricultural business as a whole, the drivers inherent in each business unit were also tested. For simplicity sake, only a summary of the results are provided in Table 3. Note that *grain storage*, *grain marketing* and *mechanization (workshops)* are service-based business units and could therefore not have been tested for *product*.

Table 3: Summary of drivers inherent in business unit

Business units	Price	Product	Personnel	Service	Average	Mean	Dif
Retail shops	4	3	1	2	6.2661	6.7278	-0.462
Grain storage	3	--	1	2	6.8144	7.3333	-0.519
Grain marketing	3	--	1	2	6.7276	6.5895	0.138
Financing	4	3	2	1	6.9294	6.7879	0.142
Mechanization (workshops)	3	--	1	2	5.9355	5.9657	-0.030
Mechanization (spare parts)	3	4	2	1	5.9711	5.9799	-0.009
Mechanization (whole goods)	4	3	1	2	6.3196	6.2652	0.054
Insurance	2	4	1	3	6.8304	6.9206	-0.090
Agricultural business	4	3	1	2	6.5311	6.9354	-0.040
Weighted Averages	5.8307	5.8695	6.9827	6.7576	6.3601		
Agricultural drivers	5.4940	6.0310	7.4164	7.1829	6.5311		
Difference	0.337	-0.122	-0.434	-0.425	-0.171		

Table 3 presents a summary of the main findings with regard to each individual business unit, as well as the company as a whole. The price, product, personnel and service columns indicate the ranking order each driver occupy in each business unit (according to performance). The Average column provides a calculated average of the performance of all the drivers inherent in each business unit. The Mean column gives an indication of the performance of each business unit, as indicated by the respondents. The Difference column provides the discrepancy between the average and the mean columns. If the value is positive, then the customers' perception of the performance of the business units is lower than that of the averages of the drivers. If the value is negative, then the customers' perception of the performance of the business unit is better than that of the averages of the drivers.

It is clear that personnel occupies the first spot in the majority of the business units, with service second, product third and price last, which corresponds with the results from Table 2 for the company as a whole. The only exceptions are financing, mechanization (spare parts) and insurance. The business units that do not have a physical product to test, namely grain storage, grain marketing and mechanization (workshops), all indicated personnel to be ranked first, service second and price last. The third last row indicates the averages of all of the business units' price, product, personnel and service. The second last row provides the results from Table 2 in order to compare the two with each other. The results indicate that all of the drivers are perceived to perform better by averaging all of the business units' drivers, except in the case of price, where the respondents perceived price to perform worse than the averages.

Interestingly, the Difference column indicates that the majority of the business units' drivers averages performs inferior compared to the means of the various business units, except in the case of grain marketing, financing and mechanization (whole goods). The finding that the business

units' means performs better than the drivers' averages, indicates that the customers have a better perception of the business units overall than when their drivers' averages are tested. This result could also signify that the means of the business units that performs the worst – mechanization (workshops, spare parts and whole goods) did not differ a great deal from the averages of the drivers. Therefore, the perception of the customers with regard to the worst performing business units were approximately the same as the average performance of their inherent drivers. Also, the means of the other (better performing business units) show a greater difference than the average performance of the drivers. These results could indicate that better performing business units have a bigger impact on how customers perceive the business as a whole.

## CONCLUSION

The ultimate survival strategy of agricultural businesses should be customer satisfaction through the use of customer relationship management practices. To keep customers satisfied, would ensure loyalty and establish a long-term relationship with the customer, which would lead to financial benefits through retention. Service is not the only driver of customer satisfaction, but also satisfaction towards price, product and personnel. Therefore, this study aimed to include these variables in testing customer satisfaction in a simplified manner. Due to the unique business format of agricultural businesses, it made it possible to measure customers perceived satisfaction towards the business as a whole, the business units independently, the overall drivers, as well as the drivers inherent in each business unit. From the literature it was determined that overall satisfaction is a better indicator of satisfaction than transaction-specific satisfaction, as it has a stronger influence on repurchases intentions. However, by not focusing on transaction-specific satisfaction, but rather inherent driver satisfaction, it is clear that the majority of the business units are perceived to perform better as a whole when compared to a calculation of the drivers' averages. Therefore, it could be presumed that a customers' overall perception of performance of a business unit would yield a better result than when each driver in the business unit are examined individually. Also, according to the expectancy-perception model of satisfaction, if there is a gap between perception and expectations, a customer can either have assimilation tendencies or contrast tendencies, where he/she exaggerates the discrepancy and makes it larger than reality. The customer would therefore communicate more satisfaction than is really the case. It seems that in the case of the better performing business units, contrast tendencies are displayed, while in the case of the worst performing business units, either assimilation tendencies or neutral confirmation are displayed, as the two values are very close to each other. So, with the better performing business units, the results thus indicate that there was a positive confirmation that leads to the ultimate satisfaction. However, in the case of the worst performing business units, there were either low expectations or low perceptions (neutral confirmation) or the customers adjusted their perceptions downwards when it differed from their expectations (assimilation tendency).

The first objective of this paper was to test customers' satisfaction towards all of the business units and the organization as a whole, as well as all of the drivers inherent in the business units and the overall organization; and establish an improved understanding of what satisfy customers in this unique industry. The second objective was to determine whether customers rate a business unit on average better or worse than an average of all of the drivers inherent in each business unit and the results indicated that for the better performing business units, the business units were perceived to be much better than their averages. Also, the worst performing business units' results indicated that their overall perception and the averages of the drivers performed more or less the same. It seems therefore, that when customers are satisfied, they would exaggerate their satisfaction and even if they experience a service failure, they would fall back on their satisfaction levels of past experiences (overall satisfaction) rather than decreasing satisfaction.

The managerial implications of this study are that it is essential to test customer satisfaction not just by focusing on service, but also the other three drivers of customer satisfaction. By concentrating on a more simplified method (as was used in this study), it would be easier to pinpoint problem areas within a specific business unit, in an effort to increase customer satisfaction of the entire business unit and ultimately that of the organization as a whole. When a business unit is perceived to perform well, customers would tend to remain satisfied, even when service failures do occur. This paper contributes to the limited research available on customer satisfaction of agricultural businesses, as well as to consider the expectancy-perception model of satisfaction and the link between transaction-specific and overall satisfaction with repurchase intention from another standpoint, i.e. by including the drivers of customer satisfaction. By knowing your customers and their perceptions, it would be possible to not only survive, but flourish in an industry with fierce rivalry.

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# THE ROLE OF ENERGY CONSUMPTION IN ENVIRONMENTAL KUZNETS CURVE IN SOUTH KOREA

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## ABSTRACT

*This study examines the integrative relationship between per capita energy consumption, per capita income and per capita carbon dioxide emissions during 1971–2010 in South Korea. The short-run and long-run relationships are estimated using the autoregressive distributed lag approach. Per capita carbon dioxide emissions are then forecasted for the next decade, using the estimated model. The results indicate (i) an inverted U-shaped relationship between income and carbon dioxide emissions (the Environmental Kuznets Curve), (ii) energy consumption is a major contributor to such emissions, and (iii) the long-run elasticity of carbon dioxide with respect to energy consumption is larger than its short-run elasticity. The forecast also shows that managing energy consumption would curb carbon dioxide emissions.*

**JEL:**Q2, Q3, Q4

**KEYWORDS:** Carbon Dioxide Emissions, Energy Consumption, EKC

## INTRODUCTION

The Intergovernmental Panel on Climate Change report (IPCC, 2007) identified the risks associated with climate change as some of the most significant environmental concerns of our age. Economic growth and energy consumption have the potential to increase greenhouse gas (GHG) emissions, particularly carbon dioxide (CO<sub>2</sub>) emissions. In an effort to mitigate these risks, several industrialized countries, including South Korea, agreed to sign the Kyoto Protocol, which set binding obligations on these countries to decrease their GHG emissions levels. South Korea has the ninth highest level of carbon dioxide emissions in the world, and hence, it is critically important that the South Korean government decrease these emissions. The nature of the relationship between output and environmental pollution and the relationship between output and energy consumption have been controversial issues. The empirical findings are equivocal (Ang, 2008). More recent studies have examined a combination of both relationships (Zanag and Cheng, 2009; Acaravci and Ozturk, 2010).

The first strand, which examines the relationship between environmental pollutants and income, has been studied extensively. Whether economic development increases, environmental pollution is critically important to designing policy strategies. Most empirical studies have attempted to test the Environmental Kuznets Curve (EKC) hypothesis, following the work of Grossman and Krueger (1995), Selden and Song (1994), who proved the inverted U-shaped relationship between per capita income and environmental degradation. According to the EKC, during the initial phase of economic development, environmental degradation increases with per capita income, but then decreases with per capita income after reaching a threshold. Stern (2000) and Dinda (2004) provide extensive reviews of the EKC, and Agras and Chapman (1998), Schmalensee et al. (1998), and Zaim and Taskin (2000) have all attempted to prove the EKC. More recent studies on this topic include those of Ang (2008), Shabaz et al. (2013), and Pao et al. (2012). However, the empirical findings from these studies are mixed and are dependent on factors such as econometric methods and data, industry structures, times, and governmental interventions. Thus,

an increase in per capita income does not necessarily guarantee a reduction in environmental pollution. The second strand examines the relationship between energy consumption and output and suggests that output and energy use are jointly determined. This is because greater economic development is expected when energy consumption increases. However, more efficient energy use may also contribute to economic development (Halicioglu, 2009).

Following Kraft and Kraft (1978), an increasing number of studies have employed both a cointegration approach and Granger causality to examine the relationship between these two factors. Recent examples include the studies of Narayan et al. (2005), Belloumi (2009), and Pao (2009), but they have yielded contradictory results. The disparate empirical findings might be due to different approaches and data. For example, Glauser and Lee (1997) have demonstrated that failing to explain non-stationary and cointegration may lead to incorrect conclusions. The third strand integrates the above two approaches and examines the dynamic relationship between income, energy consumption, and environmental pollutants. Soytas et al. (2007) and Ang (2007) made an initial attempt to use this integrative approach. Recent studies include those of Halicioglu (2009), Soytas et al. (2009), Pao et al. (2011), Pao et al. (2012), and Chandra and Tang (2013). This study examines the integrative relationship between per capita energy consumption, per capita income and per capita CO<sub>2</sub> emissions.

The model estimated from the results is then employed to determine how per capita CO<sub>2</sub> emissions change in response to changes in energy consumption, given other variables. To this end, we adopt the autoregressive distributed lag (ARDL) approach suggested by Pesaran et al. (2001), Pesaran and Shin (1998). The ARDL approach has a number of advantages over the standard Engle and Granger (1987) procedure: (i) the bounds test does not require the same order of integration for time series data because the test allows a mixture of I(1) and I(0) variables; (ii) the test is appropriate for a small sample size; and (iii) the ARDL approach manages endogeneity between the variables by using lagged variables. Furthermore, the Zivot–Andrew (1992) unit root test and the Gregory–Hansen (1996) cointegrating test are employed to examine whether structural breaks affect the stability of the data and our model. To the best of our knowledge, this is the first study to examine the dynamic relationship between per capita energy consumption, per capita income and per capita carbon dioxide emissions, while considering structural changes in South Korea. This case study provides general ideas that can be used to guide policy strategies. The rest of this paper is organized as follows: Section 2 discusses the basic EKC model and outlines the econometric method. Section 3 presents the data analysis and empirical results. Finally, Section 4 describes potential policy implications and concludes the paper.

### Material and Methods

We use the double log form to examine the long-run relationship between per capita carbon dioxide emissions, per capita energy consumption and per capita real gross domestic product (GDP) because the log-linear specification provides consistent empirical findings (Shabaz et al., 2013):

$$\ln\text{CO}_t = \alpha_0 + \alpha_1 \ln E_t + \alpha_2 \ln Y_t + \alpha_3 \ln Y_t^2 + \varepsilon_t \quad (1)$$

where CO<sub>t</sub> represents carbon dioxide (CO<sub>2</sub>) emissions (measured in metric ton per capita), E<sub>t</sub> represents energy consumption (measured in ton of oil equivalent per capita), Y represents income per capita (real GDP per capita), Y<sup>2</sup> is the square of Y, and ε<sub>t</sub> is the error term. The relationship between per capita income and per capita carbon dioxide emissions can be mixed. If α<sub>1</sub> > 0 or (α<sub>1</sub> < 0) when α<sub>3</sub> = 0, there is a monotonically increasing (or decreasing) relationship between per capita income and per capita CO<sub>2</sub> emissions. The EKC hypothesis indicates an inverted U-shaped relationship between per capita carbon dioxide emissions and per capita

income (i.e.,  $\alpha_2 > 0$  and  $\alpha_3 < 0$ ). This means that, if income per capita increases, carbon dioxide emissions first increase, but then decrease after reaching a certain threshold. The energy consumption parameter is expected to be positive ( $\alpha_1 > 0$ ) because rising energy consumption stimulates CO<sub>2</sub> emissions.

We employ the ARDL cointegrating approach developed by Pesaran and Shin (1998) and Pesaran et al. (2001) because it has certain advantages over the standard Engle–Granger (1987) and Johansen (1988) approaches. First, it allows a mixture of I (1) and I (0) variables, unlike the traditional approaches that need the same order of integration for time series data. Second, the ARDL approach is appropriate for small samples. Third, the ARDL approach allows parameters of variables with different lags, and fourth, endogeneity problems can be managed by including lagged variables. However, the ARDL approach is invalid if the order of integration of any variable is greater than one. Therefore, we use a unit root test to ensure that all variables are less than I (2). We conduct the Phillip–Perron (PP) (1988) test since it corrects for serial correlation and heteroskedasticity. The Kwiatkowski–Phillips–Schmidt–Shin (KPSS) (1992) test and Zivot–Andrews (ZA) (1992) test complement the PP test. Unlike the PP test, the KPSS test assesses whether the stationary of the time series is suitable for a small sample size. The ZA test also considers structural changes in the data.

The ARDL cointegrating approach, suggested by Pesaran and Shin (1998) and Pesaran et al. (2001), is conducted as follows: (i) a Wald or F-test on the unrestricted error correction model in Equation (2) tests whether a long-run relationship between the variables exists; (ii) the ARDL model in Equation (3) is used for the long-run relationships; and (iii) the dynamic error correction model derived by the ARDL model is used to examine the short-run relationships among the variables and the speed at which lnCO<sub>2</sub> recovers to a long-term equilibrium. The unrestricted error correction model shown in Equation (2) is used to test for a cointegration relationship between income, energy consumption, and CO<sub>2</sub> emissions (Pesaran et al. 2001; Narayan, 2005).

$$\Delta \ln CO_t = \beta_0 + \sum_{i=1}^{a1} \beta_{1i} \Delta \ln CO_{t-i} + \sum_{i=0}^{b1} \beta_{2i} \Delta \ln Y_{t-1} + \sum_{i=0}^{c1} \beta_{3i} \Delta (\ln Y_{t-1})^2 + \sum_{i=1}^{d1} \beta_{4i} \Delta \ln E_{t-i} + \delta_1 \ln CO_{t-1} + \delta_2 \ln Y_{t-1} + \delta_3 (\ln Y_{t-1})^2 + \delta_4 \ln E_{t-1} + \varepsilon_{1t} \quad (2)$$

The variables are the same as those in Equation (1), and  $\Delta$  is the difference operator. An appropriate maximum lag is selected based on an Akaike information criterion (AIC). To ascertain the existence of cointegration, the null hypothesis of no cointegration (i.e.,  $H_0: \delta_1 = \delta_2 = \delta_3 = \delta_4 = 0$ ) should be rejected. The F-statistic obtained by the Wald test has a non-standard distribution, and hence, it is compared against the critical values generated by Pesaran et al. (2001). If the F-statistic is greater than the upper critical bounds value, then the null hypothesis is rejected, indicating cointegration. If the F-statistic is below the lower critical bounds value, this indicates no cointegration. If the statistic lies within the bounds, the results become inconclusive. However, the critical values provided by Pesaran et al. (2001) are inappropriate when a sample size is small. Thus, this study employs the critical values provided by Narayan (2005) for small samples (30 to 80). The Gregory–Hansen (1996) cointegrating test will complement the ARDL bounds test by managing a structural break. Once there is evidence of cointegration, the following long-run ARDL (p1, q1, q2, q3, q4) model is specified (Dergiades and Tsoulfidis, 2008):

$$\ln CO_t = \gamma_0 + \sum_{i=1}^{p_1} \phi_{1i} \ln CO_{t-i} + \sum_{i=0}^{q_1} \gamma_{1i} \ln Y_{t-1} + \sum_{i=0}^{q_2} \gamma_{2i} (\ln Y_{t-1})^2 + \sum_{i=0}^{q_3} \gamma_{3i} (\ln Y_{t-1})^3 + \sum_{i=0}^{q_4} \gamma_{4i} \ln E_{t-i} + \varepsilon_{2t} \quad (3)$$

The long-run multipliers can be obtained by the following equation:

$$a_0 = \gamma_0 / (1 - \sum_{i=1}^{p_1} \phi_{1i}), a_j = \gamma_m / (1 - \sum_{i=1}^{p_1} \phi_{1i}), \text{ with } j=2, 3, 4, 5 \quad (4)$$

m=2, 3, 4, 5

The optimal lag lengths ( $p_1, q_1, q_2, q_3, q_4$ ) are determined from an AIC or other suitable model. The long-run multipliers represent the long-run elasticity of carbon dioxide emissions with respect to each variable. The ARDL model in Equation (3) can be represented as the error correction model in Equation (5), which integrates short-run dynamics with the long-run stable equilibrium.

$$\Delta \ln CO_t = b_0 + \sum_{i=1}^{a_1} \phi_{1i} \Delta \ln CO_{t-i} + \sum_{i=0}^{b_1} b_{1i} \Delta \ln Y_{t-i} + \sum_{i=0}^{c_1} b_{2i} \Delta (\ln Y_{t-1})^2 + \sum_{i=0}^{d_1} b_{4i} \Delta \ln E_{t-i} + \psi ECT_{t-1} + \varepsilon_{3t} \quad (5)$$

Here,  $ECT_{t-1}$  is an error correction term, which is employed by the residuals estimated from the ARDL model in Equation (3), and  $\psi$  is the coefficient of the error correction terms. The latter term measures the speed at which the previous disequilibrium recovers to equilibrium, and should be significant with a negative sign. The coefficients of the differenced variables represent the short-run elasticity of carbon dioxide emissions with respect to each variable.

## RESULTS

South Korea is suitable for a case study since the government is urgently trying to mitigate the levels of carbon dioxide emissions in the country, as it is among the top ten generators of carbon dioxide in the world. The country's industries are energy intensive, and thus, energy consumption may contribute to producing carbon dioxide emissions. The hypothetical scenario depicted here can add to planners' and policymakers' knowledge of carbon dioxide emissions and its determinants, which, along with accurate forecasting, can help them make more informed decisions. The annual data used in this paper (1971 to 2010) are per capita real GDP (Y) (in constant US\$ in 2005), per capita energy consumption (EC) (TOE per capita), and CO<sub>2</sub> emissions (tCO<sub>2</sub> per capita). The annual time series data are obtained from World Development Indicator (WDI) database. For modeling purposes, all variables were converted to their natural logarithm form, which reduces heteroskedasticity and serial correlation.

Table 1: Descriptive Statistics of Variables

Variables	Mean	Std. Dev.	Min	Max
Y (US\$ per capita)	12112.02	7508.58	2633.14	25525.10
E (TOE per capita)	2.41	1.47	0.52	4.70
CO <sub>2</sub> (tCO <sub>2</sub> per capita)	5.95	3.05	1.67	10.63

As stated earlier, we conducted PP (Test 1), KPSS (Test 2) and ZA (Test 3) tests to ascertain the amount of integration. The KPSS and the ZA tests complement the PP test because the KPSS test is useful for small samples, and the ZA test manages a structural break by determining the break

point endogenously from the data. The results in Table 2 show that the series (lnCO, lnE, lnY, lnY<sup>2</sup>) are all nonstationary in their levels, but are stationary in their first differences (i.e., I(1)). The ARDL bounds test is implemented for the variables in Equation (2), and for comparative purposes, the Engle–Granger and the Johansen approach, as per Gregory and Hansen (1996), are conducted as well. Table 3 shows the results.

Table 2: Unit Root Tests

	Test 1 (PP)		Test 2 (KPSS)		Test 3	
	Levels	1st diff.	Levels	1st diff.	Levels	1st diff.
lnCO	-1.039 (1)	-6.474 (0)**	0.345 (1)	0.048 (0)**	-2.676 (1)	-7.988 (0) **
lnY	-0.164 (1)	-4.762 (0)**	0.421 (1)	0.078 (0)**	-1.771 (1)	-6.621 (0) **
lnY <sup>2</sup>	-1.981 (1)	-5.138 (0) **	2.020 (1)	0.449 (0) **	-2.206 (1)	-6.675 (0) **
lnE	-0.016 (1)	-5.143 (0)**	0.359 (1)	0.115 (0)**	-1.496 (1)	-7.373 (0) **

\* and \*\* indicates significance at the 1% and 5% significance levels and the values in parentheses indicate the number of lags determined by the AIC or SIC. The KPSS test has a null hypothesis of a stationary variable, while the other tests have a null hypothesis of a unit root.

Before conducting the ARDL bounds test, a suitable lag length is determined using the AIC, which is suitable for a small sample (Shahbaz et al. 2013). The null hypothesis of no cointegration is rejected at the 5% significance level because the F-statistic is 3.240 greater than the critical value provided by Narayan (2005). The standard Engle–Granger and Johansen approaches support the existence of cointegration, which means the variables are linked in a long-run relationship. In addition, the Gregory–Hansen (1996) test is performed for cointegration with regime shifts. The null hypothesis is that there is no cointegration. The alternative hypothesis is that cointegration exists with a single shift at an unknown point in time. The null hypothesis is not rejected. Thus, we can confirm that the variables are cointegrated in case of South Korea.

Table 3: Cointegration Test Results

ARDL	Engle–Granger	Johansen	Gregory–Hansen
3.240**	-3.508** (-2.964)	68.706 27.228* 8.195	Rank 0 Rank 1 Rank 2

The optima lag lengths are selected using AIC or SIC, and \*\*  $p < 0.05$

Table 4 shows the results of the ARDL (1, 1, 0) and ARDL (1, 1, 1, 1) models, based on the AIC and setting the maximum lags to two. These models fulfill several diagnostic tests, including heteroskedasticity, serial correlation, and normality. The likelihood-ratio test was conducted for the null hypothesis of the restricted ARDL (1, 1, 0) model versus the unrestricted ARDL model (1, 1, 1, 1). Based on the results, the unrestricted ARDL (1, 1, 1, 1) model is preferred because the likelihood-ratio test statistic (6.61) is greater than the critical value and the hypothesis is rejected at the 5% significance level.

Table 4: Ardl Results

Variables	Model-1	Model-2
lnCO2(-1)	0.600*** (0.135)	0.778*** (0.156)
lnE	1.025*** (0.097)	1.047*** (0.119)
lnE(-1)	-0.633*** (0.157)	-0.803*** (0.206)
lnY	-0.007	-3.107**

	(0.061)	(1.489)
lnY(-1)		2.629*
		(1.412)
lnY <sup>2</sup>		0.171**
		(0.082)
lnY <sup>2</sup> (-1)		-0.148*
		(0.077)
Constant	1.019**	2.709**
	(0.549)	(1.052)
R-squared		0.999
Normality (Skewness/Kurtosis)	13.04/0.04	4.05/1.08
Serial Correlation	1.426	0.317
Heteroskedasticity	0.37	0.02

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , and the values in parentheses indicate standard errors.

The estimated ARDL model (Model-2) is used to measure the long-run elasticities, using Equation (4). The error correction model in Equation (5) is used to measure the short-run effects and the speed at which the previous disequilibrium recovers to equilibrium. The results are shown in Table 5. The long-run energy consumption elasticity is 1.09, which means that a 1% increase in per capita energy consumption leads to a 1.09% increase in per capita carbon dioxide emissions. The parameters of per capita income (-) and square of income (+) fulfill the EKC hypothesis. The significance of the coefficient of the error correction term (ECT) (-0.99) implies that short-term deviations in equilibrium between variables adjust quickly back to the long-run equilibrium. Following Pao et al. (2011), the variables take one year to recover to equilibrium when the inverse of the absolute value of the ECT coefficient is calculated.

As expected, the energy consumption has significant and positive effects on carbon dioxide emissions, and the long-run energy consumption elasticity is larger than short-run energy consumption elasticity. The short-run effects of income terms are not significant. This is because energy consumption and income do not change radically in the short-run, and the long-run effects are stronger than the short-run effects.

Table 5: Long-Run and Short-Run Effects: Error Correction Models

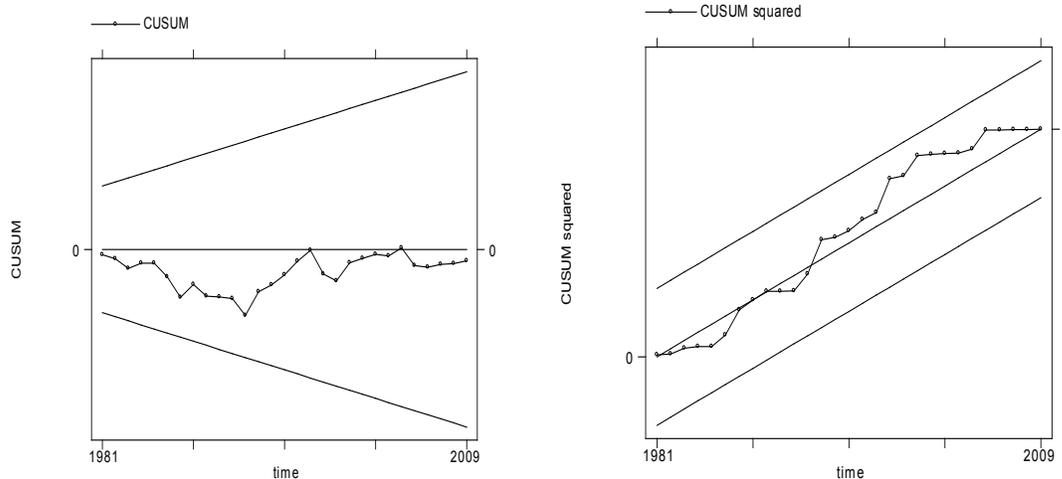
Variables	Coefficients	t-statistics
$\Delta \ln \text{CO}_{t-1}$	0.74***	2.82
$\Delta \ln E_t$	1.12***	10.19
$\Delta \ln E_{t-1}$	-0.85***	-3.05
$\Delta \ln Y_t$	-1.04	-1.44
$\Delta \ln Y_{t-1}^2$	0.05	1.33
ECT	-0.99***	-3.11
Constant	-0.00	-0.04
Long-run Relationship	ECT = $\ln \text{CO}_2 - 1.09 \ln E - 2.15 \ln y + 0.1 \ln Y^2$	
R-squared	0.999	
Normality(Skewness/Kurtosis)	4.05/1.08	
Serial Correlation	0.317	
Heteroskedasticity	0.02	

t-statistics in parentheses, and \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

The model fulfills the diagnostic tests for non-normality and serial correlation (heteroskedasticity). One possible concern with the ECM model is that the estimated parameters may change over time. If a structural break exists, the parameters are then unstable (Pao et al., 2011). We check the stability of the parameters using the cumulative sum (CUSUM) and cumulative sum of squares (CUSUMSQ) tests, as suggested by Brown et al. (1975). Unlike the Chow test, which requires a predetermined break point, the CUSUM and CUSUMSQ tests do not need to know where the structural break occurs. Figure 1 provides the plots of the CUSUM and

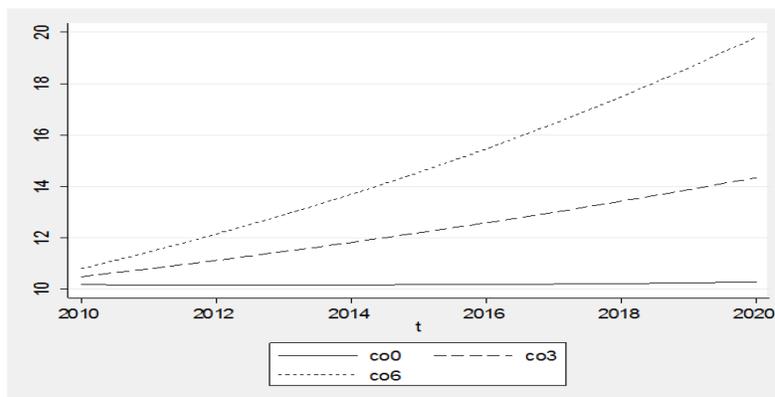
CUSUMSQ test statistics, which fall inside the 95% confidence band. This means that the estimated parameters are stable over the period shown.

Figure 6: Cusum and Cusumsq Test Results



Next, the carbon dioxide emission scenarios are forecasted based on the estimated long-run equilibrium model. The three scenarios hypothesize what will happen to changes in carbon dioxide emissions per capita in response to changes in energy consumption, given other variables: (i) no change (scenario 1: co0); (ii) a 3% increase in energy consumption (scenario 2: co3); and (iii) a 6% increase in energy consumption (scenario 3: co6). We assume a 3% growth in per capita income and forecast per capita carbon dioxide emissions from 2010 to 2020. Figure 2 shows the results for each of the three scenarios (co0, co3, co6). These results indicate that per capita carbon dioxide emissions are elastic with respect to energy consumption, which ranges from 4% to 100% in 2020. Therefore, managing energy consumption will contribute to curbing carbon dioxide emissions, *ceteris paribus*.

Figure 1: Forecasts of Carbon Dioxide Emissions in South Korea (2010–2020)



## CONCLUSIONS AND POLICY IMPLICATIONS

This study examined the dynamic effects of per capita energy consumption and per capita income on per capita carbon dioxide emissions in South Korea. The ARDL approach was employed to examine the dynamic relationship. The estimated model was then used to forecast carbon dioxide emissions for 2010–2020, depending on certain scenarios. The empirical results suggest the following findings. First, a long-run stable equilibrium relationship exists, and short-term deviations from this equilibrium quickly readjust, taking approximately one year to do so. Second, the long-run elasticity of per capita carbon dioxide with respect to per capita energy consumption is elastic. Third, the inverted relationship between per capita income and per capita carbon dioxide emissions (the EKC hypothesis) is supported. Fourth, the forecasted carbon dioxide emissions from certain scenarios range from 4% to 100% in 2020.

The results of this study suggest important policy implications for public planners in South Korea who want to curb carbon dioxide emissions. First, the evidence of EKC indicates that economic growth or higher income does not mean higher carbon dioxide emissions. Thus, there is much scope for developing other options, such as energy conservation strategies. Second, the evidence also suggests that energy consumption is a major contributor to carbon dioxide emissions. Therefore, managing per capita energy consumption could be an important policy strategy to restrain per capita carbon dioxide emissions. The forecasts of carbon dioxide emissions based on certain scenarios underlines the significance of managing energy consumption. The main contribution of this paper is that it is the first attempt to examine the dynamic relationships between per capita energy consumption, per capita income and per capita carbon dioxide emissions in South Korea. This paper also considers structural changes within the data and models. Even though this study considers small samples and endogeneity, the results should be interpreted with caution.

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# CAUSALITY TEST OF BUSINESS RISK AND CAPITAL STRUCTURE IN A PANEL DATA OF NIGERIAN LISTED FIRMS

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## ABSTRACT

*In economic sense, some events may be subject to spill-over from economy-wide or world-wide shocks. For instance a country's fiscal policy, such as government spending, taxation, and borrowings, influence both the pattern of economic activity and also the level and growth of aggregate demand, output and employment. Therefore, causal relationship may flow from business risk to financing structure of companies and vice versa. The objective of this study is to show that Granger (1969) Causality test can be conducted on a panel data comprising of time series and cross-sectional data set. This study used a dynamic panel data of publicly listed firms in Nigeria for the period of 2000-2006, to analyse the direction of causality between our measures of leverage and business risk using the causality approach described by Granger (1969). The overall, results indicates that increases in either business risk or total liabilities as a proportion of total assets do not Granger-cause or predict higher future values of both variables over the short-to-medium term. The implication is that an analysis of the relationship between capital structure and business risk in Nigeria could be estimated in a dynamic panel framework*

**JEL:** 320

**KEYWORDS:** Capital structure, business risk, Granger causality, Nigeria

## INTRODUCTION

Financial researchers have often use contemporary pair-wise correlation coefficients to analyse of the degree of correspondence of directional movement in the variable of interests. However, such estimated pair-wise correlation coefficients do not indicate whether the assumed relationship is unidirectional or bi-directional. For instance, it does not often show whether the dependent variable is causing change in the independent variable or vice versa Nwachukwu and Mohammed (2012). In other words some global events may be subject to spill-over from economy-wide or world-wide shocks. For instance a country's fiscal policy, such as government spending, taxation, and borrowings, influence both the pattern of economic activity and also the level and growth of aggregate demand, output and employment. It is therefore important to realize that changes in fiscal policy affect both aggregate demand (AD) and aggregate supply (AS) including that for a company's capital.

In order to capture the impact of these changes in aggregate demand and aggregate supply researchers such as Granger, *et al.*(2000) and Koop (2006) employ econometric method to statistically detect the direction of the causal relationship between two time series variables using the Granger causality test. Similarly, previous studies on capital structure including Morley (2006) and Berger and Patti (2006), have utilized the Granger causality test in their panel data analysis. The aim of this paper is to use causality test as described by Granger (1969) to examine the directional relationship between business risk and capital structure of Nigerian listed firms. For brevity, we limit our analysis of the direction of causality by assuming that the ratio of total liabilities to total assets (LEV) and earnings risk (STDEV) form a simple two-variable model

without the necessity of controlling for the effect of the other factors influencing the capital structure decisions of Nigerian companies.

## DATA COLLECTION

The data for our study were obtained directly from the Nigerian Stock Exchange and to check the authenticity of data, we compared it with those made available by some of the companies on their respective web sites. Further, we excluded firms with less than 8 years of continuous time series data on their total liabilities, total assets, and earnings before interest and tax between 2000 and 2006. We also dropped firms that were cross-listed on both the domestic and overseas capital markets. This helped to avoid the confounding implications of disparities in economic structure, exchange rates, legislation, and the level of development of local and foreign markets. The sample of our study comprises seven annual observations for 94 companies, thus 658 observations. On the whole, they make up more than three-quarters of shares traded on the Nigerian Stock Exchange (NSE). We examine the relationship between these variables using annual data over the period 2000-2006. The last seven years were chosen in order to avoid the uncertainties associated with the Nigerian elections in 1999 and in 2007.

### Theoretical Framework of Bi-Variate Granger Causality Test

The theoretical framework of the bi-variate Granger-causality test is based on the premise that a causal series contains information about the response variable that is unavailable from any other source (Pesaran *et al.* 2001). A variable ( $X_{it}$ ) for example, is said to cause another ( $Y_{it}$ ) if the forecast for the current value of  $Y_{it}$  is significantly improved by the inclusion of the past value of  $X_{it}$  after controlling for the past value of  $Y_{it}$  (Pesaran *et al.* 2001). Given the challenges of Nigeria's business environment, it would not be impossible to have a causality relationship between capital structure and earnings volatility (*business risk*) running in both directions.

It therefore follows that causation may run negatively from earnings risk to the total leverage ratio, providing that company managers are more inclined to retain a larger proportion of a marginal increase in earnings rather than distribute them to shareholders during periods of economic uncertainty. Thus, the additional retained profit is then substituted for debt capital. This implies that a forecast of changes in earnings variability would be followed by changes in the total leverage ratio in the opposite direction. Previous studies on capital structure including Morley (2006) and Berger and Patti (2006), have utilized the Granger causality test in their panel data analysis. The perceptive ideas for bivariate causality are usually investigated by isolating the impact of the two variables of interest, in this case the leverage ratio of our sampled firms and our measure of earnings variability (business risk) assuming other variable are held constant. Hence, we regressed lags of the two variables of interest using the following specifications:

$$Y_{i,t} = \eta_0 + \sum_{j=1}^m \alpha_j^y Y_{i,t-j} + \sum_{j=1}^n \beta_j^y X_{i,t-j} + f_i^j + \varepsilon_{i,t}^y \quad (1)$$

$$X_{i,t} = \eta_0 + \sum_{j=1}^m \alpha_j^x X_{i,t-j} + \sum_{j=1}^n \beta_j^x Y_{i,t-j} + f_i^x + \varepsilon_{i,t}^x \quad (2)$$

where the term  $\eta_0$  is an overall group constant,  $f_i$  is the company-specific effect and  $\varepsilon$  is the error term. We assume that the disturbance terms for the two equations are uncorrelated with the observable variable on the right hand side and that they are normally identical and independently distributed. The coefficient  $\beta_j^y$  in equation 2.1 is utilized in our assessment of whether Granger-causality runs from the variable X to Y, while the coefficient  $\beta_j^x$  in equation 2 is employed in our computation of Granger-causality running in the opposite direction from Y to X.

## METHODOLOGY

The variables used in this paper are the natural logarithm of debt ratio and the volatility of the ratio of total earnings before interest and tax (EBIT) relative to total assets. The natural log as opposed to untransformed ratios allow us overcome the problem of skewed distribution as a result of the inclusion of companies with varying dimensions in their sales variability and asset structure. Harris, *et al.* (2005) has suggested that some skewed data can be transformed to normally distributed data and then analysed using more accurate parametric testing. In addition, the use the natural log was also based on the result of a nested test. The non-nested test of linear versus log linear equations is obtained by estimating the linear equations and saving the predicted value of the dependent variables. We then ran the log-linear regression equation and include the fitted dependent variable from the linear model. The decision criterion is that if this additional predicted variable is significant at the conventional five per cent, then the log-linear equation is the wrong specification for analysing the data.

The test result rejects the significance of the fitted dependent variable, thus implying that the log-linear equation is an acceptable specification for analysing our data. Furthermore, dynamic heterogeneous models require selecting the appropriate lag length for the individual company equation. There are two methods of information criteria (i) Akaike Information Criterion (AIC), and (ii) Schwarz Criterion (SC). The AIC is often used in model selection for the non-nested alternative, while the Schwarz Criterion is an alternative to the AIC that imposes a larger penalty for additional coefficients. Again, following the empirical approach in dynamic panel study by Gaud *et al.* (2005) and Nwachukwu (2009) among several other studies, we settled for specifications with four-year lags for each explanatory variable that is  $m = n = 4$ . This is represented in equation 4.1 and 4.2 below. We first experimented with longer time lags of five and six years but our data proved too short to accommodate such lag periods.

We begin with a max lag of 6 and slowly eliminated the ones that are insignificant using the Schwarz Bayesian criterion. Subsequently, the Granger causality test in equations 4.1 and 4.2 were estimated using four annual lags of the percentage changes in the total debt ratio and the standard deviation of total earnings relative to total assets (business risk). The regression analysis deploys a total of 609 observations generated from the panel data of our ninety-four companies over the period 2000 – 2006. The use of annual observation means that we can consider separately short and long-run Granger causality effects (Elbadawi and Mwega, 1998; Attanasio *et al.* 2000). Consequently, equations 4.1 and 4.2 above are estimated using the three instrumental variables techniques of GMM-IV, SURE and 3SLS mentioned above and the results presented in Table 1.

## CONCLUDING COMMENTS

The study tests for the direction of causality between our measures of leverage and business risk using the causality approach described by Granger (1969). Overall, the results in Table 1 suggest that increases in either business risk or total liabilities as a proportion of total assets do not Granger-cause or predict higher future values of both variables over the short-to-medium term. The results show that the previous debt ratios lag 1, 2 and 4 are statistically significant under the

SURE estimation. The implication is that an analysis of the relationship between capital structure and business risk in Nigeria could be estimated in a dynamic panel framework. Nonetheless, we recognised that the causal predictions of such a simple two-variable empirical analysis may be biased because of the effect of omitted firm-specific variables that may impact on the capital structure choices of companies.

Table 1: Result of Granger Causality Analysis Between Capital Structure and Business Risk in Nigeria During the Period 2000-2006

number of observations 609						
models	gmm-iv		sure		3sls	
	column 1	column 2	column 3	column 4	column 5	column 6
dependent (y) variable	dllev	stdev	dllev	stdev	dllev	stdev
independent (x) variables						
constant	-0.238 [-0.102]	1.102 [0.906]	0.178 [1.269]	<b>0.070</b> [4.961]	0.556 [0.281]	1.220 [0.876]
dllev (-1)	-0.138 [-0.194]	-0.294 [-0.805]	<b>-0.109</b> [-1.728]	-0.006 [-0.939]	-0.476 [-0.789]	-0.318 [-0.752]
dllev (-2)	-0.252 [-1.315]	0.087 [0.663]	<b>-0.139*</b> [-2.161]	0.008 [1.288]	-0.228 [-1.116]	0.093 [0.644]
dllev (-3)	-0.173 [-1.304]	-0.029 [-0.354]	-0.049 [-0.819]	-0.005 [-0.879]	-0.190 [-1.382]	-0.034 [-0.349]
dllev (-4)	-0.700 [-0.552]	-0.476 [-0.738]	<b>0.136</b> [1.913]	0.002 [0.304]	-1.026 [-0.886]	-0.525 [-0.646]
stdev (-1)	0.011 [0.002]	2.243 [0.940]	0.464 [0.752]	<b>0.311</b> [5.033]	2.719 [0.682]	2.330 [0.832]
stdev (-2)	-1.030 [-0.443]	-0.858 [-0.615]	-0.438 [-0.600]	<b>0.200</b> [2.727]	-1.082 [-0.487]	-0.773 [-0.496]
stdev (-3)	0.383 [0.0393]	3.647 [0.718]	-0.173 [-0.214]	0.124 [1.531]	5.544 [0.661]	3.836 [0.651]
stdev (-4)	3.589 [0.134]	-11.004 [-0.821]	-0.178 [-0.231]	-0.087 [-1.127]	-9.069 [-0.403]	-12.110 [-0.767]
sum beta coefficients <sup>5</sup> wald test 1: $\chi^2$ [5];(probability value)	2.953 [0.840]	-5.971 [0.444]	-0.326 [0.483]	-0.001 [0.961]	-1.887 [0.880]	-6.717 [0.443]
sum of alpha coefficients <sup>5</sup> wald test 2: $\chi^2$ [5];(probability value)	-1.264 [0.495]	-0.711 [0.429]	-0.162 [0.260]	<b>0.548</b> [0.001]	1.920 [0.244]	-0.785 [0.498]
implied long-run granger-causality coefficients wald test 3: $\chi^2$ [7];(probability value)	1.304 [0.918]	-3.489 [0.435]	-0.280 [0.010]	-0.002 [0.001]	-0.646 [0.784]	-3.764 [0.443]

<b>null no serial correlation up to lag order one</b>						
ljung-box q-statistics $\chi^2$ [1];(probability value)	[0.658]	[0.359]	[0.935]	[0.349]	[0.295]	[0.300]
<b>null no serial correlation up to lag order two</b>						
ljung-box q-statistics $\chi^2$ [1];(probability value)	[0.903]	[0.522]	[0.993]	[0.619]	[0.554]	[0.470]
sargan test	[0.97]	[0.999]				

**Notes:**

1. The estimated coefficients in bold italics are significant at the conventional five percent level
2. The figures in brackets[...] are the t-statistics unless otherwise stated
3. The equations estimated in columns 1 and 3 and 5 are of the form in equation 4.1 while the models in columns 2, 4 and 6 are of the form in equation 4.2
4. The sum of beta coefficients is the sum of the coefficients on the lagged explanatory (x) variable in the respective equations. The sum of the alpha coefficients is the sum of coefficients on the lagged dependent (y) variables in the equation concerned
5. The probability value of the sum of beta and alpha coefficients are associated with a Chi-square statistics obtained from a Wald test of the null hypothesis that such additions of the estimated causality are equal to zero.
6. The long-run Granger-causality coefficient is calculated as the sum of beta coefficients divided by one minus the sum of alpha coefficients. The probability value is for a Chi-square statistics following results of a Wald test of the hypothesis that all the beta coefficients are jointly equal to zero.
7. The probability values of the Ljung-Box statistics are obtained by applying view-residual-test function in the EViews version 6.0 to the residual of each specification 6 and 7. The results show that the null hypothesis of no first and second-order serial correlation in the difference residuals cannot be rejected at the five percent confidence.
8. The Sargan test for the GMM model in column 1 and 2 is not significant at the 5% confidence level and hence accepts the validity of our instruments.

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# USING QUANTILE REGRESSIONS TO EXAMINE THE CAPITAL STRUCTURE DECISION OF US FIRMS

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## ABSTRACT

*The paper examines the capital structure decision of 3432 US companies in the year 2006 and 2011. The paper employs quantile regression to explore the predictions of the trade-off and pecking order models. We find evidence of heterogeneity in the capital structure and the determinants of capital structure. We find the data more consistent with the trade-off theory than the pecking order theory in 2006 but find that only economic conditions matter in 2011.*

**JEL:** G32

**KEY WORDS:** Quantile Regression and Capital Structure

## INTRODUCTION

Ever since the groundbreaking work of Modigliani and Miller (1958) empirical capital structure research has been abundant. Yet a successful explanation of the wide variety of capital structures remains elusive. For example Frank and Goyal (2003) note “there is a surprising lack of consensus even about many of the basic empirical facts.” Most of the research focused on testing two competing theories. Since neither of the theories claimed to provide an explanation of the capital structure decision for all circumstances this state of affairs is perhaps understandable. This paper’s contribution is twofold. First, Korajczyk and Levy (2003) show that economic conditions along with firm specific variables determine the capital structures. Thus we will examine the capital structure determinants for two very different years. The first year, 2006, was just before the recent US recession. A period some observers (most well-known Shiller (2005)) classified as a period of “irrational exuberance”. The second year, 2011, a period shortly after the recession, is a period characterized by low interest rates and considerable risk aversion.

This allows us to study the capital structure decision in different economic environments. Second, it has been shown that the distribution of leverage ratios is highly skewed with considerable kurtosis. These observed statistical properties may result in an incomplete picture of the relationship between the leverage ratio and the firm specific variables when least square regressions are used. A better suited methodology under these circumstances is quantile regressions. Introduced by Koenker and Bassett (1978), quantile regressions allow us to examine the impact of capital structure determinants across the whole distribution rather than only at the mean of the distribution. The paper opens with a brief explanation of the two models of capital structure determination. The predictions of each model for the various determinants of capital structure are spelled out. The next section explains one quantile regression. The following section describes our data source. Then the results are presented and discussed. The paper’s conclusions are presented in the final section.

## LITERATURE REVIEW

Modigliani and Miller (1958) show that assuming away taxes, bankruptcy costs, agency costs and asymmetric information in an efficient market financial policy is irrelevant. Thus the trade-off theory focuses upon when these conditions are violated. The trade-off theory argues that firms

way the benefits of taxes and certain incentive effects against the direct and indirect costs of bankruptcy. The optimal capital structure precisely balances the costs and benefits of additional debt.

Corporate taxes in the Modigliani and Miller (1958) model provide a strong incentive for debt financing. Miller (1977) shows that personal taxes can mitigate or at least lessen this effect. DeAngelo and Masulis (1980) developed a model in which the benefits of the tax deductibility of interest are greater for profitable firms. They argue higher levels of nondebt tax shields may render the deductibility of the interest payments superfluous and thus lower the tax benefit of debt. They posit a negative relationship between the size of nondebt tax shields and book leverage. Because the tax shields may affect the market value of the firm the impact on market leverage is ambiguous. Furthermore their analysis implies that an increase in profitability allows a corporation to issue more debt. If leverage is measured using book values we may conclude there is a direct relationship between profitability and the debt ratio. The situation becomes more complex if we measure leverage using market values. Since increases in profitability may increase the market value of the firm, the effect on leverage is uncertain.

Jensen and Meckling (1976) and Jensen (1986) focus on the conflicts of interests between managers and stockholders. They argue that managers have a tendency to spend excess free cash flow on their interests at the expense of stockholder's interest. If a company chooses a higher debt ratio the fixed obligations from debt commitments can reduce the free cash flow available for managerial self-dealing and help realign the interests of the managers and stockholders. These are also called agency costs. To the extent a firm has more investment opportunities it has less need for debt to control managerial behavior. In the trade-off theory increased investment opportunities are associated with a lower debt ratio.

On the other hand, there are also negative effects of debt on firm value. That is, leverage creates incentives for risk shifting, another type of agency costs. This is the tendency for stockholders to accept high risk projects to profit on the upside potential and allow bondholders to suffer the losses if the project fails. This reduces the willingness of lenders to supply funds. To the extent the firm's assets are tangible and can serve as good collateral this lessens the lender's risk and increases their willingness to provide funds. Thus firms with high levels of net fixed assets should employ more leverage. Warner (1977) found that the direct costs of bankruptcy were about 5.5% of the asset value of the firm and only 1.4% of the value five years prior to bankruptcy. When we consider the probability of bankruptcy this suggests the expected costs of bankruptcy are not large. However, the indirect costs of bankruptcy such as the effects on customers, suppliers, and employees may be quite substantial. Since the possibility of bankruptcy rises when profitability falls, this provides another rationale for a negative relationship between leverage (measured by book values) and profitability.

To the extent a firm relies on tangible assets which can serve as collateral, the costs of bankruptcy and the costs of agency should be lower. Lenders should more willingly provide debt financing. Therefore, the greater the proportion of tangible assets, greater the expected leverage. The Pecking order model of Myers and Majluf (1984) claims the high costs associated with issuing equity securities are the supreme consideration. There are two types of costs: transactions and asymmetric information. The transactions costs are the fees associated with issuing new securities. These are highest with new equity; debt securities are next, and retained earnings has no fees. The asymmetric information costs arise from the investors believe that the managers have better information about the firm's prospect than investors. Thus, if prospects are good the management is unlikely to issue equity to share the profits with investors. Thus investors will interpret an equity issue as a negative signal and will underprice it. This problem is present for debt but in a much smaller degree. Since management understands investor's

perception and wishes to avoid the underpricing they set a hierarchy of financing. The first choice is retained earnings. Next is debt and new equity is issued reluctantly.

In a single period pecking order model debt rises when investment needs exceed the retained earnings. Controlling for profitability, leverage is directly related to retained earnings. Similarly, controlling for investment needs, profit is inversely related to debt. In a dynamic model the relationships are less clear. In this case even if investment needs exceed retained earnings a firm may not wish to issue debt if it anticipates more profitable projects and a shortage of retained earnings in the future. This possibility is less likely for a firm paying dividends as they could lower their payout rate to preserve retained earnings. Nevertheless it cannot be dismissed.

Table 1 which draws from Fama and French French (2002) summarizes our discussion. It contrasts predictions of the trade-off and pecking order theories and lists the proxies that we employ. It allows us to pull together our predictions of the determinants of leverage in the two models. First we examine predictions concerning profitability. In the pecking order model increases in profitability will lower the leverage ratio (for both book and market value measures of leverage). In the trade-off model increased profitability results in higher levels of leverage. The effect of profitability on market value measures of leverage is ambiguous as we discussed above. Second, we consider the impact of the availability of investment opportunities on leverage. The single period Pecking order model predicts the book leverage increases with the availability of investment opportunities. In the dynamic model the theory predicts that investment opportunities is inversely related to market leverage. Third, we consider the impact of tangible assets. The pecking order theory offers no prediction on their effect. The trade-off theory predicts the higher the proportion of tangible assets the greater is both book and market leverage. Finally, we consider nondebt tax shields. The pecking order theory offers no prediction of their impact on leverage. The trade-off theory suggests they will negatively impact the leverage and have ambiguous effect on market value.

Table 1: Summary of Predictions and Proxies of Pecking Order Models and the Trade-Off Model

	Proxies	Pecking Order		Dynamic Pecking Order		Trade-off Model	
		Book	Market	Book	Market	Book	Market
Determinants	Proxies						
Profitability	ET/A	-	-	-	-	+	
Investment Opportunities	V/A	+	+	-	-		
Proportion of Tangible Assets	NFA/A					+	+
Non-debt Tax Shields	Dep/A					-	-
This table draws heavily from Fama and French (2002)							
ET/A, Preinterest, pretax earnings divided by assets							
V/A The ratio of market to book value of assets							
NFA/A Net fixed assets divided by total assets							
Dep/a depreciation divided by total assets							

## DATA AND METHODOLOGY

### The Data Set Comes From Damodaran's Website.

[http://pages.stern.nyu.edu/~%20adamodar/New\\_Home\\_Page/data.html](http://pages.stern.nyu.edu/~%20adamodar/New_Home_Page/data.html). This data is free of survivorship bias. It covers 6176 companies in 101 industries. We considered the 3432 companies for which we had complete data for both of the time periods, 2006 and 2011. The use the pre-interest after-tax earnings divided by the book value of assets is our proxy for profitability. This

measure of profitability is not influenced by the company's choice of leverage. Our proxy for the availability of investment opportunities should reflect the firm's expectations for high future growth. Following Myers (1977) we use the ratio of the market to book value of assets as a proxy for expected future growth opportunities. The proportion of net fixed assets total assets measures the tangibility of the firm's assets. Finally we measure non-debt tax shield as the ratio of depreciation expense to total assets.

Table 2 provides basic descriptive statistics of the key variables for 2006 and 2011 periods. It is interesting that the leverage (market value of the debt to capital) in 2011 of 27% exceeds the ratio in 2006 of 16%. Couple of reasons could be offered for the growth in the leverage. First, the interest rates in 2011 were extremely low and may have encouraged firms to take on more leverage. Second, since we are using market leverage ratio, low interest rates could have pushed the market value of debt higher.

The table 2 shows the mean profitability measure was negative in both periods. In both periods the median value of profitability was positive and in both periods negatively skewed. This means some firms with large losses lowered the mean value. The median profitability in the 2011 period was lower than in 2006. This reflects the incomplete recovery from the recession. The remaining variables have significant skewness and kurtosis. The Jarque-Bera statistic strongly rejects the null hypothesis that any of the variables are normally distributed. The Table 2 illustrates the heterogeneity of data on both the capital structures and the proposed determinants of capital structure

Table 2: Descriptive Statistics For 2006 and 2011

<b>2006 descriptive statistics</b>						
	market debt to capital	profitability	investment opportunity	net fixed assets to total assets	non-debt tax shield	
mean	0.1576	-0.0908	0.5054	0.2063		0.0370
median	0.0913	0.0400	0.0013	0.1179		0.0288
maximum	0.9961	3.5256	380.0400	1.0000		3.0000
minimum	0.0000	-17.5000	0.0000	0.0000		0.0000
std. dev.	0.1861	0.7734	7.9840	0.2338		0.0674
skewness	1.5025	-10.0654	35.6388	1.3238		26.4247
kurtosis	5.1232	149.9036	1552.8160	3.8929		1101.4600
jarque-bera probability	1935.9180	3143984.0000	343000000.0000	1116.4420		173000000
	0.0000	0.0000	0.0000	0.0000		0.0000
<b>2011 descriptive statistics</b>						
mean	0.267296	-0.079322	2.918	0.213531		0.038909
median	0.172126	0.036444	0.0061	0.117335		0.030543
maximum	0.99997	3.92	2081.665	1		1.6
minimum	0	-74	1.33e-08	0		0
std. dev.	0.288647	1.51834	48.55	0.24267		0.055195
skewness	1.065328	-38.43958	34.891	1.306307		12.56956
kurtosis	3.108585	1738.198	1355.88	3.707823		290.3395
jarque-bera probability	650.4832	4.31e+08	2.62e+08	1047.118		11890092
	0	0	0	0		0
observations	3432	3432	3432	3432		3432
definition of variables						

profitability	pre-interest, after-tax earnings divided by book value of assets
investment opportunities	the ratio of market to book value of assets
non-debt tax shield	depreciation expense divided by book value of assets

Most of the empirical tests of capital structure determinants focus on testing the implications of the two competing theories we outlined above: the trade-off model and the pecking order theory. These theories suggest many factors to explain the determinants of leverage. Frank and Goyal (2003) proposed 39 factors. Fama and French (2002) narrowed them down to 4 factors; profitability, investment opportunities, the tangibility of assets, non-debt tax shields and volatility. In their analysis volatility is measured over time as log of assets and it is not included because our analysis is over cross-section of firms. Previous studies have used different definitions of leverage. As noted by Frank and Goyal (2003) book values are determined by past economic activity whereas market values are determined by expected future economic activity. They note that while early studies employed book value definitions, more recent studies have focused on the market value. In this study we will focus on the market value. As in the previous studies the market value of leverage is defined as the ratio of market value of debt to market capitalization.

### Quantile Regression

We test the predictions of the two models using the quantile regression developed by Koenker and Bassett (1978). The aim of simple classical regression analysis is to minimize the sum of squared errors given by

$$\min_{\alpha, \beta} \sum_{i=1}^t (y_i - \alpha - X_i \beta)^2$$

where,

$y_i$  is the dependent variable

$X_i$  is the independent variable

and  $\alpha$  and  $\beta$  are the estimated intercept and slope parameters. The objective is to find values of  $\beta$  that would minimize the error. While the idea of quantile regression is similar, it aims at minimizing absolute deviations from  $\tau^{\text{th}}$  conditional quantile and it is given as:

$$\min_{\beta \in R_p} \sum_{i=1}^T \rho_{\tau} (y_i - \xi(X_i, \beta))$$

Where

$\xi$  is the conditional quantile

$\rho_{\tau}$  is the so-called *check function* which weights positive and negative values asymmetrically (giving varying weights to positive and negative residuals)

For example to obtain conditional median parameter estimates,  $\tau$  should be set at 0.5 (since this is the quantile that represents the median) and an optimization model is employed to find values of  $\beta$  that minimizes the weighted sum of absolute deviations between the dependent variable and the independent variable. However the constraints imposed require that a linear programming

must be used. In a regression format the relationship between the dependent and independent variable can be summarized as:

$$\min_{\alpha^\tau, \beta^\tau} \sum_{i=1}^T |y_i - \alpha^\tau - X_i \beta^\tau|$$

Where

$\alpha^\tau$  is the intercept for a specified quantile and  
 $\beta^\tau$  is a slope coefficient

$\beta^\tau$  shows the relationship between  $X_i$  and  $y_i$  for a specified quantile. A linear program is used where different values of  $\alpha$  and  $\beta$  are plugged into the above equation until the weighted sum of the absolute deviations are minimized.

## RESULTS AND DISCUSSION

Table 3 presents both the OLS and quantile regression estimates of the leverage ratio for 2006 and 2011. The impact of profitability on leverage in 2006 is positive except at low levels of leverage. In particular the impact of profitability was insignificant at the 20<sup>th</sup> quantile and positive with statistical significance at all of the other quantiles. In addition the coefficients increased monotonically as we moved to higher quantiles. This was not consistent with the Pecking Order model which predicted a negative coefficient and potentially consistent with the Trade-Off model which made no prediction. The investment opportunities were statistically insignificant determinants according to OLS. At the lower end of quantiles investment opportunities were also insignificant. However, at the higher end of quantiles, the investment opportunities exerted a statistically significant downward influence on leverage. This implies that the firms with higher leverage would invest in new opportunities by using equity. Moreover, the order of magnitude of the coefficients generally increased as we moved to higher quantiles. This is consistent with both the dynamic Pecking Order theory and the trade-off model. This illustrates the advantage of the quantile regression. OLS would simply have assigned no significance to investment opportunities. The proportion of tangible assets has a strong statistically significant positive impact on leverage both in OLS and across all of the quantiles. This is not predicted by the pecking order model but is predicted by the Trade-Off theory. Finally non-debt shields are negatively statistically significant in OLS. In quantile regressions non-debt tax shields have no statistical significance across the distribution. The results of 2006 are more supportive or consistent with the tradeoff model.

In 2011 profitability had a negative marginally significant impact on leverage in the OLS model. However, as we examine the impact across the quantiles we observed no statistically significant impact but the sign of the coefficient is negative. Because the Trade-Off theory makes no predictions the result is not inconsistent with the theory. The OLS results are consistent with the Pecking Order theory but they are not confirmed across the quantiles. Since the median profitability is lower in 2011 and further the economy was in the process of coming out of a deep recession the firms made no attempt to alter their leverage. The investment opportunities, unlike 2006, are marginally significant in OLS. But, the coefficient obtained statistical significance only in the highest (80th) quantile. In 2011 investment opportunities do not seem to be important determinants of capital structure. The proportion of tangible assets again enters positively and is statistically significant in OLS and all of the quantiles except the highest quantile. Perhaps in economically uncertain times, highly leveraged firms were unable to increase their leverage even with additional collateral. This result is consistent only with the Trade-off theory. Finally, the non-debt tax shields failed to obtain any statistical significance in either OLS or across the

quantiles. Soon after the great recession, we find little support for either theory. It makes sense because in an uncertain economic time period, the only thing that matters is having good collateral.

Table 3: Ordinary Least Squares and Quantile Regression Results For the Capital Structure

results for 2006						
	ols	q(.20)	q(.40)	q(.50)	q(.60)	q(.80)
independent variables						
constant	0.1373	-0.0003	0.0182	0.0621	0.1085	0.2576
	31.6067	-0.1924	7.0065	9.2798	16.1615	21.6165
profitability	0.0098	0.0000	0.0027	0.0062	0.0108	0.0214
	2.3058	-0.0338	2.2724	3.3199	4.7090	6.9315
investment opportunities	-0.4267	0.00185	-0.022826	-0.280969	-0.2216	-0.5621
	-1.0763	0.0307	-0.3070	-1.0079	-2.2556	-7.1422
net fixed assets/total assets	0.1298	0.0563	0.1861	0.1963	0.2006	0.1580
	9.4051	4.9456	11.6524	10.1283	8.6294	5.2321
non-debt tax shield	-0.1451	-0.0531	-0.1264	-0.2515	-0.2180	-0.1425
	-2.9408	-1.0209	-1.6610	-1.6889	-1.7181	-0.5107
results for 2011						
	ols	q(.20)	q(.40)	q(.50)	q(.60)	q(.80)
independent variables						
constant	0.2400	-0.0011	0.0400	0.1079	0.2049	0.4884
	34.4447	-0.2790	7.3695	10.1224	14.3750	26.8421
profitability	-0.0070	-0.0003	-0.0019	-0.0075	-0.0365	-0.1648
	-1.7629	-0.0928	-0.4342	-0.5260	-0.4710	-0.6241
investment opportunities	-0.2290	-0.011063	-0.111778	-0.245036	-0.4431	-0.2030
	-1.9235	-0.0843	-0.5590	-0.9717	-1.5794	-3.1680
net fixed assets/total assets	0.1488	0.1291	0.3034	0.2971	0.2778	0.0683
	7.0410	6.5653	14.9796	10.0698	8.5389	0.8393
non-debt tax shield	-0.1116	-0.1201	-0.1656	-0.2270	-0.5282	-0.2675
	-1.1454	-1.0014	-1.1713	-0.9291	-1.4465	-0.3093

## CONCLUSION

This paper examines capital structure in the US for 2006 and 2011. The paper employs quantile regression analysis to explore the determinants of capital structure. We find convincing evidence of heterogeneity in the debt ratios of firms. There is also strong evidence of heterogeneity in the determinants of capital structure. In 2006 we find profitability had a positive statistically significant impact on capital structure across the distribution. The investment opportunities had a statistically negative impact on capital structure as predicted by the Trade-off theory only in the highest quantiles. Relying only on only OLS would have missed this evidence that supports the Trade-off theory. The proportion of tangible assets had a statistically significant positive impact on the capital structure consistent with the trade-off theory. The non-debt tax shields had a statistically significant negative impact on capital structure only in OLS. Examining the impact of non-debt tax shield across the distribution reveals that there is marginal statistical significance only in the middle of the distribution and no significance at the extreme. The OLS results are consistent the trade-off theory whereas the quantile regressions while supportive suggest a more mixed picture. In 2011 the only determinant of capital structure was the tangible asset ratio. The recession and the accompanying economic uncertainty were probably important considerations in setting capital structure than the usual determinants. The capital structure theories work well in

normal economic conditions but not as well when the economy is coming out of a distressed economic period.

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# SYNERGISTIC SOLUTIONS TO MILITARY VIABILITY AND ECONOMIC EQUALITY

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## ABSTRACT

*Throughout history, empires have been built through the development of a superior military. Many of these empires experienced slow decline and collapse through a conjectured lack of passionate and loyal conscripted individuals who made up these armies. Others argue that individuals enlist out of internal compulsions ranging from ancestral pressures, loyalty and civic pride; or to a quest for citizenship. Historical and economic literatures document that it becomes more difficult for a society with high and increasing prosperity to maintain a sufficient number of dedicated individuals to serve in its military because of other career choices. The problem, then, is how does a country structure an economic package attractive enough to ensure sufficient enlistment for an effective military? This paper: 1.) examines pressures that draw these dedicated individuals to other pursuits, 2.) proposes economic and other benefits to attract a sufficient number of them to a military career; 3.) considers the cost to the United States Government of implementing these benefits; and 4.) estimates whether these changes could become law.*

## INTRODUCTION

At the moment of his inauguration, the next U.S. President will face a myriad of crises: difficult times for the economy, major deterioration of many critical foreign alliances, emerging Arab spring, Iranian nuclear bomb controversy, totally inept Congress and illegal immigration are only a few. The events of the past decade may have come full circle. Could the same circumstances that removed Russia as a global player visit itself on the United States? We find ourselves in the "Perfect Storm" of Murphy's Law; an iteration beyond the simplistic description to the exponential result of "everything that can go wrong is going wrong—all at the same time". In times of severe stress, emotional decisions tend to become the norm and almost always result in the absolute wrong decision being made [1] [2] [3] [4]. Time will tell whether the economic bailout of 2008 will be one of these wrong decisions. Nonetheless, given the time that they had to consider it, it is clear that whether or not to vote for past packages and bailouts were emotional decisions for many U.S. lawmakers and one in which many of these lawmakers could not get beyond partisan politics when the times and the legislation demanded rational and not emotional decisions. In such a climate as the one in which the U.S. finds itself, problems must be addressed systematically, rationally, and unemotionally.

In this climate, where many issues must be addressed and the money to fund the solutions found, it will be very easy to cut funds from the Defense budget and use them to fund new economic solutions assuming that the Democrats retain control of Congress. This paper is not a knee-jerk defense to maintain military funding at its current levels, nor does it enter into the debate of which programs to cut and which to retain. However, it does look at one feature of our defense posture; the all voluntary army concept, and the difficulties currently encountered in attracting enough individuals who are of a caliber to maintain U.S. Armed Forces at a level as high, if not higher, than any other military in the world. This quality of force is essential not to advance an American imperialism but to assure that those bent on harming the country do not misinterpret our national resolve. We do not want to become victim of a financial mentality or an even worse military "Guns of August" mentality [5]. This paper: 1.) examines pressures that draw these

dedicated individuals to other pursuits, 2.) offers a favorable income tax alternative to the ever growing issue of signing and reenlistment bonuses; 3.) considers the cost to the United States Government of implementing these benefits; and 4.) estimates whether these changes could become law.

#### What Draws These Individuals to Other Pursuits

For most of its history, the U.S. has mustered an all volunteer army. Its only exceptions were: 1. the Civil War; 2. World War I; 3. World War II; and 4. the Korean conflict through Viet Nam. World Wars I and II were considered patriotic endeavors and all "did their part" to win the Wars. Winning, and progress toward winning (after 1942 for World War II), helped with national morale as well. Korea was much the same way and U.S. citizens were enthusiastic to fight the communists; at least at the beginning. A majority of the populace saw the necessity of maintaining a large standing army during the Cold War. In all of these wars, hot and cold, enough people were motivated by patriotism and winning to make sure that there were enough men conscripted and no significant dissent against the draft existed. They supported the military at the beginning of the Viet Nam conflict until it became apparent that the military and the government were lying about its conduct and results. At this point, a popular movement began, fueled by many in college who would go to war if they lost their educational deferment.

This had not been an issue in the Civil War either as the wealthy and educated class (then one and the same) could "buy their way out" of serving by paying \$300 to a substitute who would fight in their place[6]. Nor was it an issue during World Wars I and II when patriotism drove neither war support nor Korea when those in college had a military deferment. [7] Since moving to the concept of an all voluntary army subsequent to Viet Nam, the U.S. Congress has been loath to return to the conscription system. However, our largest potential adversaries have huge human resources for very large standing armies, and we find ourselves stretched so thin around the globe that we need to send National Guard personnel for multiple tours of duty in Iraq and Afghanistan. These individuals volunteered for domestic service, did not expect to be billeted abroad, and, indeed, would have been very useful here at home during the Katrina debacle of 2007. Had separations not been suspended, it is reasonable to assume that many of these individuals would not have reenlisted since they were not doing what they signed up to do.

Economic issues. As the United States economy has grown and prospered we have become a nation of profligate consumption. Subsequent to the Regan Revolution, armed with the [now] false security of increasing housing prices, easy money and a non-sustainable rise in the stock market, many U.S. residents eschewed saving, especially for a "rainy day". Swayed by the belief that interest rates would stay low forever, millions of consumers tapped the equity in their homes and injected additional discretionary spending into the economy. Studies will be written for decades about what happened here and how this became the latest and most dangerous "black swan" in over 70 years. U.S. consumers, along with members of the U.S. financial community, collectively forgot the lessons of the past; whether it was the worldwide currency crisis of the early 1990's, the Long Term Capital Management collapse, or, at the beginning of the new millennium, the bursting of the dot.com bubble. As a nation we spent, consumed, and ran up staggering amounts of household debt as our savings rate plunged to zero [8].

The Federal Reserve Board, under the direction of Alan Greenspan for nearly two decades, kept interest rates too low for too long as the money supply exploded resulting in more and more dollars chasing fewer and fewer safer investments. Adjustable rate mortgages, no document and NINJA [9] loans, coupled with teaser rates and interest only payments, led to an explosion of housing prices and home construction that far out striped historical norms. Fannie Mae and Freddie Mac found themselves in the position that they were losing their rank and business to the

independent investment banks. Both corporations came under intense scrutiny from their large shareholders as they saw their profit and revenue base shrink; the victims of competitive disintermediation. This environment made high paying jobs plentiful in many industries. Why enter the army when you could get a high paying position without the potential risk to life and/or limbs. This increased competition for human resources and with the military more stressed than at any time in U.S. history due to simultaneous wars in Iraq and Afghanistan, it became necessary for the Pentagon to relax enlistment standards and explode its budget for enlistment and reenlistment bonuses. These ranged from \$3000 to \$15000 depending upon the arm of the service and the position [10].

This competition led these government sponsored entities to take larger and larger risks to maintain their competitive position; risks with which they were unfamiliar and did not know how to control. At the same time, the U.S. Government continued to spend unprecedented amounts of revenue on its military as a response to the 9/11 calamity.[11] As shown with President Johnson's effort to pay for the Viet Nam conflict, a guns and butter approach could not be successful long term and, ultimately, seriously hurt the U.S. economy. Waging two wars at the same time in Iraq and Afghanistan was not only ill advised from a military perspective and almost fraudulently from an economic slant in that these adventures were never factored into President Bush's ongoing budgets. This recession makes it increasingly difficult to fund reenlistment bonuses and maintain an all volunteer army. Some countries, like China, North/South Korea, Russia, and Germany, either maintain a conscripted military or have returned to one. However, as noted above, the U.S. population finds the draft an unacceptable alternative as does the Congress; although Representative Charles Rangel (D, N.Y.) has sponsored a fact finding proposal regarding reinstating the draft. Mark B. Cohen in his blog has argued that the draft would cost upwards of one trillion dollars and be disruptive to the economy [12].

Yet, should the U.S. continue to maintain its current military commitment, it must maintain high levels of financial incentive to U.S. citizens, lower its educational standards for recruits, and continue to intensify its recruitment to aliens with the promise of citizenship to meet its enlistment goals. These have been the solutions that the Pentagon found and adhered to in recent years in its not always successful efforts to maintain U.S. armed forces at their preferred levels. In 2008 a new and more comprehensive GI bill became law which helps veterans with education after separation from the military [13]. Despite this, and the increased costs for recruiting bonuses, and promises of citizenship, the US still is not drawing the numbers of recruits that are needed to maintain the best armed forces in the world [14].

The all-volunteer concept has proven to be very expensive and the pay scale alone has increased \$24,000 per person for active personnel or 33% in real terms from 1999 to 2005 [15]. Couple this with a housing allowance of 66% and health care at 69%, the compensation system is unsustainable [16]. To increase the military by just 40,000 troops will add an additional \$4 billion per year to the service budget [17]. In fact, a recent survey showed that average military compensation now exceeds the 70<sup>th</sup> percentile threshold for comparable civilians [18]. Indeed, the average enlisted member earned \$5400 more and the average officer \$6,000 more, than comparable civilians [19]. Incentives have grown six fold since 2003 when the above numbers were recorded and some bonuses can range as high as \$150,000 for very senior Special Forces soldiers who re-enlist for six years. All told, the Army and Marines spent \$1.03 billion in 2008 on reenlistment bonuses, compared with \$174 million in 2003, the year the war in Iraq began [20]. This program is extraordinarily costly and will become even more so as it is revised. A comprehensive new program needs to be passed and implemented to help recruit quality personnel while providing severally needed financial help to veterans and their surrounding collateral society. Right now the Army has lowered its standards by accepting up to 25% of new recruits without a high school diploma; again lowering the quality of the armed forces [21].

A New Proposal to Attract and Fund The All-Volunteer Armed Forces While Providing on the Ground Immediate Local Stimulus As noted earlier, the savings rate in the United States has fallen to zero. We have also seen multiple stimulus packages to various economic sectors to lower the severity of the current recession in this country. Instead of enlistment and reenlistment bonuses, we propose that upon honorable discharge, all military personnel with a minimum of five years service in any military service be granted a life time exemption from federal taxes; up to a maximum of \$100,000 a year for household income. We believe that an additional incentive of increasing that level by \$5000 for each additional two years served up to \$150,000 annual income would help to keep soldiers in the service longer. They would only pay on the income above the thresholds as described below. Based on the 2012 Federal Tax form 1040-es [22] the tax due on \$100,000 is as follows:

Married filing jointly:

$$\begin{aligned}
 & \$70,700 \text{ to } \$142,700 = \text{Tax liability of } \$9,735 \text{ plus } 25\% \text{ of income over } \\
 & \$70,700 \\
 & \quad \$9,735 + (\$100,000 - \$70,700 \times .25) = \\
 & \quad \$9,735 + (\$29,300 \times .25) = \\
 & \quad \$9,735 + \$7,325 = \$17,060
 \end{aligned}$$

If we use the 75<sup>th</sup> percentile of all living vets the numbers become more revealing. The 75<sup>th</sup> percentile is \$52,000.

Married filing jointly

$$\begin{aligned}
 & \$17,400 \text{ to } \$70,700 = \text{Tax liability of } \$1,740 \text{ plus } 15\% \text{ of income over } \\
 & \$17,400 \\
 & \quad \$1,740 + (\$52,000 - \$17,400 \times .15) = \\
 & \quad \$1,740 + (\$34,600 \times .15) = \\
 & \quad \$1,740 + \$5,190 = \$6,930
 \end{aligned}$$

Thus, a direct inflow of available capital totaling \$6,930 from each veteran will be injected into the economy where each of the veterans live. Average salaries of veterans fall into a normal distributive pattern as shown in Table 1.

<	\$21,840	25%
	\$ 21,840-35,359	25%
	\$ 35,360-51,999	25%
>	\$ 51,999	25% [23]

The next question to consider is how much will this proposal cost in comparison to the current \$500 million per year (and increasing rapidly) budgeted for enlistment and reenlistment bonuses? This is addressed below. Assuming an ongoing pool of veterans eventually totaling 5 million over the next twenty five years we can make some assumptions as to the amount of shortfall to the U.S. Treasury from this proposal. Take into consideration an aggressive stance as to the economic/monetary stress to the government by using the 75<sup>th</sup> percentile as a guideline, in 2038.

$$\begin{aligned}
 & 5,000,000 \text{ retired veterans} \times (6,930) = \text{Annual cost} \\
 & 5,000,000 \text{ retired veterans} \times (6,930) = \$34,650,000,000
 \end{aligned}$$

This cost would not be reached until 2038 as noted in the computations below. To see a more immediate effect we will use recruit numbers to keep our military at a stable number. The armed forces goal is to recruit 100,000 soldiers, sailors and airmen each year. For illustration we will double that number to accelerate an appreciation of the overall impact. Since our program would

not be implemented until 2015, we would not see veterans entering into the all volunteer non taxed force until 2020. Therefore, the costs are more than offset by the saving in enlistment and ultimately re enlistment bonuses. A secondary saving would be the entire recruitment apparatus as a more efficient advertising using the Internet will provide additional cash flows.

2015 200,000 eligible veterans' treasury shortfall/direct infusion into the local community would be:

	200,000 x 6930 = \$1.39 billion
2020	1,200,000 x 6930 = \$8.32 billion
2025	2,200,000 x 6930 = \$15.25 billion
2030	3,200,000 x 6930 = \$22.18 billion
2035	4,200,000 x 6930 = \$29.11 billion
2040	5,400,000 x 6930 = \$37.42 billion

These numbers are estimates at twice the attrition rate that now exists. This amount would go directly back into the neighborhoods where the retired veterans live. It could also entice veterans to start saving money which, in itself, could foster more growth in the mortgage and banking areas. Through an aggressive social networking and more efficient advertising campaign, several hundred million dollars can be saved. The enlistment bonus could be totally revoked for new recruits and the re-enlistment award cut back and only used to maintain a force of highly qualified individuals in competitive demand from civilian endeavors. This proposal should provide for an adequate flow of new foot soldiers because of the inherent lifelong benefit. Based upon the figures quoted earlier in the paper, at least \$500 million in enlistment bonuses would be eliminated, leaving an annual cost of roughly \$22.18 billion in 2030. This is an insignificant amount when compared to the \$ 700 billion financial services industry bailout passed in 2008 and will not be reached for 17 years. Even if this were not enough justification, the following could be argued. Based upon the zero savings rate in the U.S. noted earlier in the paper, it might not be reasonable to expect that these tax exemptions would be saved. Rather, we would expect that this savings of the tax burden by these veterans would be injected directly back into the economy as stated, exemplifying the ultimate "invisible hand." While it could also be argued that enlistment bonuses go back into the economy, this proposal should be significantly more attractive to enlistees because it is an ongoing lifetime benefit rather than a one- time event.

This proposal would not supplant the provisions and or pensions now in place for current veterans but would go into effect in 2015 for new recruits only. To be fair to the 24 million living veterans, a plan would also be to be considered to include these individuals in some form. However these calculations are too complicated for this paper and will be considered elsewhere. Besides helping our veterans and stimulating the economy, this proposal will assure a greater pool of acceptable recruits, the incentive for them to stay in the military, and save the U.S. Government untold billions in training and retraining. As noted earlier, by instituting this dynamic change the armed forces could greatly reduce, or eliminate completely, the enlistment and reenlistment bonuses. In today's political and economic environment it is incumbent upon both political parties to lay aside partisan differences from the far left and far right. Rather, they must work in a bipartisan way so that proposals which have merit, such as this one, have an opportunity to pass. This proposal, besides providing a solution to a serious military problem, can become a template to deal with other economic issues. For example, it could also be applied to those advocating for civilian volunteerism to serve the social needs of those less fortunate.

## CONCLUSIONS

In the political environment that existed before the near collapse of the U.S. financial system in 2008 this proposal would have had little, if any, chance of passage. With the recent \$700 billion

bailout of the financial services industry, however, there is now a recent example of the center of each party working together in both houses of Congress for the good of the country. As a nearly revenue neutral proposal, this reform of the enlistment system is a great deal less risky and controversial than the financial services solution. Now is the time to find answers to problems that we will find facing ourselves in the future. This does not have to be a zero sum game but proposals such as this can lead to a duplicative process by which several areas of the economy, national safety and security can find safe haven in a synergistic fashion that we have not seen since the end of World War II.

### Endnotes

<sup>1</sup> In order to get a better perspective on the costs and programs now in existence we need to look back at the history of the armed forces and the advent and continued unabated growth of the bonus budget for enlistment and re-enlistment in all branches of the service. Post -Vietnam and ending of the Cold War led to increasing numbers of young lesser educated males enlisting in the armed services. A more secure world made the possibility of entering into an armed conflict more remote, coupled with an increasing level of unemployment saw enlistments grow. The problem still remained: could we maintain a military large enough to face an armed conflict. A study sanctioned by the Foreign Affairs and National Defense Division in 1981 summarized that the armed forces would continue to experience quantitative and qualitative recruiting problems [24]. These problems become especially acute when referring to critical technical and medical areas such as pilots, nurses and doctors. The Department of Defense is pouring greater and greater sums into the bonus pool in essence creating standing mercenary armed forces.

The bonus budget has been growing at an alarming rate which shows no signs of abating. The Department of Defense [DOD] re-enlistment budget for the Selective Reenlistment Bonus Program has more than tripled in recent years--from \$235 million in fiscal year 1997 to an estimated \$789 million in fiscal 2002 [25]. There are many factors contributing to the difficulty in recruiting high quality servicemen. During the Clinton years, especially from 1997-2002 there was a downsizing of U.S. military forces, a decline in recruiting budget and fewer reenlistment [26]. The above- mentioned fact helped to reduce the government deficit and balance the budget but left the military woefully lacking in preparation for an armed conflict. Secondly a growing economy lured young eligible recruits away from the military and into civilian pursuits. The bonus budgets have already begun to grow well before the 911 attacks and subsequent military incursions into Afghanistan and Iraq.

It is ironic to see that while there was a conscious effort to downsize the military there was a concurrent rise in budgets for all branches of the armed forces for reenlistment bonuses. Army from \$30 million to \$72 million and exceeded this amount by \$49 million Navy, the largest Selective Reenlistment Bonus Program from \$78 million to \$234 million and exceeded that amount by \$121 million Marines \$8 million to \$25 million Air Force \$13 million to \$123 million, an 846% and exceeded that number by \$57 million [27]All in all a very dangerous trajectory if one assumes exponential growth during times of stress, indeed during the second Iraq War the numbers and amounts of bonuses skyrocketed including tax free payments for those in harm's way [28].

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# THE CASE FOR INCLUDING VARIABLE ANNUITIES IN YOUR RETIREMENT PORTFOLIO

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## ABSTRACT

*While most employer-sponsored 401(K) plans and 403(B) plans include a vast selection of bond and stock investment options, a strong case exists for placing variable annuities in the asset mix.*

*With the uncertainty of future social programs and the turbulence of today's financial markets, variable annuities can be designed to meet retirement and other long term goals. Today, many employees are deferring their retirement and are concerned about preserving capital and yet seeking a guaranteed income for life. In brief, investors near retirement can be protected from outliving their assets, through the investment options offered with variable annuities.*

*This paper will address the characteristics and benefits of variable annuities, namely the guarantees of minimum withdrawals over the life of the annuities. In addition variable annuities may also contain a variety of death benefits, including stepped-up benefits, for the next generation.*

*The presentation will also highlight the potential shortcoming of variable annuities namely the charges for the various benefits and charges for surrenders and administration fees.*

*This study will conclude by synthesizing the powerful investment options and guaranteed death benefits available with variable annuities. The limitations and administration fees will also be summarized.*

# THE STRATEGIC MANAGEMENT OF THE UNIVERSITY

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## ABSTRACT

*It is necessary to analyze the present condition the State University management. Accordingly, the purpose of this study is to analyze the present condition and issues of the strategic management of the State University and examine ways to improve the result of University development.*

**KEYWORDS:** Strategic management, university

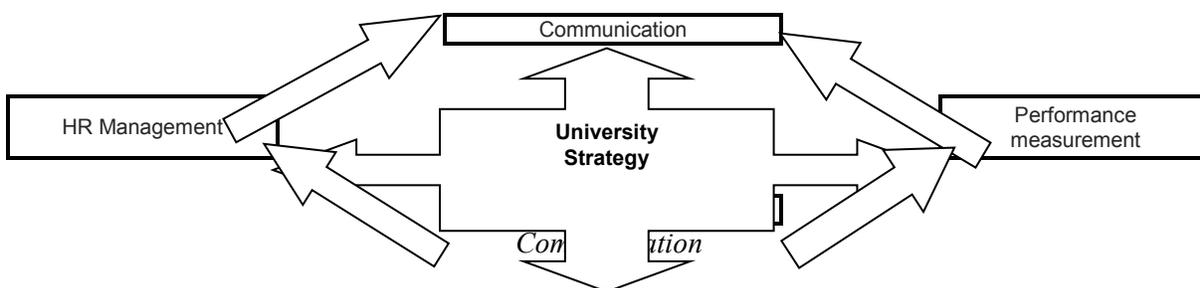
## INTRODUCTION

Adequate management should be based on finding and setting goals. Anybody often has achieved nothing if takes up everything. More importantly seriously concentrate on a few achievable goals. In selecting these goals can be two-way, two strategies: strategy to overcome bottlenecks and unmissed chance strategy. Narrow interpretation strategy based on the identification of the main bottleneck, after the liquidation of which, all processes are fuller. Overcoming bottlenecks provides a solution to the problem, in principle, to expand the organization. Unmissed chance strategy to select and use the most favorable of the available options.

## STUDY RESULTS

Strategic plans include approaches by which management intends to achieve its goals. The strategy helps to identify cause-and-effect relationship. The strategy reflects the three points in time: yesterday, today and tomorrow. A sound and well- conceived strategy, mobilizing and directing the limited resources of the organization, can lead to tremendous results. The strategy is not developed only financial indicators. It has long been known that the organization is not simply to make a profit in the short term, therefore, there is a need for not only financial, but also non-financial indicators, such as communications with contractors, staff efficiency, quality indicators of activity. Such non-financial indicators can be any number . But the most optimal and sustainable recognized four elements of the strategy. (Kaplan, R. S. and Norton, D. P., 1992). Schematically, the main elements of University's strategy are presented in Figure 1.

Figure 1: The main elements of University's Strategy



Communication means how the university conducts its affairs. The task of managing communications is that the properties of the services provided have changed in the least. To do this, a sufficient level of communication should ensure the timely provision of services and to promote closer integration with the university environment. External (competitive) environment of any organization, the results of the research of many scientists, consists of the five competitive forces. With regard to higher education are the following competitive forces: the influence of the state, the impact of consumer services, threat of new competitors, threat of new products and services; rivalry between existing universities.

Among the measures to improve the communication mechanism is necessary to clarify those areas that are overloaded connections. It is necessary to take into account the fact that not all links are equal in complexity management. All management communications with customers is to provide the consumer with the highest quality product, i.e. a product with minimal loss of quality. The highest level of communication is characterized by information connectedness of all university elements. There should be present not only an analysis of the competitive environment, but also the analysis of the customer base, and the analysis of relationships with government agencies (in particular, the optimization of taxation). Organizations, who have reached a high level of communication, claim the dominant role in the market, because the quality of processing of orders and release dates of new services to the market reach unprecedented levels. In education, seeks to increase the number of students in parallel with the qualitative change in the structure of education - increasing the number of graduate and post-graduate students, including foreign ones. There is an active involvement of the graduates of the University and its partners in the activities of the Board of Trustees and the Board of Supervisors, an alumni association.

Endowment Fund with the support of the business community and the public is becoming an important tool for the development of the University. The transition to a system interaction with employers will create educational programs that meet today's requirements of social and economic development, education and advancing the principles of "learning through life». Forced scenario involves a significant change in the social and public component of the University as a whole and of individual employees in the public space, especially in the region, by strengthening the public, expert and analytical activities of the University, including regardless of the order by the government, business, and his ability to make the results of this activity in a public context.

### Hr Management

It is well known that "cadres decide everything." In the face of global competition can not continue to base education on the use of cheap labor. Principles of formation and staffing of personnel policy are determined by the new requirements of the university in terms of improving the quality of the educational process and scientific research, its results and the reflection in the social activities of the public university. To achieve quality education, it is necessary to develop and effectively implement operations throughout the value chain organization, and this will require the development of knowledge, skills and abilities of the teaching staff. In this important role played by the level of remuneration. It is advisable to develop a scheme for premium pay for educational services, depending on their quality, meeting deadlines. There is no need for initiatives to award or the number of procedures performed. There should be rewarded for results. There is another issue in designing the reward - is the choice of the number of criteria. Indicators formulated in accordance with the strategy should be consistent with two or three strategic areas (such as more efficient use of assets).

In education, the priority is given to scholars, educators, who can draw a general picture of the cause-and- effect relationships that unite the various factors to achieve results. Activated involvement in faculty research activities related to the priority areas, increasing the number of scientists and teachers is changing the structure of the load in the direction of its greater focus on research.

Activities in the field of science should be judged by the number of high-level scientific publications, with income derived from the research, commercialization of intellectual activity. The result of the intensification of scientific activity is reaching the level of the leading research institutions of Russia in terms of publications and income from research activities and 30 % of the total revenues of the University. The effectiveness of human resource management can also help and a clear allocation of responsibilities and accountability. In addition, the leadership of the university needs to keep track of the passage of the regular training of the teaching staff. It is also very important to include measures to reduce the potential for conflict of interest in the educational and scientific environment. This is important for the creation of a positive atmosphere in the team with the approved policies and procedures.

### Performance Measurement

University must decide what he means for efficiency and performance. The definition of these concepts should be clear and simple. And the strategy in the future it will be based on a new definition of performance. Most importantly, the evaluation of the effectiveness of the university in four areas: 1) the external environment - customer service and satisfaction of demand , optimizing relations with the state ; 2) in the internal environment - improving the efficiency and productivity; 3) down in the organizational hierarchy - the spread and adaptation of the overall strategy of the company to all the lower levels of the organizational structure, incentives for change; 4) bottom-up in the organizational hierarchy - the growing influence and expand freedom of action of employees.

System performance evaluation of educational activities should be aimed not only at the implementation of the strategy, but also on the development of corporate culture that recognizes the constant advance usual lifestyle. The advanced nature of education is to be achieved through the implementation of the principle of the unity of scientific and educational activities of teachers and students, to raise the profile of research in shaping educational programs incorporating research findings into the public sphere, strengthening language training graduates to the level of the requirements of international certification centers. The structure of the educational process in terms of its levels, subject specialization will be determined by the strategic goals of the University, faculties, institutes and branches, reflecting the needs and challenges. System and technology training range in the required quantities to improve the quality of education, strengthen the scientific foundation of education, obtaining the necessary competencies that best meets the needs of students, employers and society.

In the scientific field, this strategy involves determining research priorities that reflect the long-term direction and pace of development of the University as a scientifically and educationally and speakers "points of growth" in general. An important factor in the development of the university is to improve the methodology. The key here is to develop a detailed internal research and educational standards that improve the work of scientists and teachers. In addition, considerable emphasis is flexible response, which means the ability to respond to changes in the external environment (customers, competitors, government installations). Flexibility is becoming increasingly important to the extent that the university has to deal with an increasingly diverse clientele and customers. The strategy should clearly define and represent a sequence of hypotheses

and the concept of cause-and-effect relationship between the indicators that measure the results of operations, and those internal dynamics that led to these results. Each indicator is included in the strategy should be a link in the chain of cause-and-effect relationships that links the strategy of the business units and the strategy of the company as a whole. From this it follows that the indicators included in the strategy should be characterized as the results achieved, and determine their main factors. It is necessary to constantly review the achievement of certain criteria and indicators. An analysis of some university indicators is given in Table 1.

Table 2: Indicators Analysis

N	Name of the indicator	2010	2011	2012
1	Average number of students, people.	11396	11634	11750
2	The average annual number of the teaching staff, person.	1249	1097	982
3	Full funding per teaching staff (thousand ruble per month) (1USD ~ 32 Ruble)	101,3	146,5	149,8
4	The utilization of classroom fund (teaching space per student ), m <sup>2</sup>	3,0	3,0	4,0
5	Utility costs per 1 student , thousand ruble per year	4,0	5,0	5,0
6	The total area of teaching and laboratory buildings , per students, m <sup>2</sup>	8,0	10,0	12,0

Table 1 Analysis shows that the steady the number of students is increased by steadily declining of teachers. Withal the total area of teaching per student has increased by a slight increase in the cost of utilities per student. We can improve the system performance so that they more accurately reflect the organization's success in attracting new customers; improve processes, development of new services, etc. in the long run. For this it is necessary to maintain a certain level of competitiveness of the corresponding organization's ability to respond to changes in the external environment and the ability to maintain its position in the selected direction. The strategy of the university is also designed to focus on those aspects of the activities that are really the most important in the present and in the future. Timing considerations allow us to estimate the effectiveness not only in the short and medium term, but in the long-term perspective. For example, it is possible to recognize an effective organization based on the criteria of performance, quality and flexibility, but count it inefficient in terms of competitiveness. Maintaining the right balance is the need to balance the results in time.

## CONCLUSION

The results of development Strategy for University in the medium term should be: 1) the achievement of positive dynamics of the number of students and, as a consequence, the financial support of the University; 2) changes in the structure of the load of the faculty in favor of scientific research , improving its efficiency and effectiveness for different spheres of socio-economic , socio-political and socio-cultural development; 3) increasing the role of research in providing revenue diversification of the University, attracting highly of the teaching staff , including the leading Russian and foreign scientific and educational centers, the commercialization of research results; 4) development of the property complex of the University to meet the employment and social needs of University employees and students at the leading universities of the standards ; 5) Ensure that the educational programs of the University of actual and future needs of the economy and society , the organization of advanced education in priority areas of the University; 6) the deployment range of public relations and the establishment of the

University as an active and authoritative information of a subject that dominates in a number of intellectual and public spheres and subject areas. Development strategy for University: strengthening the position in the ranking of Russian Higher Education, improving competitiveness, transformation of the University in the center of the integration of education, science and culture, and public life.

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# COLLABORATION AND PERFORMANCE OF GREEN INNOVATION: INVESTIGATING THE MODERATION EFFECTS OF GREEN KNOWLEDGE INTEGRATION MECHANISMS

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## ABSTRACT

*In the wake of environmental deterioration, green innovation is now considered a key factor to achieve economic success. The use of green standards offers an opportunity for green innovation to be relevant not only to the host organizations but also to their collaborative partners, while the use of green knowledge integration mechanisms can also drive green innovation. This paper examines how collaboration (i.e. cross-functional collaboration and environmental collaboration) interacts with green knowledge integration mechanisms (i.e. external green knowledge acquisition and internal green knowledge sharing) to affect the performance of green innovation. The results of a survey on 128 Taiwanese electronics companies show that, in the process of cross-functional collaboration, a high level of internal green knowledge sharing strengthens green innovation performance, while a high level of external green knowledge acquisition weakens such performance. In contrast, in the process of environmental collaboration, a high level of external green knowledge acquisition strengthens green innovation performance, while a high level of internal green knowledge sharing weakens such performance. The results of this study offer managers a greater insight into the effects of green knowledge integration mechanisms on the collaboration and performance of green innovation, whereby organizations can further improve their relevant practices.*

**JEL:** M10

**KEYWORDS:** Cross-Functional Collaboration, Environmental Collaboration, Green Knowledge Integration Mechanisms, External Green Knowledge Acquisition, Internal Green Knowledge Sharing, And Green Innovation Performance

## INTRODUCTION

Escalated by the impact of global warming and climate change, sustainable development with environmental thinking and strategies has become a key task faced by firms. McKinsey and Company (2008) pointed out that, in practice, 60% of managers take into account the climate change factor when developing new products. While in recent years, the subject of green product innovation has also been widely discussed in academic researches. (Chang, 2011; Chen, 2008; Chiou, Chan, Lettice, & Chung, 2011; Schiederig, Tietze, & Herstatt, 2012) Many signs point to the growing importance of green product innovation and development, and such topics have become popular with researchers and practitioners alike. This “green wave” has, in turn, forced firms to change their thinking and approaches to products, technologies and manufacturing processes, to proactively launch green products, and to create green innovation performance. However, there is no shortage in the market of failed attempts in this regard (Pujari, 2006). How to create green innovation performance is thus a shared focus among academics and managers. Cross-functional collaboration has long been identified as a key contributor to new product success (Griffin & Hauser, 1996; Tsai, Fang, & Hsu, 2012).

However, such collaboration has increasingly become a necessity, as few firms can independently create green products for better green performance, despite the growing attention paid to environmental problems. Because the impact to the environment by green products is driven by the inputs of these products (Lee & Kim, 2011), therefore, to develop successful green products, companies must collaborate with their suppliers. This collaboration begins with the distribution of end product to end users (customers), and goes back to the manufacturing, the procurement of raw materials, and finally to the suppliers of materials and services. Therefore, the integration of both intra-organizational (i.e. cross-functional) and inter-organizational (i.e. environmental) collaboration is required in the process of developing green products (Stank, Keller, & Daugherty, 2001). It is thus necessary to look into cross-functional collaboration and environmental collaboration concurrently, in order to help firms take actions that enable their products to do the least harm to the environment.

Despite the development and implementation of various collaboration-enhancing models, it is not clear how cross-functional collaboration affects the development of new products. (Tsai, Fang, et al., 2012) At the same time, studies regarding the effects of environmental collaboration on the development of new products have turned out inconclusive results. Specifically, some studies show that environmental collaborations with suppliers result in positive performances of new product development (Frohlich & Westbrook, 2001; Petersen, Handfield, & Ragatz, 2005), whereas other studies show insignificant or no effects whatsoever from such collaborations (Belderbos, Carree, & Lokshin, 2004; Freel, 2003; Ledwith & Coughlan, 2005). A logical explanation for these conflicting findings may be the omission of the factors that affect the relationship between collaboration and new product performance (Tsai, Tsai, & Wang, 2012). In other words, additional consideration must be taken into account in the attempt to understand the relationship between collaboration and the performance of innovative green products.

At the same time, knowledge integration mechanisms ensure a smooth flow, as well as formal procedures and structures, for knowledge to be shared across functional departments. Hence, knowledge integration mechanisms determine the impact of collaboration on the strength of innovation performance (De Luca & Atuahene-Gima, 2007). Failing to properly manage the moderation effects of collaboration and knowledge integration mechanisms may be a key contributor to the failure of developing innovative green products. As such, this study aims to further understand the moderation effects of green knowledge integration mechanisms on both cross-functional collaboration and environmental collaboration, as well as on the performance of green innovation. Based on the above-discussed topics, the purpose and the expected contributions of this study are as follows: first, to explore, concurrently, the effects of cross-functional collaboration and environmental collaboration on the performance of green innovation; secondly, to examine the impact of external green knowledge acquisition and internal green knowledge sharing on the performance of green innovation; finally, to investigate how collaboration (both cross-functional and environmental), after the use of green knowledge integration mechanisms, can drive the performance of green innovation, so as to explore the moderation effects of green knowledge integration mechanisms on such performance.

## **DATA AND METHODOLOGY**

This study is based on quantitative data collected from questionnaires. These questionnaires were designed from interviews and by referencing past literature, and they were also pre-tested and modified by business practitioners experienced in green product development. The subjects were Taiwanese electronics companies with research capabilities on innovation. As Taiwanese electronics products are highly export-oriented, Taiwanese electronics manufacturers are subject to the same stringent environmental regulations as faced by their customers abroad. These regulations include: Montreal Convention, Kyoto Protocol, Restriction of the Use of Certain

Hazardous Substances in EEE (RoHS) Directive, Waste Electronics and Electrical Equipment (WEEE) Directive, Energy Using Product (EuP) Directive, and Integrated Product Policy (IPP) Directive. This reality has driven the Taiwanese electronics industry to focus its efforts on the development of green products in order to satisfy its customers' environmental needs and requirements (Chen & Chang, 2013). Presently, the environment-focused trends have become a great challenge faced by the Taiwanese electronics industry, and exploring how this industry utilizes collaboration and green knowledge integration mechanisms to achieve green innovation performance is both an interesting and useful study. Because the questionnaires were designed to explore green innovation performance in the process of collaboration, which involved green knowledge integration mechanisms used in the process of developing innovative green products, these questionnaires were mainly given to staff from R&D departments which were more experienced in knowledge integration as compared with other departments. A total of 128 valid questionnaires were collected after excluding incomplete ones, representing an effective response rate of 38.3%. This study used several statistical tools to evaluate the relationships among the performance of green innovation, collaboration, and green knowledge integration mechanisms. First, AMOS 7 was used for structural equation modeling (SEM) and for measurements on the reliability and validity of each item in the questionnaire. This was followed by using SPSS data analysis to perform hierarchical regression; the relevant variables were entered into the models sequentially in order to test the hypotheses of this study. To reduce multicollinearity, this study followed the recommendations of Jaccard and Turrisi (1990), which was that all dependent variables as well as independent variables in the regression models were mean-centered.

## RESULTS AND DISCUSSIONS

### Regression Analysis and Hypothesis Testing

A hierarchical regression analysis was used in order to understand the effects of different combinations of variables on the performance of green innovation. The results show that cross-functional collaboration and environmental collaboration both have a significant positive effect on the performance of green innovation ( $\beta = .63, p < .001$ ;  $\beta = .17, p < .05$ , respectively). Green knowledge acquisition has a significant positive effect on the performance of green innovation ( $\beta = .33, p < .01$ ), whereas green knowledge sharing has no significant effect on the performance of green innovation ( $\beta = .18, p > .10$ ). "cross-functional collaboration\*green knowledge acquisition" has a significant negative effect on the performance of green innovation ( $\beta = -.35, p < .05$ ), whereas "cross-functional collaboration\*green knowledge sharing" shows a significant positive effect ( $\beta = .53, p < .01$ ). In contrast, "environmental collaboration\*green knowledge acquisition" shows a positive effect on the performance of green innovation ( $\beta = .54, p < .05$ ), while "environmental collaboration\*green knowledge sharing" shows a negative effect ( $\beta = -.41, p < .10$ ). In short, the findings are consistent with the hypotheses made in this study: cross-functional collaboration and environmental collaboration both have a direct effect on the performance of green innovation, while green knowledge acquisition and green knowledge sharing have a moderating effect.

## CONCLUSION

This study supports the concept proposed by Lee and Kim (2011), namely, successful development of green products may depend on effective intra-organizational and inter-organizational collaboration. Effective cross-functional (intra-organizational) collaboration enhances problem-solving skills (Sherman, Souder, & Jenssen, 2000), and these skills can be used to solve environment-related challenges faced by the products, thus improving the performance of green innovation. At the same time, in light of an increased awareness of environmental compliance, more and more environmentally proactive organizations have been

observed to include suppliers in their development of new products (Geffen & Rothenberg, 2000; Pujari, Wright, & Peattie, 2003) in order to develop new products that can boost their performance on green innovation. According to the findings of this study, firms should attach importance to both cross-functional and environmental collaboration concurrently, when attempting to successfully develop new products of high green performance.

Furthermore, the results of this study show that, in the process of developing green products, both cross-functional collaboration and environmental collaboration are influenced by external green knowledge acquisition and internal knowledge sharing, which resulted in different effects on the performance of green innovation. In the process of cross-functional collaboration, uncertainty is reduced because of a high level of internal green knowledge sharing which, for example, reduces the gap between the amount of green information possessed by a firm and that which is understood by the firm. This, in turn, improves the performance of green innovation. However, in the same process of cross-functional collaboration, a high level of external green knowledge acquisition seems to weaken the performance of green innovation. The reason may be that, for firms with knowledge diverse enough, acquisition of additional green knowledge may be counterproductive after all. This finding is consistent with the argument proposed by Miller, Fern, and Cardinal (2007), which states that interdivisional knowledge is more effective when used to increase the impact of an invention rather than for uses outside of the host organization. In contrast, in the process of environmental collaboration, a high level of external green knowledge acquisition results in better performance of green innovation. This is because a widened range of knowledge acquisition often enables technological breakthroughs which may lead to the development of new green products, thus improving the performance of green innovation. However, in this kind of collaboration, a high level of internal green knowledge sharing weakens the performance of green innovation. The reason may be that, while knowledge sharing allows various functional units within a firm to combine and/or find new uses for otherwise disparate knowledge in order to advance the development of innovative green products, the act of sharing knowledge may reinforce existing expertise and operational routines, which may actually lead to inertia that interferes with innovative efforts and performance.

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# ON-LINE REVIEWS' IMPACT ON TRUST BUILDING

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## ABSTRACT

*An on-line consumer review, which is a popular form of consumer created information, is provided by previous consumers. It often includes information and recommendation. This novel type of the electronic word-of-mouth communication has recently been emerging as a crucial factor in trust building during on-line shopping. Our research investigates the influences of on-line consumer reviews impact on trust-building process with regard to quality, quantity, proportion of negative/positive on-line consumer reviews as well as consumers' purchasing intentions. On-line questionnaire has been implemented to a convenience sample of 73 respondents. Our findings provide important managerial implications for better-informed e-tailing marketing strategy design.*

**JEL:** M30, M31

**KEYWORDS:** on-line consumer review, trust building, e-retailing, on-line shopping.

## INTRODUCTION

Belkin, a computer and consumer electronics company, has been accused of paying for positive reviews of its products on the worldwide infamous e-tailer Amazon. Belkin's President Mark Reynoso said the solicitations had been "an isolated incident;" (Meyer, 2009) however, questions have started to rise about the trust the on-line reviews build. Spending on the Internet is expected to reach \$327 billion by 2016, up from \$200 billion in 2011, a 10.7 percent average annual growth rate (Woo, 2012). Though this fast emerging business channel has similarities with the offline channel, there are certain exclusive challenges included. On-line shopping has a unique nature when compared to traditional channel as it is not possible for the consumer to directly experience the approached product by touching, seeing, and tasting. Thus, on-line environment is significantly different in many ways from traditional shopping environment (West et al., 1999). During on-line shopping, although decision maker may find more information and a wider variety of alternatives, credibility of information source and trustworthiness of retailer often present important bottlenecks (Kim and Benbasat, 2003). Previous research shows that marketers, who maintain high level of trust, also achieve satisfactory transactions via elimination of perceived risk and uncertainty.

In the appearance of uncertainty, trust becomes a major agent of what individuals expect from their activity (Awad and Ragowsky, 2008). High levels of trust have been reported to increase both purchase intention and customer loyalty (Chen and Barnes, 2007). E-tailers aim to build brand loyalty and trust by the provision of a proxy for reviews of previous customers through the use of e-commerce-based word-of-mouth (eWOM) systems (James, 2008, McWilliams, 2000). On-line recommendation resources, which range from other consumers reviews (eWOM) to personalized recommendations provided by recommender systems, prove to be useful for both consumers and on-line retailers (West et al., 1999) in terms of eliminating or reducing

uncertainty. In the case of e-retailing, consumers have limited opportunities for judging the trustworthiness of the remote vendor and the performance of the offered service/product (Reichheld and Scheffer, 2000, Gefen et al., 2003). On-line consumer reviews provide means for prospective consumers to build their judgements. Accordingly, we define on-line consumer review as the consumer-created information presented from the perspective of consumers who have purchased and used the good (Park et al., 2007). In comparison to endorsements by retailers and manufacturers, on-line consumer reviews have been claimed to have a powerful credibility advantage (Wagner, 2008). Moreover, current reports indicate that many customer demand e-tailers to have on-line customer reviews (Grau, 2008). Given the complex nature of on-line consumer reviews' impact in building trust, this paper aims to examine the effects trust levels in terms of respondent's purchase intentions, and evaluations of review quality, quantity and negativity. This study focuses on eWOM communicated via Web-based consumer-opinion platforms (quasi-spontaneous) while other forms of eWOM might involve spontaneous, independent or third party sponsored, and corporate sponsored (Kiecker & Cowles, 2001) types. We believe that web-based consumer-opinion platforms are widely used compared to other forms, easier to operate, and require less Internet literacy. According to a survey by PowerReviews, 65% of on-line shoppers read on-line consumer reviews prior to purchase decision, while 86% of these find customer reviews helpful (McKeefery, 2007, Aaronson, 2007).

### On-Line Trust

Trust is defined as one's willingness to rely on a trading partner with confidence (Moorman et al., 1993b, Liu et al., 2002). Trust improves commitment and customer satisfaction (Bauer et al., 2002), therefore trust building is not only crucial for traditional businesses but for on-line businesses as well (Handy, 1995). Trust building involves behavioural intentions that develop from (a) general belief in the e-tailer, (b) a combination of e-tailer's trustworthiness, integrity, ability and benevolence, and/or (c) certain beliefs about competence, integrity and benevolence (Awad and Ragowsky, 2008). Consumers shopping on-line have been reported to lack trust in the legitimacy of on-line stores (Novak et al., 1999). As a commercial vehicle, the Internet offers many advantages to both businesses and consumers. Traditional face-to-face shopping offers opportunities of touching, seeing and even tasting the goods. On-line shopping, on the other hand, is mostly hindered with regards to such opportunities. Limitations involved in directly experiencing goods create major disadvantages in building and developing on-line trust (de Kervenoael and Aykac, 2008). It is believed that on-line customers have to establish trust before they involve in business relationships with on-line sellers (Cheung and Lee, 2006, Salam et al., 2005). Although, the Internet offers variety of attractive advantages as a medium, the lack of faith and trust between businesses and consumers is still a critical obstacle to the success of on-line shopping (Salam et al., 2005).

Lee and Turban (2001) define consumer trust in Internet shopping as "*the willingness of a consumer to be vulnerable to the actions of an Internet merchant in an Internet transaction, based on the expectation that the Internet merchant will behave in certain agreeable ways, irrespective of the ability of the consumers to monitor or control that Internet merchant*" (p. 79). Notion of trust have been previously studied in bargaining (Schurr and Ozanne, 1985), industrial buyer-seller relationships (Doney and Cannon, 1997), distribution channels (Dwyer and Oh, 1987), partner cooperation in strategic alliances (Das and Teng, 1998), and marketing research (Moorman et al., 1993a) context. According to Lewicki and Bunker (1995), three perspectives involved in the literature that investigated on-line trust are (1) the views of social psychologists, (2) the views of personality theorists, and (3) the views of sociologists.

On-line trust is defined as a combination of four elements, namely *reputation*, *technology*, *expertise* and *relationship* (Patokorpi and Kimppa, 2006). *Reputation* is considered as an influential factor in building trust for first-time consumers. For instance, strong brands are considered trustworthy (Ahn et al., 2004). *Reputation* is accompanied by *technology* for a web site to build trust. Giving credentials of the responsible people and offline contact information, publishing policy and providing links to reputable sites are some indicators of trustworthiness for consumers. Customers who enjoy their visits and feel in control while using a particular web site report the web site as useful and easy to use (Koufaris and Hampton-Sosa, 2002). Web sites that provide value added information such as product reviews and recommendations have been shown to offer a more positive and enjoyable experience (Koufaris et al., 2002, Koufaris, 2002). *Expertise* integration with perfect product, service, transaction and delivery also features trust building. Lastly, the most crucial factor in building trust is the *relationship*. In on-line environment, the trustor (customer) can uncover the trustworthiness of the trustee (company) by building a relationship. Subsequent to the establishment of the relationship, customer can judge whether the trustee deserves her/his trust (Tuomela and Hofmann, 2003).

The on-line consumer review, which is a one type of electronic word-of-mouth, involves positive and negative statements made by previous customers of a retailer often for a specific product/service offer. This type of consumer-created information is reported as helpful during decision-making, since it provides consumers with indirect experiences of previous customers (Park et al., 2007). Half of the consumers who visit on-line retailers report that consumer reviews are crucial in their buying decisions (Piller, 1999). In this regard, on-line consumer review plays two crucial two roles: (1) functioning both as an informant and as a (2) recommender. This might be due to the fact that consumer-created information tends to be more consumer-oriented than seller-created information (Bickart and Schindler, 2001). While seller-created information focuses on product attributes, consumer-created information reflects the actual consumer experience(s). Familiarity with the type of information and the ease of understanding it, are some crucial factors that make on-line consumer reviews effective in trust-building (Chen and Xie, 2005).

Consumers shopping on-line are overwhelmed by the amount of the digital information provided to them. They tend to prioritize the delivered content for processing. In this regard, on-line customer reviews have become an indispensable part of product research during on-line shopping (Grau, 2008). Since on-line consumer reviews are perceived as sincere sources of information, they are favoured among other sources. The credibility of attributed to on-line consumer reviews is extremely high. These reviews ease identification by providing a peer review especially for utilitarian consumers. When consumers are provided with a trustworthy peer recommender's review, they do not only use the information provided to evaluate alternatives but also for decreasing their degree of search effort for the entire decision making process (Smith et al., 2005). In this regard, peer or editorial recommendations are reported as more trustworthy than sponsored ads.

On-line consumer reviews operate as informant and recommender, simultaneously. In more detail, provision of user-oriented product information is coupled by recommendations of previous consumers. As an informant, on-line consumer reviews give user-oriented product information, while as a recommender, they provide positive, negative or neutral signal of product popularity (Park et al., 2007) as well as the performance evaluation of the e-tailer in keeping his/her promises. Although sellers also provide product related information, on-line consumer reviews differ in two important points in terms of provided information. The first difference is the trustworthiness of the information source. Consumer-created information is reported as more

credible than seller-created information in terms of trustworthiness (Dellarocas, 2003). Information credibility is referred as a crucial factor of information source trustworthiness (Bickart and Schindler, 2001). There might be various reasons for consumers to favour on-line consumer reviews over seller reviews. Consumers' honesty in stressing products' strengths and weaknesses with a better balance as opposed to seller's natural motivation to hide the weaknesses while exaggerating the positive aspects might be one such reason (McKnight et al., 2002). Alternatively, consumer on-line reviews often describe actual consumption practice, which might be easier for prospective consumers to identify with (Chen and Xie, 2004). The two roles on-line consumer reviews play, the informant and the recommender, might sometimes exhibit conflicts in the presence of numerous reviews (Park and Lee, 2009, Park and Lee, 2008). As recommenders, the more the on-line consumers reviews are, the better the effect in trust building. Yet, as informants, high numbers of on-line consumer reviews complicate information processing and result in an information overload. Therefore, a range should be determined for an optimum number of on-line consumer reviews.

Previous research emphasizes that there is a positive relationship between the ratio of negative on-line consumer reviews and trustworthiness of the overall information delivered (Lee et al., 2008). On-line consumer review sets that only contain positive reviews tend to raise questions about on credibility and trustworthiness. A reason for this might be the suspicion that arises whether the e-vendor has eliminated the negative reviews or there are really no bad consumer experiences for real. Or, as it was in the case of Belkin, a brand with only positive reviews might be perceived as paying for these reviews. We support the idea that customers will find a pool of positive and negative on-line reviews more credible (Martin, 2007, Grau, 2008). Quality and quantity of on-line consumer reviews are important factors, which may affect consumers' final decision. High quality on-line consumer reviews that are credible, understandable, logical and persuasive, with sufficient reasons based on specific facts about the product, have a strong positive effect on purchasing intention. Low quality on-line consumer reviews, on the other hand, are irrelevant, unreliable and difficult to understand with insufficient reasoning (Lee et al., 2008). Since people are inclined to believe what the majority believe (Deutsch and Gerard, 1955), the more the number of reviews is, the higher is the signaled product popularity. This is an important fact which eliminates the undesirable feeling of risk exposure. Therefore, the number of on-line consumer reviews is a crucial instrument used by consumers to justify their own choices.

## DATA AND METHODOLOGY

An on-line questionnaire has been implemented to a convenience sample. Questionnaire consisted of thirty-seven questions, of which six were general demographics questions and thirty-one were Likert-type items scored on a six-point format ranging from strongly disagree (1) to strongly agree (6). We purposefully have chosen an even Likert-type scale that is consisted of 6 points to eliminate neutral evaluations as suggested by (Park et al., 2007, Bearden and Netemeyer, 1999). General attitudes towards on-line consumers' reviews have been first questioned. Subsequent to questions related with general attitude, respondent have been introduced to the chosen product for the study. The chosen product is the *New Digital Media Player (MDP)*, which is used for listening to music and radio, viewing photos and videos and/or recording voice or video. MDP is chosen in this study due to several reasons. First, MDP is an electronic product and electronic products are known as the most demanded product category in on-line shopping. Second, electronic products are often regarded as complicated and most consumers find comments from previous users as favorable.

Third, MDP is a category extension, therefore we expect respondents to keep their reliance on prior similar category related knowledge at minimum in their evaluation of MDP. In this study, high proportion of negative on-line consumer reviews was designed as five negative on-line consumer reviews within a total set of eight on-line consumer reviews. The quality of the on-line consumer reviews was assessed in terms of the quality of the information, which includes factors of relevance, trustworthiness, clarity and sufficiency (Park et al., 2007). In our study, the high quality on-line consumer reviews included trustworthiness and persuasive product relevant information with a prominence on understandability and sufficiency of reasons. The quality of positive on-line consumer reviews was kept at the same level by mixing high quality positive and negative on-line consumer reviews. Additionally, on-line consumer reviews were arranged according to the order of three negative followed by one positive. Even though we have designed a ratio of positive and negative reviews in our design, the degree of negativity should be measured to ensure the validity of design. We also measure respondents' evaluations regarding the product related information since issues of objectivity, understandability and credibility are important parameters that could influence trust building.

These questions have been directed after an introduction to a set of on-line consumer reviews. This set of on-line consumer reviews have been articulated from real on-line consumer reviews from an on-line opinion forum, namely www.epinion.com. It included five negative and three positive high quality on-line consumer reviews. The reason for giving a total of eight on-line consumer reviews was grounded to the previous research which reports subjects' general preference of reading about six to eight reviews of about three to four lines each (Park et al., 2007). Each on-line consumer review included a title, the contents and the reviewers' nickname. The length of one on-line consumer review was designed as three to four lines to eliminate the effect of changing lengths since the length can affect the information quality and quantity (Chevalier and Mayzlin, 2006). Though similar uses in business might sometimes involve also a star based summary, we refrained from such design in our questionnaire due to several reasons. First, including stars together with reviews could have prevented exploration of the reviews' effects on trust building. Second, we chose to keep parsimony in our design as being frontier research in this domain. Seventy-three subjects participated in the questionnaire (**Error! Reference source not found.**).

Table 3: Descriptive Demographics of Sample

	Variable(s)	N (total 73)	Valid %		Variable(s)	N (total 73)	Valid %
Gender	Female	39	53,4	Avr. income per month	less than 2.000TL	20	27,4
	Male	31	42,5		2.000-6.000 TL	46	63
	Missing	3	---		more than 6.000TL	3	4,1
Age	18-25	17	23,3	Degree Last Earned	Missing	4	--
	26-35	45	61,6		High School	4	5,5
	36-45	7	9,6		Undergraduate	45	61,6
	46-55	2	2,7		Graduate	23	31,5
	Missing	2	---		Missing	1	--
Occupation	Employed	63	86,3				
	Student	7	9,6				
	Unemployed	2	2,7				
	Missing	1	--				

## RESULTS AND DISCUSSION

Trust variable has been dichotomized in two polar as high and low. Significant differences have been determined between respondents with high level of trust and low level of trust in all four factors (Table 4).

Table 4: Effects of High and Low Levels of Trust (ANOVA)

	Sum of Squares	df	Mean Square	F	Sig.
Review Quantity	18,338	1	18,338	25,096	0,000
Purchase Intention	6,669	1	6,669	9,382	0,003
Review Quality	32,101	1	32,101	32,353	0,000
Review Negativeness	5,942	1	5,942	5,179	0,026

Reliability of used scales has been reported in Table 5. Principal component analysis has been conducted to further analyze the data. Varimax with Keiser Normalization converged to a rotation in 7 iterations (Table 6). Five factors have been extracted. These explain 75,6% of variation in the whole dataset. First component reveals presence of a major group that highly appreciates on-line consumer reviews for both building trust and proceeding with on-line shopping. This component explains 29,4% of variation and uncovers importance of on-line consumer reviews for on-line shoppers. Second component indicates another group that understand the benefits of on-line consumer reviews for reducing anxiety in decision making both offline and on-line. Third component stresses that on-line reviews that has been designed for this study were reliable. According to fourth component, these reviews led respondents to further stages in consumer decision-making process. Lastly, fifth component underlines that consumers appreciate the presence of negative reviews as well as adequate length.

Table 5: Distribution of Perceptions of Respondents

Variable / Statement	ANOVA			
	Mean	Std.Dev.	F	Sig.
<b>1. General Attitude (cronbach's alpha = 0,707)</b>			25,63	0,000
When I purchase a product on-line, I always read reviews that are presented on the Web site	4,4167	1,68464		
When I buy a product on-line, on-line consumer reviews displayed on the Web site are beneficial for my product choice	4,2917	1,54225		
When I buy a product on-line, the reviews displayed on the Web site make me feel secure while purchasing the products	3,9861	1,40916		
I get benefit from using on-line consumer reviews very often while I purchase the product offline	3,3944	1,58095		
I prefer to use on-line consumer reviews for purchasing of high tech products such as laptop, digital camera and mobile phones rather than buying clothes, shoes etc.	4,3889	1,61468		
The reputation & trustworthiness of a Web site displayed on-line consumer reviews, are extremely important for me while choosing a product	4,9718	1,39358		
If I do not read the on-line reviews displayed in the Web site when I am shopping on-line, I am anxious about my decision	3,0423	1,61632		
When I buy a product on-line, I feel overloaded with information while reading the on-line reviews displayed on the Web site	2,8451	1,43076		
When I buy a product on-line, reading the reviews displayed on the Web sites annoys me	2,4167	1,53595		
<b>Variable / Statement</b>	<b>Mean</b>	<b>Std.Dev.</b>	<b>F</b>	<b>Sig.</b>
<b>2. Trust Level (cronbach's alpha = 0,352)</b>			3,025	0,052
Each review has sufficient reasons to supporting the opinions	3,2571	1,31530		
Each review is rational	3,6761	1,23952		
The number of reviews is large enough to persuade me about the source credibility	3,1781	1,51238		
<b>Variable / Statement</b>	<b>Mean</b>	<b>Std.Dev.</b>	<b>F</b>	<b>Sig.</b>
<b>3. Purchase Intention (cronbach's alpha = 0,903)</b>			1,906	0,172
According to above information I am willing to buy this product	2,1806	1,22562		
According to above information I am willing to recommend this product	2,0694	1,06581		
<b>Variable / Statement</b>	<b>Mean</b>	<b>Std.Dev.</b>	<b>F</b>	<b>Sig.</b>
<b>4. Review Quality (cronbach's alpha = 0,654)</b>			24,406	0,000

Each review is objective	3,0959	1,48291		
Each review is product relevant	3,9452	1,41314		
<b>Variable / Statement</b>	<b>Mean</b>	<b>Std.Dev.</b>	<b>F</b>	<b>ANOVA Sig.</b>
<b>5. Review Quantity (cronbach's alpha = 0,572)</b>			8,765	0,000
The length of review information is great	4,0580	1,38143		
I always prefer to buy a product which has the highest number of consumer reviews	3,2464	1,50885		
The existence of negative on-line reviews increases the source credibility	3,8406	1,35715		
<b>Variable / Statement</b>	<b>Mean</b>	<b>Std.Dev.</b>	<b>F</b>	<b>ANOVA Sig.</b>
<b>5. Review Negativity (cronbach's alpha = 0,608)</b>			4,113	,046
The reviewers in the given page negatively evaluate the product	3,6986	1,38127		
In general, the reviewers in the given page do not recommend the product	4,0274	1,22443		

Table 6: Principal Component Analysis

Statement	Component					Variance Explained (%)
	1	2	3	4	5	
When I buy a product on-line, reading the reviews displayed on the Web sites annoys me	-,791					
The reputation & trustworthiness of a Web site displayed on-line consumer reviews, are extremely important for me while choosing a product	,769					
When I purchase a product on-line, I always read reviews that are presented on the Web site	,768					
When I buy a product on-line, on-line consumer reviews displayed on the Web site are beneficial for my product choice	,749					29,429
When I buy a product on-line, the reviews displayed on the Web site make me feel secure while purchasing the products	,699					
When I buy a product on-line, I feel overloaded with information while reading the on-line reviews displayed on the Web site	-,663					
If I do not read the on-line reviews displayed in the Web site when I am shopping on-line, I am anxious about my decision	,856					
I get benefit from using on-line consumer reviews very often while I purchase the product offline	,765					15,791
I always prefer to buy a product which has the highest number of consumer reviews	,686					
Each review is rational		,849				
Each review is product relevant		,846				12,691
Each review is objective		,786				
According to above information I am willing to recommend this product			,940			
According to above information I am willing to buy this product			,940			9,732
The length of review information is great				,841		
The existence of negative on-line reviews increases the source credibility				,710		6,965

We believe that on-line reviews with a mix of negative and positive reviews are more influential in building trust as opposed to on-line consumer reviews that only includes positive reviews. A reason for this might be the suspicion that arises whether the e-vendor has eliminated the negative reviews or there are really no bad consumer experiences for real. Or, as it was in the case of *Belkin*, a brand with only positive reviews might be perceived as paying for these reviews. We support the idea that customers will find a pool of positive and negative on-line reviews more credible (Martin, 2007, Grau, 2008).

**CONCLUSIONS**

As on-line consumer reviews impact trust building, managing these reviews becomes crucial. Our findings indicate that type, number and proportions of on-line consumer reviews can deteriorate or enhance trust to the e-vendor and/or product. Specifically, we contend that negative on-line consumer reviews should be managed for improving their effects in trust building. Marketers should not eliminate negative on-line consumer reviews for all, but have a purposeful action plan for exhibiting them together with the positive ones. Since negative on-line consumer reviews have more powerful impact on purchasing intention, product choice and establishing trust than positive on-line reviews, on-line marketers should more carefully scrutinize the proportion, quality and quantity of negative on-line consumer reviews than positive on-line consumer reviews. Thus the proportion and the order of each on-line consumer reviews need to be controlled before they are presented.

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# STRESS AND PSYCHOLOGICAL STRAIN AMONG UNIVERSITY LECTURERS IN SAUDI ARABIA

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## ABSTRACT

*This paper is an examination of the role of stress roles in psychological strain among university lecturers in an institution of higher learning in Saudi Arabia. The study objectives included the examination of the relationship of individual role stressors (role overload, role conflict and role ambiguity) with psychological strain. The study also identified the predictor factors of role stressors on psychological strain. The sample comprised of 217 university lecturers from various faculties in the University of Dammam. Statistical tests including Pearson correlation and multiple regressions were used for the hypotheses testing. The results showed the existence of a significant relationship between independent variables and the dependent variable. On the basis of the results, discussions were conducted and future recommendations were provided.*

**JEL: M10**

**KEYWORDS:** Stress, Psychological Strain, Role Overload, Role Conflict, Role Ambiguity.

## INTRODUCTION

Prior decades have garnered a small body of research dedicated to stress and psychological strain (Kebelo, 2012). Nevertheless, studies of this caliber are still few and far between in Asia (Kebelo, 2012). Therefore, the present research is an attempt to investigate the stressors-psychological strain relationship among lecturers in Saudi Arabia. The exogenous variables include work overload, work ambiguity, and work conflict while the endogenous variable is psychological strain.

Fisher (1994) stated that academic staff members come across role stressors in reaction to job demands requiring them to be a teacher, researcher, organizer, and administrator at the same time. On top of this, owing to the changes in higher education, a considerable increase in the administrative burden was also experienced by academic staff members (Azeem and Nazir, 2008). Studies concentrated on this topic showed that occupational stress may result in several negative outcomes for both the individual and the workplace (Oginska-Bulik, 2006). An educator's work is generally becoming more complex and demanding (Jackson and Rothmann, 2006). The educators' role is not without boundaries and the variables coming into play are increasingly becoming complex (Jackson and Rothmann, 2006). Additionally, the more recent global research concerning stress among academics shows that the institutions of higher learning are rife with the phenomenon of occupational stress (Winefield, 2000). Studies also revealed that occupational stress among academic as well as administrative staff of these institutions is high in general (Michailidis, 2008; Thorsen, 1996). In the Saudi context, the scenario is the same where several studies evidenced that university staff displayed job stress ranging from moderate to high levels (Iqbal and Kokash, 2011). On the basis of Houtman and Kornitzer's (1999) study,

occupational stress refers to a pattern of reactions occurring when employees are faced with work demands that they are not able to cope with and they perceive an imbalance between demands and environmental/personal resources. Stress was also defined by Cooper, Dewe and O'Driscoll (2001) as a non-specific reaction to environmental demand and work related stress is generally referred to as psychological strain. Psychological strain is defined as psychological outcomes that surface in reaction to organizational demands. These outcomes include lack of concentration, loss of sense of worth, and depression and this situation reflects what is generally considered as stress in such scenarios. On the other hand, Winnubst (1993) described strain as a multiple process of behavioral, physiological and psychological elements that appears under the influence of stress and it disturbs routine. Hence, it can be stated that stress is conceptualized as a process that occurs in individuals being under the influence of stressors that cause strain, and eventually result in adverse outcomes including cynicism, lack of professional efficacy, minimized organizational commitment and intention to leave (Idris, 2011).

## LITERATURE REVIEW

### Stress

A stressor, as defined by Lazarus and Folkman (1984), is an environmental element that is perceived by the individual as threatening to his/her well-being. In their proposed model, they postulated personal and situational factors as significant in shedding a light on the impact of stressors (Lazarus, 1999). The optimism that the individual holds concerning his/her control over the stressor may impact his/her appraisal and behavior towards it. Threatening environmental elements may appear as barriers that cause additional work, time pressure or monotonous routines (Greiner, Ragland, Krause, Syme and Fisher, 1997). Both work environment and poor job design are factors that may prevent the individual from performing his tasks in the organization which could limit workplace role performance. In this study, the occupational stresses identified include role overload, role ambiguity and role conflict.

### Strain

Strain is defined as affective, feeling states of the individual that involved depletion of emotional resources and lack of energy. Idris (2011) further explained that psychological strain is a specific form of emotional distress appearing in reaction to a perceived threatening situation. Moreover, Winnubst (1993) described strain as a multi-process comprising of behavioral, physiological and psychological elements that appear under the influence of stress and disturbs routine function. Hence, stress is considered to be a process that appears in individuals facing stressors that cause strain, which eventually results in several adverse outcomes such as cynicism, lack of professional efficacy, lack of organizational commitment and intention to leave (Idris, 2011).

### Relationship between Stresses and Psychological Strain

A review of literature reveals that the stress-strain relationship has been thoroughly examined by authors, particularly in the Western countries. However, in Asia, studies of this caliber are still rare (Achour and Boerhannaeddin, 2011). In addition, literature has also clarified the relationship between stressors and the feeling of strain (in Lee and Ashforth, 1996; Fogarty, Singh, Rhoads and Moore, 2000; Peiro et al., 2001, Posig and Kickul, 2003). Specifically, Posig and Kickul (2003) claimed that strain happens primarily owing to fatigue resulting from pressure to adhere to the set of demands. As for role stressors in the context of academics, literature reveals clear evidence that academics do experience role overload, role ambiguity and role

conflict (Taris et al., 2001; Dua, 1994; and Gillespie et al., 2001). Idris (2011) stated that role overload and role ambiguity are both predictors of psychological strain but not role conflict. Studies also revealed that role conflict, role ambiguity and role overload can lead to the development of stress symptoms (Huda, Rusli, Naing, Tengku, Winn and Rampal, 2004). In a similar study, Kinman (2001) showed that a great number of academicians have the tendency to quit working in higher education institutions or they regret selecting academics as their career. Also, Sun, Wu and Wang (2011) revealed that role overload is a predictor of occupational stress among Chinese university teachers.

Moving on to Australia, Gillespie, Walsh, Winefield, Dua and Stough (2001), and Winefield and Jarrett (1998) enumerated factors including lack of research finance, lack of support, task overload, poor leadership and job insecurity as the primary stress sources. In the context of New Zealand, Chalmers (1998) stated that dissatisfaction owing to work overload was the primary cause behind university staff stress. A similar contention also came from Tytherleigh, Webb, Cooper and Ricketts (2005) who found that job insecurity, lack of control and communication issues were liked to higher job stress among UK university staff. These studied evidently overlooked the examination of stress related outcomes among lecturers in institutions of higher learning in a developing country like Saudi Arabia. Thus, this study aims to examine the association between each role stressors (role overload, role conflict and role ambiguity) and psychological strain and to identify the predictor factors of role stressors on psychological strain. Therefore, this study hypothesizes that;

1. There is a positive relationship between role ambiguity and psychological strain among university lecturers in the University of Dammam, Saudi Arabia.
2. There is a positive relationship between role conflict and psychological strain among university lecturers in the University of Dammam, Saudi Arabia.
3. There is a positive relationship between role overload and psychological strain among university lecturers in the University of Dammam, Saudi Arabia.
4. Role overload, role conflict, and role ambiguity predict psychological strain among university lecturers in the University of Dammam, Saudi Arabia.

## **METHODOLOGY**

### Study Design

The present study employed the survey design. This design involves a large number of individuals that provides a description of the characteristics of the population through an unbiased sample selection.

### Study Sample

This study's target population comprised of lecturers teaching in a higher learning institution in Dammam, Saudi Arabia. The sample comprised of PhD and Master Degree holders who were chosen through stratified sampling method from the University of Dammam. After obtaining the go ahead to conduct the survey through a written informed consent, the questionnaires were distributed to the lecturers. A total of 217 lecturers were chosen for the study whose ages ranged from 25-51. There were 168 male respondents in the sample and 49 female respondents as shown in Table 1.

Table 1: Descriptive Statistics of Participants

<b>Gender</b>	<b>Male</b>	<b>168</b>	<b>77.40%</b>
	Female	49	22.60%
Age	25-30 Year	60	27.60%
	31-40 years	105	48.40%
	41-50 years	24	11.10%
	Above 51	28	12.95%

### Outcomes Measurement

The current study's variables are measured through the following instruments; role overload was measured through Spector and Jex's (1998) QWI, role ambiguity was measured through Rizzo, House and Lirtzman's (197) six-item scale, role conflict was measured through Rizzo et al.'s (1970) eight-item scale, and strain was measured through Goldberg's (1978) GHQ12. The instrument was categorized into two. The first one (Section A) contained the demographic characteristics while the second one (Section B) contained 30 items whereby the lecturers were required to indicate by ticking their degree of agreement or disagreement. The scales ranged from 1-strongly disagree to 5- strongly agree. The produced initial items were examined by nine experts in education who contributed to the study. The final copy of the items was proven to have content validity. As for the items reliability, the Cronbach Alpha for the variables are strain = 0.93, role overload= 0.86, role ambiguity= 0.84 and finally role conflict = 0.93.

## **RESULTS**

### Correlation Analysis

The mean value and correlation among the variables are presented in Table 2. According to the results, all the stress variables (role overload, role conflict and role ambiguity) are related to psychological strain. Specifically, role overload positively relates to psychological strain with ( $r=.847^{**}$ ,  $p<.000$ ), role conflict positively relates to psychological strain with ( $r=.808^{**}$ ,  $p<.000$ ) and role ambiguity is related to psychological strain with ( $r=.773^{**}$ ,  $p<.000$ ). It can therefore be concluded that role stressors are all related to psychological strain among university lecturers in the University of Dammam, Saudi Arabia.

Table 2: Correlation of the Variables

<b>variables</b>	<b>Mean</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Psychological Strain	3.34	1			
Role Overload	3.18	0.847**	1		
Role Conflict	3.15	0.808**	0.850**	1	
Role Ambiguity	3.21	0.773**	0.821**	0.831**	1
		0.000	0.000	0.000	217

### Regression Analysis

The researcher made use of multiple regression analysis to investigate the variation of role stressors (role overload, role ambiguity and role conflict) on psychological strain. The predictor variables of role overload, role conflict and role ambiguity presented in Tables 3, 4 and 5. The results revealed that they are all predictors of psychological strain. The overall model explained 74.6% of variance in psychological strain at a statistically significant level of F (212.546; P=.000).

Table 3: Model Summary (b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.866(a)	.750	.746	.45023

Predictors: (CONSTANT), Role Conflict, Role Ambiguity, Role Overload

### Dependent Variable: Strain

Table 4: ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	129.198	3	43.066	212.456	.000(a)
	Residual	43.176	213	.203		
	Total	172.374	216			

Predictors: (CONSTANT), Role Conflict, Role Ambiguity, Role Overload  
Dependent Variable: Strain

Table 5: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.681	.114		5.986	.000
R-OI	.485	.066	.520	7.347	.000
R-AMB	.133	.065	.137	2.047	.042
RC	.221	.064	.252	3.473	.001

a. Dependent Variable: Strain  
R-OL: Role Overload; R-AMB: Role Ambiguity; RC: Role Conflict

## DISCUSSION AND IMPLICATION

On the basis of the results, role stressors are highly correlated with psychological strain. This result is consistent with those of prior studies (e.g. Idris, 2011; and Keelo, 2012) revealing that role overload, role conflict and role ambiguity are significantly correlated to psychological strain.

This indicates that work environment of university lecturers play a role in strain level experienced by the lecturers. This is further reinforced by the result found by Kebelo (2012) who stated that 24.6% of total strain stem from role overload, role ambiguity and role conflict. Also, Idris (2011) contended that role stressors are related to psychological strain.

With regards to study implications, this study serves as a preliminary research dedicated to stress and psychological strain among university lecturers in Saudi Arabia. It explains the relationship between stresses and psychological strain among the said lecturers. The study revealed that stress roles are significantly correlated with psychological strain. From the perspective of management, this study urges university leaders to facilitate better working environment in order to minimize the conflict in lecturer's work. Management should employ steps to control stress and strain in the university environment, which would lead to improving the conditions of lecturers and improving their depleted performance.

#### Limitation and Recommendations

Not unlike other studies, the present study has some limitations. First, the study sample is not a representative of the bigger population as it was chosen only from one institution of higher learning. This indicates that generalization across geographical and demographical areas was not confirmed. On the basis of this limitation, future studies could make use of the same design and framework but include all Saudi public and private universities in their study sample. Second, this study employed the quantitative data though self-report measures which provide the participants a great chance to manipulate their answers. This may have occurred owing to the boredom of the participants, their eagerness to get over the test battery or to just satisfy the researcher. Hence, the answers may not reflect the true experience of the respondents (Creswell, 1994). Future studies could make use of qualitative methods to explain the perceptions of lecturers about their actual work environment.

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# CROWDFUNDING: A NEW PARADIGM IN START-UP FINANCING

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## ABSTRACT

*This research seeks to examine the concept of crowdfunding, which is relatively a new trend in alternative financing. This work follows a theoretical analysis of literature to describe crowdfunding and its advantages and disadvantages with the chief focus on equity crowdfunding investment. In addition, since skepticism and apprehension has been growing in financial circles regarding the impact that equity crowd-funding might bear on venture capital industry, we have provided a theoretical reasoning describing how both these financing mechanisms - venture capital and equity crowdfunding - can go together in future complimenting each other.*

**JEL:** G24, M13

**KEYWORDS:** Crowdfunding, Venture Capital, Entrepreneur, Start-ups, Financing

## INTRODUCTION

It is a fact that the reasons for failure of an established business may be attributed to poor product offering, lack of vision or a weak business model but the death of a budding entrepreneurial venture is largely a matter of inadequate financing. These new businesses are in a great need of financing from investors but face challenges in securing this one most important resource. Start-up capital has played a major role in many of the present day entrepreneurial endeavors. This area has caught the attention of many of the economists and researchers. Capital requirement and their ability to attract such financing is largely influenced by the stage of maturity a business is currently in. Each business follows a cycle of maturity and therefore, it becomes imperative to look at business maturity cycle that includes the following seven stages: - 1) Seed Stage, 2) Start-Up Stage, 3) Growth Stage, 4) Established Stage, 5) Expansion Stage, 6) Mature Stage and 7) Exit Stage (Thierry Janssen, 2013).

This research is restricted to capital requirement at the Seed Stage where in crowdfunding comes in. At the seed stage, the business is still a concept or an idea. The seed stage is characterized by the initial capital that is used to do product and/or service development, patent filings, market surveys and research and business partner recruitment. At this point, no commercial operations have been started and the company is still testing waters. The biggest hurdle faced by the companies in this stage is the capital requirement to convert this business idea into a successful commercial venture. Until now, very few of the wealthy investors have been shaping up the world of innovation. Angel investors and venture capitalists have always been regarded as gatekeepers of the creative world. They have been very selective and many of the businesses are left out in their stringent selection process of investing. Many innovative ideas have been lost in their fight for realization (Scott Steinberg, Rusel deMaria, 2012). At this juncture, a very new concept of crowdfunding is coming up which can go a long way in helping the entrepreneurs raise the capital.

## LITERATURE REVIEW

Kickstarter.com being one of the first and most successful crowdfunding platforms helped raise \$942,578 from 13,512 investors for a business idea promoted by Scott Wilson and his team against their pitching target of \$15,000 (Siegler, 2010, Kickstarter, 2010). By these statistics, we get a glimpse of how rapidly this funding platform is expanding. Schwienbacher and Larralde (2010) have described crowdsourcing and how crowdfunding has emerged from crowdsourcing; the definition being “Crowdsourcing enables a firm to outsource specific tasks essential for the making or sale of its product to the general public (the crowd) with the aid of an open call over the internet and consumers volunteer to contribute to production processes and create value. Crowdfunding: can be viewed as combining concepts of crowdsourcing (i.e. seeking financing from the crowd) and microfinance (small amounts contributed; no collateral)”.

Crowdfunding is a new and emerging type of funding (Larralde & Schwienbacher, 2010), with very little academic literature available on it. Larralde & Schwienbacher (2010) in their book have discussed crowdfunding with the chief focus being on small, entrepreneurial ventures. A description of crowdfunding and existing research on the topic has been provided, putting crowdfunding into the perspective of entrepreneurial finance and thereby describing factors affecting entrepreneurial preferences for crowdfunding as a source of finance. Larralde & Schwienbacher (2010) have also researched upon different business models used to raise money from the crowd and have elaborated upon the structure of the crowdfunding process. Devashis Mitra (2012) has analyzed crowdfunding from the point of view of crowdsourcing. Burtch G., Ghose A. and Wattal S. (2012) have discussed the contributing patterns in crowdfunding market and they clearly point out that all crowdfunding transactions are facilitated through internet-based crowdfunding platforms, which also provide a convenient means for all exchanges of funds. Kerr, Lerner and Scholar (2010) conducted their research on entrepreneurial ventures funded by angel investors and proved that such ventures had higher survival rates over an initial 4 year period than the firms not backed by angel investors.

They further concluded that appropriate financing and managerial guidance play a big role in the success rate of new ventures. Dahlqvist, Davidsson & Wiklund (2000) argued that the availability of financial capital and sound human resource were essential for new venture growth. Venture capital financing is a necessary evil that provides not only funds but managerial know-how best suitable in situations of high strategic uncertainty, relatively low average profitability and skewed chances of firm's success (low success probability, but extremely high pay-off in case of firm's success) (Winton & Yerramilli, 2004). De Bettignies & Brander (2007) further supported these arguments and findings with reasons as to why venture capital funding is mostly found in high-tech or biotechnology start-ups.

## RESEARCH DESIGN

We have primarily focused on the structured review of relevant literature. It began with proper selection of research papers and articles which could throw a light on our research topic. Once the literature was selected, it was thoroughly analyzed with respect to the concept of crowdfunding as an alternative source of financing. This helped us form opinions on crowdfunding's future relationship with venture capital industry, with suitable reasoning. The relevance of selected literature was ensured by choosing the latest articles and picking them up only from authentic sources.

### The Crowdfunding

Do you hold an idea as profitable as present day innovations of Google, Facebook or Youtube? Can you create another multi-million venture? If yes, the answer is crowdfunding. “Crowdfunding is like posting a classified advertisement on a website with the difference that, through crowdfunding sites, entrepreneur can also advertise a business concept and request for funding from the crowd” (Griffin, 2012). Crowdfunding is basically pitching a business idea to the general public and asking for donations to help bring your idea into reality. An entrepreneur can bypass the venture capitalists and angel investors and get directly in contact with the regular internet users asking for small amounts of capital from many of them. Creators use certain websites such as Kickstarter and indiegogo to pitch their ideas, business plans, product offerings, etc and the investors in return are awarded in terms of discounts, free services or product offerings, once the company starts commercial operations (Scott Steinberg & Rusel deMaria, 2012). For example, all the persons pledging their money in support of a movie might be given free DVD copies and premier night tickets, etc. Initially, the funding benefits to the investors were in the form of merchandize benefits but very recently the concept of ‘Investment Crowdfunding’ is coming up where in the investors will hold an ownership stake in the new venture in the form of equity known as ‘Equity Crowdfunding’ or will receive interest payments from the entrepreneur known as ‘Debt Crowdfunding’. However, this concept of investment crowdfunding is in its nascent stage and is considered illegal in most countries. In Europe, different countries have different rules. On 4 September 2013, French Finance Minister Pierre Moscovici presented a draft law, which aimed to adapt the legal status of the participative financing platforms while Italy, UK and Austria are working on crowding regulations (Europe’s New Crowdfunding Regulations, 2013). Only recently was it legalized in U.S.A through U.S Jumpstart Our Business Start-ups (JOBS) Act, 2012 (U.S Government Printing Office, 2012). According to the (crowdsourcing), digital applications, high-tech projects, computer games, films, music or literature can easily attract equity-and lending-based platform where as donation based and merchandize rewards based crowdfunding models are best suited for cause-based promotions and projects attracting the interest of philanthropists.

#### Advantages of Crowdfunding

Crowdfunding is being regarded not just a source of raising capital but also as a mode of validation of the creator’s business idea as it gives a projection of target markets. The area of investment in this model is vast as the idea may not be worth millions of dollars but still can receive investments from philanthropists for art exhibitions, charity fundraisers, etc. It can act as a marketing tool for a start-up firm as it increases product or brand awareness among the general public. One gets to test and prove the popularity of the model, similar to beta testing in a software industry. Also, it provides genuine feedback regarding the idea and if the funding received is nowhere close to the target capital, the idea must be given another thought. In case of basic crowdfunding, where equity is not transferred, the cost is almost zero.

#### Disadvantages of Crowdfunding

In spite of the numerous benefits it enjoys, the cons cannot be ignored. The biggest disadvantage is limited capacity for raising the money. The maximum limit for raising capital is US \$1 million according to U.S.A JOBS Act, 2012 (U.S Government Printing Office, 2012). Also, there is always a fear of loss of confidentiality as the idea is shared with many others and a risk of the idea being stolen and implemented before the pioneer does. Additionally, a lot of time and effort is required to promote an idea through campaigns and promotions.

### Discussion: Future Relationship Between Equity Crowdfunding and Venture Capital (Vc) Industry

Since the legislation of Jumpstart our Business Start-up or JOBS Act, 2012 in U.S.A, speculative talks have been going around assessing the impact that equity-based crowdfund investing might have over venture capital industry (a traditional financing vehicle). Historically, angel investors usually came into the picture in start-up stage with a very few of them targeting early stage whereas venture capital firms have been a dominant force in seed financing and early stage financing. So some skepticism and apprehension has been around about equity crowdfunding affecting the venture capital industry. In recent years, VC industry has largely been criticized for their investment operating models, poor performance and low return on investments. VC industry has not been able to outperform the capital markets in more than a decade (Cambridge Associates LLC, 2013). Venture capitalists have been blamed for leading the companies to premature Initial Public Offerings (IPO) that is affecting the companies heavily. Due to these factors, VC industry has been losing their trustworthiness in the market.

### This Current Situation Raises a Question: Will Crowdfunding Be a Direct Competitor for Vc Industry?

The answer is ‘Not Necessarily’. There are key features shared by both these financing vehicles that make both the funding avenues complementary to each other for the future. Venture capitalists can benefit through crowdfunding as it can help identify promising startups much easily and simultaneously gather public reviews giving a long-term picture of any business future. In fact, some of the VC firms in the U.S. have already invested millions into crowdfunding platform ‘Funder’s Club’ while other VC’s are looking to launch their own crowdfunding websites. One of the start-ups getting a lot of publicity is ‘IPO Village’, which is offering NASDAQ IPOs from investment banking firm ‘First Line Capital’ directly to the public (<http://www.ipovillage.com/>).

This has created a lot of sensation in the capital markets as it has made such IPO market, which was once a privilege of the institutional investors, accessible to common man. In instances such as IPO Village, venture capital industry is also benefitting due to more time efficient and cost effective initial public offerings for firms whose portfolio’s IPO is backed by venture capital firms. VC firms are not merely a financing option but also equip the start-up companies with an industry expertise, help make introductions to key industry players and assist in overall company’s management. Crowdfunding will be beneficial to venture capitalists by maintaining a suitable control process over the valuation of the companies held by venture capitalists. Crowdfunding can strategize the IPO process in an efficient manner backed by the support of general public, thus maximizing the returns on investment. Also, some big players in the VC industry have or are in the process of creating their own crowdfunds that can enhance the network and provide a holistic view of VC exit strategies from their start-up portfolios e.g. ‘IPO Village’. Additionally, it is impossible for all the new firms to bypass the VC firms as JOBS ACT, 2012 has limited the maximum capital raising limit to U.S \$1 Million (U.S Government Printing Office, 2012) which is much lesser than the financing needs of many of the new companies.

## **CONCLUSION**

This research has attempted to explain the concept of crowdfunding with a main focus on equity crowdfunding. We have also endeavored to put forward the relationship that can be shared between VC and equity crowdfunding. Thus, in the light of the reasons described above, we

argue that the future growth in equity crowdfunding will not come at the cost of VC industry. While venture capitalists are known to gain access to the best deals, these internet-based financing platforms will make it easier for them to learn of any opportunities they might have missed and both the industries will go hand in hand.

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# EXAMINING THE RELATIONSHIP BETWEEN TRADING VOLUME AND EQUITY MARKET VOLATILITY: EVIDENCE FROM BRIC COUNTRIES

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## ABSTRACT

*Literature of financial time-series documented several stylized facts about the stock return series such as fat tail distribution or leptokurtosis, volatility clustering, asymmetric news effects etc. The introduction of autoregressive conditional heteroskedasticity (ARCH) model by Engle (1982) and its extension of Bollerslev's (1986) GARCH model provide a systematic framework for volatility modelling. Specifically, GARCH model is widely used in the literature and regarded as the bedrock of time-varying volatility model. However, the conventional GARCH model do not able to capture an important stylized fact known as volatility asymmetry, first detected by Black (1976)[ The asymmetric effects refers to an unexpected drop in stock price (bad news) increase predictable volatility more than unexpected increase in stock price (good news) of similar magnitude. Black (1976) and Christie (1982) on one hand provide the leverage effect explanation, and Pindyck (1984), French et al. (1987), Campbell and Hentschel (1992) on the other, provide the volatility feedback hypothesis explanations, that are well documented in the finance literature.] EGARCH model of Nelson (1991) and GJR GARCH model of Glosten, Jagannathan and Runkle (1993) are among the widely used volatility models that capture the asymmetric effects. The presence of ARCH/GARCH effects in the financial asset returns is appealing to be explained through the knowledge of the rate of information flow into the market. The seminal study of Lamoureux and Lastrapes (1990) demonstrate that the presence of GARCH effects is negligible once trading volume as a mixing variable for information flow is incorporated into the conditional volatility model. The conclusion of the recent empirical literature however is unclear, thus raising more in-depth studies.*

Recently, stock markets around the world have been experiencing volatility. The empirical evidence on trading volume-volatility relationship are largely based on mature and developed stock markets and studies in emerging and less developed markets are on the rise. Moreover, the information flow into the market are subject to institutional set up of the respective countries and varies from countries to countries both in developed and emerging markets. The present study aims to revisit this issue considering data of four relatively advanced emerging market economies - Brazil, Russia, India and China (BRIC) during the period of 2008-2013(These four countries are originally grouped by James O'Neal of Goldman Sachs based on their significant economic weights in the world economy). The commonalities among these four countries are that they represent relatively large in the class of middle-income group of emerging markets economies. However, these countries are different from each other and also from other emerging economies with respect to their economic policies, structural and institutional factors.

Having revisited volume-volatility relationship for the BRIC countries, it is expected that the present study would extend the literature by providing more insight into the emerging stock market behavior. In what follows we list the objective of this paper. First, we empirically

examined the asymmetric volatility for the BRIC stock markets using EGARCH model. During the period from 2008 to 2012, the global economy has experienced two major economic crises viz. the global financial crisis and the Euro zone crisis. The BRIC countries also felt them eventually (The stock markets of BRIC countries were declined significantly after the US crisis although they rebounded gradually. Especially, volatility in Brazil and Russia increased followed by India and China relatively lesser however, with the effect of the Lehman Brothers collapse (see, Bianconi et al. 2013). Second, we examined the impact of information flow on the equity market volatility for BRIC stock markets by considering trading volume as a proxy for rate of information into the markets. Particularly, at what extent the trading volume helps to explain equity market volatility is examined. Third, the degree of volatility persistence or the GARCH effect in the volatility model is verified before and after inclusion of trading volume as an exogenous variable in the conditional volatility model. Using daily data of their respective stock market indices we first estimate EGARCH (1, 1) model to confirm the volatility asymmetry, and then we examine the volume-volatility relationship by augmenting contemporaneous and lagged trading volume in the EGARCH model. In order to test the presence of asymmetry in the estimated volatility model, we have also estimated Engle and Ng (1993) diagnostic tests viz. the Sign Bias Test (SBT), the Negative Size Bias Test (NSBT), Positive Size Bias Test (PSBT) and the Joint Test by combining all the tests together.

The news impact curves of the estimated volatility model for the respective countries are also drawn to graphically represent the asymmetric relationship. The results indicate substantial volatility asymmetry across the BRIC equity markets. We find that contemporaneous trading volumes are significantly associated with equity market volatility for all the four market studied supporting the mixture of distribution hypothesis. Lagged trading volumes are found to be insignificant in explaining conditional volatility. However, it is evident that trading volume fails to attenuate the degree of volatility persistent. The persistence level remains high across the BRIC markets even after incorporating trading volume.

**JEL:** G110, G120, C580

**KEYWORDS:** Asymmetric volatility, Trading volume, EGARCH, BRIC, Volatility persistence

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# AN EMPIRICAL APPROACH TO RISK ASSESSMENT IN AN INVESTMENT PROJECT: CASE STUDY "FINANCIAL COMPLEX AND BUSINESS CENTER AT TECNOLÓGICO DE ANTIOQUIA"

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## ABSTRACT

*This paper establishes an investment project's risk by using estimated net profit variability for each period. Net profit variability is determined through the average net profit dispersion rate. Then, based on net cash flow variability, NPV variability, and consequently the measurement to establish the level of risk taken are determined. NPV and its explanatory variables are modeled using the Monte Carlo simulation and a pilot study to determine the likely distribution of profit, costs and expenses associated to cash flow. The social discount rate is used to counterbalance the IRR's fundamental re-investment case, since all the cash flow generated by a project may actually be re-invested at a rate adjacent to the capital cost. Likewise, confidence intervals are established to quantify risk. The case study is used as an empirical approach to risk quantification in an investment project for Complejo Financiero y Centro de Negocios —Coficen (Financial Complex and Business Center) at Tecnológico de Antioquia-Institución Universitaria (TdeA IU).*

## INTRODUCTION

The proposal “*Educación sin fronteras*” (Education without Borders), advanced by Tecnológico de Antioquia University Institution, is based on strengthening research and academia with an emphasis on the quality of the programs offered. For this purpose, and based on the Institutional Development Plan, the creation of a financial complex and business center was included in order to support academic training for both undergraduate and graduate students, professors, alumni, and the community in general. They will get support in everything related to stock-market management, understanding and operations; portfolio valuation, business valuation, management of associated risks, technical and fundamental studies, accounting for operations in capital markets, and knowledge about operations in the mercantile and BVC (Colombia Stock Exchange) stock markets. This paper is divided into four sections. The first one focuses on reviewing the basic concepts and definitions for the business center. The second one deals with a few factors the project's financial evaluation should take into account, and briefly describes ways to quantify risk. The third one focuses on defining the model to use, and on analyzing pilot study's consistency, as well as the data gathered. Finally, the results are presented, along with some recommendations for the investment project.

### Risk and Financial Assessment Techniques

*Net present value:* The Net present value (NPV) method is one of the most widely used economic criteria to assess investment projects. It is based on determining, at the very beginning of the project, the equivalence of future cash flows generated by a project, and comparing such

equivalence to the initial investment. The difference shall be the additional (positive or negative) amount a project will add to (or subtract from) the company's current value. If the project generates (positive) value for the company, then the project is approved. If, on the contrary, the NPV is negative, this means the project would destroy the company's value, and it must be rejected (Bu, 1981). The condition—that the project must be approved provided NPV is positive—is valid to forecast future cash flows based on a historical context when there is certainty enough about future tendencies. However, it does not work when estimates for those cash flows are based on multiple assumptions about what the future might bring (Gómez, 2005). This paper has, due to its own nature, a high degree of certainty regarding forecast flows. The general expression to calculate NPV is:

$$\text{NPV} = \text{initial investment} + \sum \frac{\text{NCF}_t}{(1+K_a)^t} \quad \text{Equation}$$

Where:

NPV = Net Present Value

NCF<sub>t</sub> = Net Cash Flow for year t

K<sub>a</sub> = Capital Cost

It is important to underline that capital cost used in this project will be the social discount rate represented by the opportunity cost the country incurs when using its resources to finance projects (Ministerio de Planificación, 2011). For Colombia, it stands at 12% (Aldunate, 2006).

*NPV Profiles:* An investment project's NPV, and capital cost behave in an inversely proportional way. That is to say, as the capital cost rises, NPV drops, and vice versa. Financially speaking, companies intend to keep the capital cost at the lowest possible level to get a greater number of profitable projects.

#### Internal Rate of Return

Internal Rate of Return (IRR) is defined as the annual percentage return generated by the resources invested in a project. Formally, IRR can be defined as the rate of return (or discount) that makes the NPV equal to \$0.

The general expression to calculate IRR is:

$$\text{NPV} = I_0 + \sum \frac{\text{NCF}_t}{(1+K_a)^t} \quad \text{Equation 8.2}$$

IRR is obtained when NPV = 0. Therefore:

$$0 = I_0 + \sum \frac{\text{NCF}_t}{(1+\text{IRR})^t}$$

Where: I<sub>0</sub> = Initial Investment, and IRR = Internal Rate of Return

Both the IRR criterion and the NPV are techniques rooted in cash flows deducted from a focal date, which is usually the very beginning of the project. Therefore, the results will depend on a logical and correct application of the elements that make it up. In this particular case, the most precise and concrete decision is achieved using the NPV, since it implies no confusion (Restrepo,

2009). For some analysts and executives, the IRR criterion is better than the NPV method, which contests the assumption that the latter is easier to understand. These are the significant flaws of the method. Inexperienced users, especially, may be thus misled in their decisions to invest (Bolten & Pérez, 1981). In this paper, a Modified Internal Rate of Return (MIRR) is obtained. Thus, the IRR flaws can be overcome. The method used for calculation solves the problem of multiple rates, as well as the problem of having no solutions because there will always be an MIRR. NPV assumes that it will be possible to re-invest positive cash flows generated by the project in projects with a similar rate to the company's capital cost. In turn, the IRR assumes that said positive cash flows will be re-invested in projects with an internal rate of return similar to that of the project evaluated (Van Horne, Pando & Martínez, 1988).

#### Applying Monte Carlo Simulation to the Assessment of Projects Using @Risk

Risk analysis may be defined as the systematic use of available information to establish how frequently some events may take place, and the scale of consequences (Medina, S. & Restrepo, J., 2013). It is normal to associate risk with negative events like losing money in an investment. However, opportunities can be found in the risk analysis process because it requires that all the possible results of a given situation be explored.

#### Risk Analysis With Monte Carlo Simulation

The restrictions posed by single point estimates are corrected by using a more robust and refined quantitative risk analysis with Monte Carlo simulations (SM). The variables that are random, or have a degree of uncertainty are incorporated into the model using their probability distribution. It represents the values that the variables are likely to take. By using probability distributions, the SM approaches reality to describe the uncertainty of the variables in a risk analysis.

#### Probability Distributions

In business phenomena analyses, a wide variety of probability distributions can be found. Below are described the distributions used in this study.

**Normal distribution:** When the data are not normal, it is possible to transform them, or use other statistical methods that do not require this kind of restrictions, such as the so-called non-parametric methods (Pértegas Díaz & Pita Fernández, 2001).

**Uniform distribution:** it is very versatile because the analyst only needs to define the minimum and maximum values. Production costs, revenue from the sales of a new product, inventory loss, among others, can be placed in this category.

**Triangular distribution:** This distribution is used in economics when the subject under study involves analyzing the length of private projects using optimistic, pessimistic, and most likely estimates (Olivares et al., 2009). The analyst defines the minimum, maximum, and most likely values.

**PERT distribution:** It is similar to triangular distribution. Minimum, maximum, and most likely values are defined. In practice, the PERT method requires that the analyst allocate three different values to optimistic, pessimistic and most likely scenarios (Pérez, 1998). The previous distributions are used in the Monte Carlo simulations employed in this paper. The events are the result of a probability distribution function, such as those described in the previous section, which represent the simulated stochastic process (Johnson, 2000). When an SM is carried out, values are

sampled randomly according to the distribution probabilities defined. Every set of samples is iteration, and its result gets recorded. Monte Carlo Simulation (SM) carries out this operation  $n$  times, generating a theoretical probability distribution that provides a more complete view of what might happen, and the likelihood of it happening (Aragonés & Blanco, 2000). SM generates information fundamental to make decisions in project analyses. It will reflect the project's profitability either through the NPV or the IRR. Using the SM, a significant number of cases is obtained to find out the probability distribution (Restrepo & Medina, 2012).

### Project Risk

It has been established that there is a risk factor when evaluating a project. Therefore, one of the purposes when measuring risks is maximizing NPV or IRR expectation (Tufféry, 1972). Below, an explanatory model is developed to calculate NPV and IRR expectation. Since several risk sources co-exist in a project, for this paper's purposes, estimated cash flow variability will be considered the most relevant risk. This implies that the rest of the variables are considered risk-free: capital cost, service life, investment, etc.

### NPV and IRR Probability Distribution

*Npv Distribution:* For risk analysis, cash flows in a project feature a random behavior. This means that for a thorough analysis, it is essential to know NVP's probabilistic behavior. The evaluation is generally carried out on a monthly basis and at a discount rate. The more periods the project's service life takes into account, the higher the normality of the NPV random variable, notwithstanding the probability distribution of the respective cash flows. Once the problem of NPV probability distribution is solved, and based on a normal distribution, it is possible to carry out hypothesis tests, and build confidence intervals.

### Data and Methodology

*Investment budget for civil works:* In order to carry out financial forecasts for investing in civil works, the market price quotations were obtained. By means of a uniform distribution, the items to determine the average budget were simulated. The initial investment and the project's service life are directly dependent, and independent from the rest of the variables. Likewise, the unit cost, and sales have an inverse relation: the higher the sales volume, the lower the unit cost. Initially, the random variable that explains the project's profitability (IRR), and the random variables that make it up are defined.

With a 44% confidence level, the NPV for the project stands between 0 and 51,680 dollars for the evaluation period. There is a 51% chance for the value to be below 0. The minimum value obtained from the simulation was US\$ -76.482, and the maximum, US\$79.875. In turn, the IRR, with a 90% confidence level stood between 7,47% and 12,22% for the period of evaluation. There was a 5% chance for the value to be below 7,47. The minimum value obtained from the simulation was 6,4%, and the maximum, 13,3%.

The IRR and NPV dispersion chart.

## **CONCLUSIONS**

shows the simulation summary of the main variables that make up cash flow. It is important to note that the project's total investment has a mean value of US\$370.774, a minimum value of US\$343.475, and a maximum value of US\$400.126. It has a 95% chance of ranging between

US\$355.172 and US\$386.399; a 5% chance of being below US\$355.172, and a 5% chance of being above US\$386.399. With an investment of about US\$370,000, which may generate an average NPV of US\$70,000, the institution's fundamental pillars of research, scope and teaching will be enhanced. The reason is that the academic community, as well as importers and exporters, are provided with technical and practical tools in the context of international business for trade treaties and agreements between Colombia and other countries around the globe.

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## CONCLUSIONS

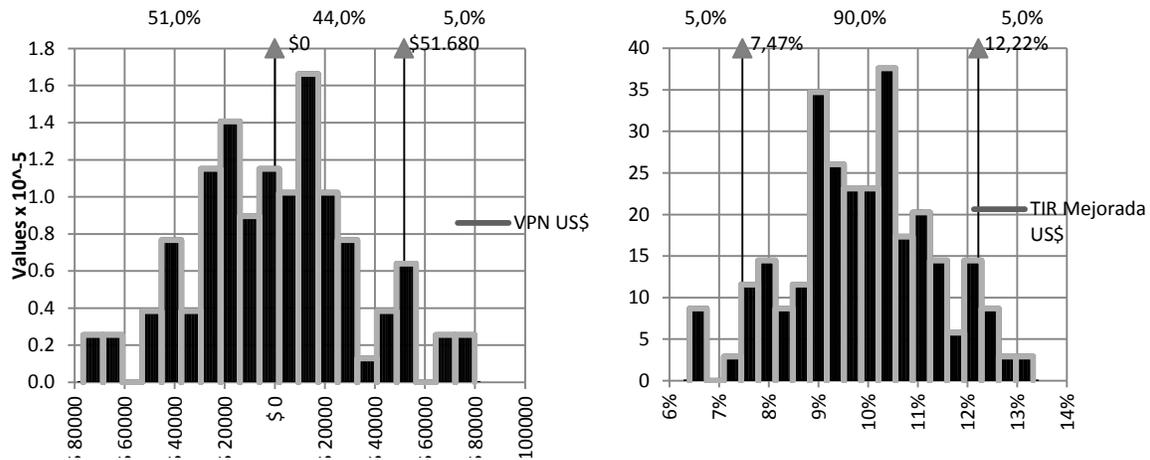
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Figure 2 shows that 47,9% of the simulations got a NPV value above 0, and an IRR between 10% and 15%. The NPV was negative 47,1% of the times, and the IRR fluctuated between 5% and 10%.

Figure 1: Histogram and Frequency Distributions For NPV and Improved IRR



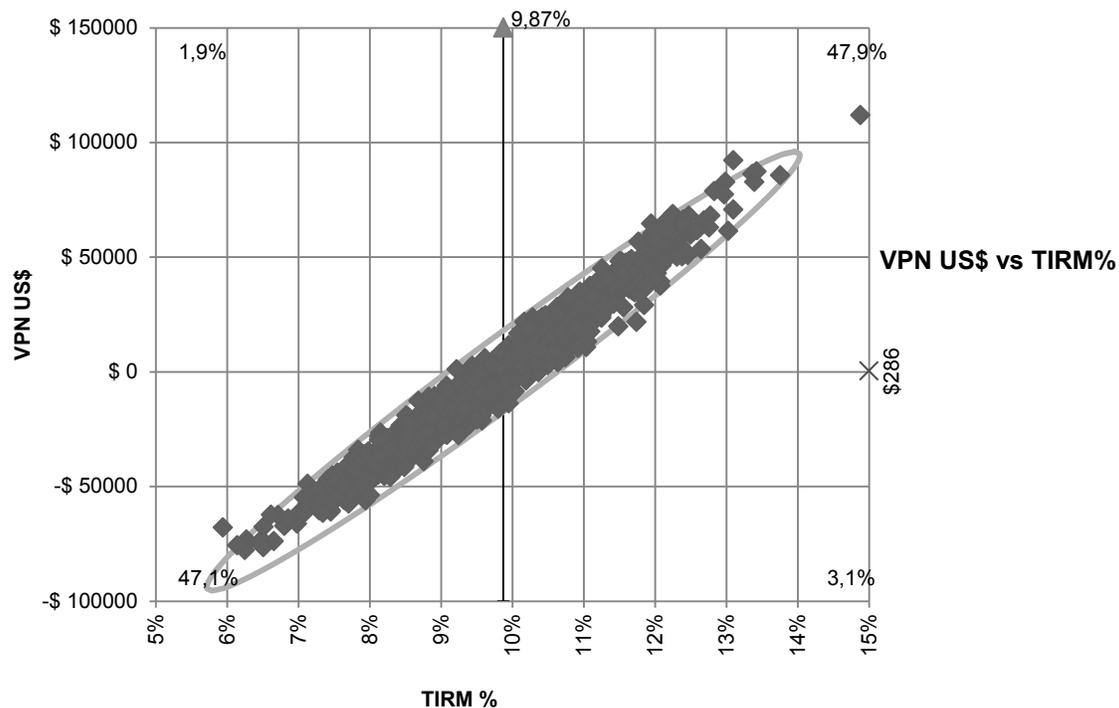
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Figure 2: IRR and NPV Dispersion Chart



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# INTEREST RATE AND CREDIT SENSITIVITY OF SECTORAL OUTPUT IN NIGERIA

Ikechukwu Kelikume, Lagos Business School

## ABSTRACT

*The Keynesian framework for analysing the transmission of monetary policy to real sectors of the economy, proposes that changes in the cost of capital will lead to changes in investment culminating to a change in output measured in Gross Domestic Product (GDP). Standard conclusion from theory states that a reduction in interest rate will stimulate economic activities but the existence of structural rigidities in developing economies has often distorted the link between interest rates sectoral output performance. This study seeks to investigate the relative responsiveness of sector output to changes in interest rate and credit in Nigeria. The study will make use of quarterly time series data spanning over a period of 23 years 1980:Q1-2013:Q2, sourced directly from the Central Bank of Nigeria (CBN) and the National Bureau of Statistics (NBS). The method used in carrying out the study is the auto-regressive distributed lag modelling technique. Our intention is to understand the dynamic behaviour of sector output in relation to interest rate and credit allocations. Results obtained from the study will track the relative effectiveness of monetary policy on various sectors and help monetary authorities understand and adopt appropriate monetary policy mix to achieve the macroeconomic short term and long term goals.*

**JEL:** E43, E51, E23

**KEYWORD:** Interest Rates, Credit Sensitivity, Sector Output

## INTRODUCTION

Prior to the great depression, the mainstream economic thought was based on the say's law – supply creates its own demand – that is the economy consumes whatever it produces so that the economy is always in a state of equilibrium. The Keynesian theory argues that the economy cannot maintain itself at full employment as a result of some structural deficiencies in the system. Keynes therefore, postulated that a combination of monetary and fiscal policy will stimulate the economy by inducing investment. He reasoned that a reduction in interest rate will automatically stimulate investment which will have a positive impact in the various sector output. The transmission mechanism of monetary policy with regards to sector output has been subject to controversial and divided opinion. An understanding of this mechanism is tantamount to a strong policy stance for the monetary authority as the success of any monetary policy hinges on its ability to contribute to economic growth.

In Nigeria, monetary aggregates have experienced significant stability in the last three years. The Central bank of Nigeria has set the monetary policy rate at 12 percent between Q1: 2012 and Q3: 2013. Stability in monetary policy rate is reflected in the positive growth in real GDP and an inflation rate that has been tending towards a single digit. Notwithstanding the current stability in monetary aggregates, the period of stable interest rates has failed to drive growth of the various sectors contrary to economic theory. This point lead to the conclusion that sectors that boost growth does not respond to changes in the interest rate.

Since the evolution of the financial sector, the impact of monetary policy on economic growth has been greatly altered through discretionary monetary policy. This has impeded the ability of banks to fund their businesses (innovation in funding practices) in the face of tight monetary policy. This probably may be the reason for slow reaction of sector output to interest rate and credit changes in the economy.

In the empirical literature, the monetary transmission mechanism is considered broadly without taking into account the grass root impact of policy on the various sector of the economy. The mechanism via which interest rate and credit affect growth is indirect as any change in interest rate will first hit the investment in different sectors before affecting the gross domestic product as a whole. Considering the sector output responsiveness to monetary policy will help understand the monetary policy mix to be adopted to ensure steady growth in the economy (Nwosa and Saibu, 2012). Not much has been done in the area in interest rate and credit sensitivity to sectoral output in Nigeria but in recent times, some studies have shown discrepancies in the response of different sectors to monetary policy. This difference observed has significant implication in macroeconomic management since monetary authority must evaluate the varying consequences of its actions on different sectors.

According to Bernanke and Kuttner (2005), the tightening of monetary policy may be viewed as mild aggregately, but it may be excessive for specific sectors. Thus, monetary authorities should have strong distributional effects within the economy. In addition, information on the sector that react first to monetary policy changes and the sectors worse hit by monetary policy shocks, provide valuable assessment tool for designing appropriate monetary policies. The stylized fact on the various sectors output growth is presented in Figure 1.

Figure 1: Sector Growth Rate In Gross Domestic Product

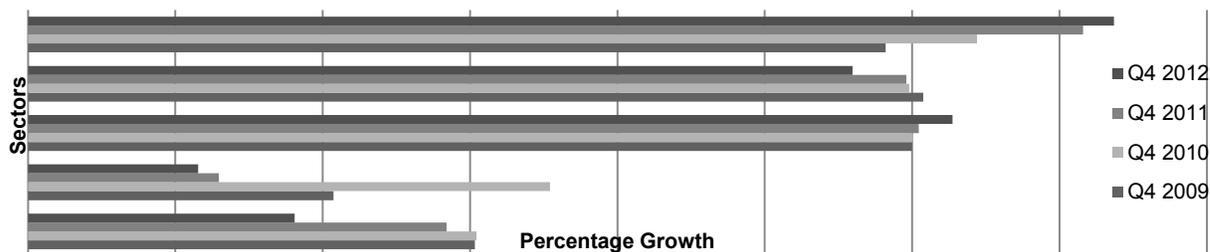


Figure 1 shows the growth in the various sectors in the fourth quarter between 2009 and 2012. Note: Each color signify the fourth quarter of each year from 2009 to 2012

The statistics as reported by the Central Bank of Nigeria (CBN) Statistical Bulletin show that on aggregate basis the Gross Domestic Product (GDP) in Nigeria grew by 6.99 per cent in the fourth quarter 2012. But a quarter-wise comparison between the fourth quarter of 2011 and 2012 show a downward trend as total GDP growth fell from 7.76 per cent to 6.99 per cent indicating a 0.77 per cent decline.

Agriculture records a slow growth a rate of about 3 per cent but it is the major sector, contributing over 38 per cent to aggregate GDP in 2012Q<sub>4</sub> – This indicate a decline of over 1 per cent when compared against 2011Q<sub>4</sub>. This decline can be attributed to the incidence of flooding in the second half of 2012 (National Bureau of Statistics 2013). Although the Service sector is the fastest growing sector with over 14 per cent followed closely by the Building and Construction Sector with over 12 per cent in 2012Q<sub>4</sub> but both sector taken together contribute over 21 per cent

to aggregate GDP which is about 17 per cent lower than the contribution of Agriculture sector in the same period. The research question that this paper seeks to address includes, which sector is the most sensitive sector to interest rate and credit changes in the Nigerian economy? What is the direction of causality between credit and output? And what is the short run and long run impact of sector output to changes in interest rate in Nigeria. The rest of the paper is structured as follows: Section II reviews related literature Section III is the methodology and theoretical framework while section VI is the empirical analysis. In section V, we conclude the study.

## LITERATURE REVIEW

Series of studies have established a link between real gross output and monetary policy. Stating that the sector allocation of credit should stimulate productivity of the country but this effect has been questioned since the financial evolution. Although studies have shown the existence of positive correlation between the financial system and economic growth (King and Levine 1993b and De Gregorio and Guidotti 1994) but, differences have been identified in the response of sectorial output and aggregate output to monetary policy measures (Gelter & Gilchrist 1993; Granley & Salmon 1997; Farès & Srouf 2001; Raddatz & Rigobon 2003 & Saibu & Nwosa 2011). Therefore, with differences in theory and conclusion, researchers have made effort to determine the interest rate and credit sensitivity of various sectors.

The marginal efficiency of capital proposed by the Keynesians states that monetary policy impact on output through changes in interest rate (Molho 1986 and Athukorah 1998). The Keynesians suggest that monetary policy affect output through the market forces of demand and supply (Mishkin, 2004). Two main hypotheses have evolved in linking output to interest rate and credit. The finance-led growth hypothesis (Schumpeter, 1969; McKinnon, 1973; Shaw, 1973; Greenwood & Jovanovic, 1990; Benciverga & Smith, 1991; Jappelli and Pagano, 1993; King and Levine, 1993a and Fernandez and Galetovic, 1994) and the growth-lead finance hypothesis (Robinson, 1952; Kuznet 1955; Jung, 1986; Lucas, 1988 and Ireland, 1994). The finance-lead growth (supply leading) hypothesis states that financial liberalization that reduces interest rates will transfer idle resources from the surplus to the deficit sector thereby stimulating growth (McKinnon, 1973 and Shaw, 1973) while the growth-lead finance (demand following) hypothesis state that demand for financial services induced by real economic growth will result in an expansion of the financial sector (Gold Smith 1969). Some researchers have contended that there exist a bi-directional causality between financial development and economic growth (Wood, 1993; Calderon & Liu, 2003; Chuah & Thai 2004).

Many studies have employed different methods in analysing the interest sensitivity of output. Josephine (2008) employed the simple regression analysis to investigate the impact of monetary policy shock. While Deodola & Lippi 2000; Hayo & Uhlenbrock 2000; Irvine & Schuh 2004 and Christino, Eichenbaum & Evans 1999, used the Vector Auto-Regression (VAR) to approach the effect of monetary policy shock on output and drawing stylized fact and causation, the Auto-Regressive Distributed Lag (ARDL) model and Error Correction Model (ECM) were used by Adebisi 2006; Majid 2008; Saibu & Nwosa 2011 and Haruna, Yahya & Nasiru 2013 to examine the disaggregate effect and dynamic response of output to monetary policy shock. Irvine and Schuh (2004) adopting the Vector Auto-Regression (VAR) model, conclude that improved monetary policy explains the decline in Gross Domestic Product (GDP) volatility.

Adopting the same method of analysis, Ganley and Salmon (1997) found the effects of monetary policy tightening to be unevenly distributed across sectors of the economy. Stating that, Manufacturing responds sharply to a monetary tightening. Shabri Majid (2008) found the Malaysia economy to support the finance-led growth hypothesis. Using VAR for six sectors in Pakistan, Alam, and Waheed (2006) found manufacturing, wholesale and retail trade, and finance and insurance sectors were sensitive to interest rate shocks while agriculture, mining and quarrying, construction, and ownership of dwellings were insensitive to interest rate changes. Furthermore, in Nigeria, evidence of sector responsiveness to credit has been inconclusive and scanty. The Nigerian economy can be broadly classified into five (5) main activity sectors namely: Agriculture, Industry, Building and Construction, Wholesale and Retail Trade and Services. The relationship between monetary policy and growth has concentrated on the aggregate output growth relegating sector-specific analysis to the background (Ajayi 1974; Ajisafe & Folorunso 2002; Adebisi 2006; Akinlo 2007; Chimobi & Uche 2010). Using ARDL, Haruna & Yahya (2013) found the relationship between private sector credit and economic growth to support the growth-lead finance hypothesis in the long-run. On the basis of VAR model, Nwosa & Saibu (2012) conclude that interest rates are the most effective channel of transmitting monetary policy to agriculture and manufacturing sector.

## METHODOLOGY AND DATA

In the context of the Nigerian economy, this research is carried out using secondary data sourced from the Central Bank of Nigeria and the National Bureau of Statistics. The data covers the period of 1990Q<sub>1</sub>-2012Q<sub>4</sub> for the major activity sector. Following the Keynesian framework for analysing monetary policy impact, an expansionary monetary policy will impact sector output through an increase in investment induced by a fall in interest rate. This will further increase credit to the private sector and decrease exchange rate but the extent to which monetary policy impact output depends on the extent to which main activity sector responds to changes in monetary policy tool.

Adopting model from the work of Shabri Majid (2008), Haruna et al (2013) and Nwosa & Saibu (2011), the functional model for sector output sensitivity to the private sector credit and interest rate is stated as follows;

$$Y_t^i = f(\text{INT}, \text{CPS}) \quad (1)$$

Where Y is the real gross domestic product (RGDP), INT is the prime lending rate. The prime lending rate is considered to be appropriate because it is the lowest rate offered to creditworthy customer and this has a direct bearing on investment. The CPS is the credit to the private sector. The RGDP is the endogenous variable while INT and CPS are the exogenous variables. In an attempt to investigate the sector sensitivity to interest rate and credit, we proceed to state the econometric form of equation 1 below

$$\Delta Y_t^i = \beta_0 + \beta_1 \Delta \text{INT}_t + \beta_2 \Delta \text{CPS}_t + U_t \quad (2)$$

From equation 2,  $Y_t^i$  is the sector specific RGDP,  $U$  is the error term;  $\beta_0$  is the intercept; while  $\beta_{1-2}$  represents the co-efficient of the RGDP determinants (INT and CPS) incorporated in the models. The Greek capital letter delta ( $\Delta$ ) represents change.

On a-priori,  $\beta_1 < 0$  and  $\beta_2 > 0$

In the time series analysis, the exogenous variables may affect the endogenous variable with a time lag. This often necessitates the inclusion of lags of the exogenous variables in the regression. Similarly, the endogenous variable may be correlated with its lag suggesting an inclusion of lag of the dependent variable in the regression. This motivates the use of Auto Regressive Distributed Lag (ARDL) model defined below as;

$$\Delta Y_t^i = \beta_1 \Delta Y_{t-1}^i + \beta_2 \Delta CPS_{t-1} + \beta_3 \Delta INT_{t-1} + \sum_{m=1}^{n-1} \alpha \Delta Y_{t-m}^i + \sum_{m=1}^{n-1} \varphi \Delta CPS_{t-m} + \sum_{m=1}^{n-1} \gamma \Delta INT_{t-m} + \mathcal{U}_t \quad (3)$$

Equation 3 is the autoregressive distributed lag (ARDL) modelling approach which allows robust and a reliable estimate of the short run and long run relationship between growth in sector output and growth in other exogenous variables. The term in summation signs represent the short run dynamics while the term with the coefficient  $\beta$ 's represents the long run relationship. The choice of the lag length is an empirical issue which can be resolved using Akaike information criterion (AIC) and the Schwarz Bayesian Criterion (SBC). SBC gives more parsimonious model, selecting the smallest possible lag length and AIC selects the maximum relevant lag length (Shrestha, 2005).

The Error Correction Model (ECM) is as follows;

$$\Delta Y_t^i = \phi \hat{\epsilon}_{t-1} + \sum_{m=1}^{n-1} \alpha \Delta Y_{t-m}^i + \sum_{m=1}^{n-1} \varphi \Delta CPS_{t-m} + \sum_{m=1}^{n-1} \gamma \Delta INT_{t-m} + \mathcal{U}_t \quad (4)$$

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# THE STUDY ABOUT THE INFLUENCE OF CORPORATION GOVERNANCE STRUCTURE ON INTERNAL CONTROL AUDIT REPORT LAG-BASED ON EMPIRICAL DATA OF LISTED COMPANIES IN CHINA

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## ABSTRACT

*Corporation governance and internal control are generated in response to Principal-agent problems as well as the internal control audit report lag. This paper examines whether internal audit report lags is associated with corporation governance. The study is based on a sample of 1244 publicly-listed companies from Year 2008 to Year 2011, obtained from Shenzhen Stock Exchange in China. Regression analysis indicates that firms, with less directors but more supervisors and members in audit committees as well as frequent board meeting, are more likely to produce internal control audit report lag. In contrast, this study also demonstrates factors as the independence of supervisors and board of directors, the frequency of board meetings together with duality of CEO, hardly exerts influence on the internal control audit report lag. The contribution of this paper is to empirically analyze data in relevant to internal control information, aiming at assisting in the improvement of corporation governance.*

**KEY WORDS:** internal control, audit report lag, corporation governance

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# AN EMPIRICAL ASSESSMENT OF THE INTEREST RATE CHANNEL OF MONETARY TRANSMISSION MECHANISM IN NIGERIA

Ikechukwu Kelilume, Lagos Business School

## ABSTRACT

*The interest rate channel of monetary transmission mechanism is the link through which variations in real interest rate by the Central Bank (CBN) influences the level of aggregate output and prices. In the past three years, the Central Bank of Nigeria in a bid to check fluctuation in prices has kept the monetary policy rate (MPR) stable at 12 percent with the view that stability in interest rate will provide the much needed incentive for domestic investment to thrive. The long run linkage between real interest rate, inflation and output in a developing country like Nigeria calls for empirical investigation. The aim of this study is to test the interest rate channel of monetary transmission in Nigeria to establish the stickiness or otherwise of interest rate in realizing the goals of macroeconomic policy. The method used is the cointegration and error correction mechanism since we are interested in investigating the channel through which nominal interest rate influences long run economic aggregates. The study will make use of secondary time series data with the data frequency dated quarterly from Q1:1996 to 2013:Q3. Result obtained from the paper will be used to track the speed with which monetary policy changes is transmitted to the economy and the relative speed of adjustment from the short run to the long run.*

**JEL:** E42, E43, E52

**KEYWORD:** Monetary Policy, Interest Rate, Monetary Transmission Mechanism

## INTRODUCTION

The interest rate channel of monetary transmission mechanism is the link through which changes in monetary aggregates (money supply and nominal interest rate) is transmitted to the economy through its effect on aggregate output and prices. According to Taylor (1995), monetary transmission mechanism is the process through which changes in monetary policy decision affects the level of economic activities measured by output and inflation.

The channels through which monetary policy changes affect the level of economic aggregates vary from one country to the other. However, the established channels through which monetary policy changes influences output and prices include the interest rate channel, the credit channel, exchange rate channel, the asset price channel and more recently, the risk taking channel (Bernanke and Kuttner 2005; Borio and Zhu 2012; Adrian and Shin 2009; and Gambacorta 2009).

Although, extensive studies has been carried out in both advanced economies and emerging market economies on the monetary transmission mechanism, recent evidence from some studies show that there exists a relatively low level of long-term interest rate in the world today which has significantly altered the level of output and prices (Greenspan 2005 and Bernanke 2005). This low level of interest rate according to Bernanke has created a significant increase in global supply of savings-a global savings glut.

Most countries have responded to this global saving glut by varying significantly monetary policy tools without recourse to the other channels through which monetary policy affects output and prices.

In Nigeria, effort to maintain a stable exchange rate, a positive growth in output and a single digit inflation level has been the sole objective of the Central Bank of Nigeria (CBN). Maintaining these objectives has led the Central Bank of Nigeria to maintain a fixed monetary policy rate of 12 percent between 2011:Q1 and 2013:Q2.

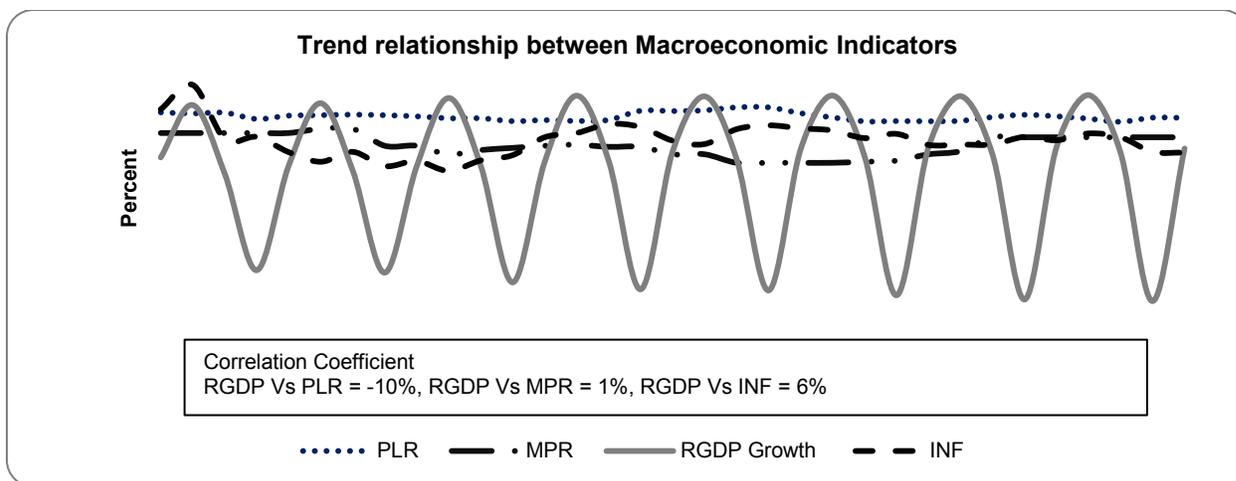
Maintaining a fixed monetary policy rate has however, not reflected in interbank rates movement, inflation and output growth over the periods 2005:1 to 2013:2. Figure 1 shows the trend behavior of interest rate, inflation and output in Nigeria.

The behavior of interest rate in relation to changes in macroeconomic aggregates raises some fundamental research questions. Of particular interest to us is how quickly does the interest rate channel of monetary transmission mechanism work in Nigeria? How reliable is the interest rate channel? And how large are the effects of interest rate changes on output and prices?

We seek to explore only the interest rate channel of monetary transmission for Nigeria because of the implicit assumption that the Central Bank has the ability to influence long term interest rate through the manipulation of short-term real interest rate. But, is the interest rate pass-through complete in Nigeria?

The study will attempt to provide answers to some of these research questions. Following the introduction section, the rest of the paper will be structured into four sections. Section two reviews the empirical literature while section three deals with the methodology and data. In section four we present the empirical analysis while section five concludes the paper.

Figure 1: Monetary Policy Rate, Interest Rates and GDP Growth Rate in Nigeria



The figure shows quarterly data of interest rate, inflation, and output growth in Nigeria during the period 2005Q2-2012Q2. The trend shows monetary policy rate to be relatively flat over the period while prime lending rate (PLR) and inflation (INF) appear to track the relatively fixed MPR. Output growth rate as measured by GDP shows very high volatility rising and falling every 4 quarters. Of particular interest to us is the correlation between GDP and MPR which is 1 percent, an indication that MPR does not track GDP in Nigeria.

## LITERATURE REVIEW

Two major economic theories that tend to explain monetary policy via the role of money in the economy are the classical quantity theory and the Keynesian theory (Luckett, 1984). The quantity theorists believe that changes in the quantity of money directly affect the real sector and that monetary policy alone is sufficient to stabilize the economy. The Keynesians believe that money supply affect output and the general price indirectly through the monetary policy transmission mechanism.

The Central Bank or the Fed in the case of the United State of America affects inflation and output mainly through short-term nominal interest rates which is carried out either through a tight monetary policy or an expansionary monetary policy. In Nigeria, the monetary transmission mechanism occurs through changes in monetary policy rate.

The notable channels through which monetary shocks influences the level of economic aggregate other than interest rate channel includes the credit channel, exchange rate channel, asset channel and wealth channel (Kuttner and Mosser 2001; Bernanke and Gertler, 1995; Rotemberg and Woodford, 1997; and Clarida, Gali, and Gertler, 1999).

Several studies have been conducted in both developed and developing countries on the monetary policy transmission mechanism with the studies using different modeling techniques. Most of the studies examined all the channels through which changes in money supply and interest rate affect output and prices with very few studies focusing on specific channels of monetary transmission mechanism.

The study by Kuttner and Mosser (2001), Raddatz and Rigobon (2003); Gertler and Gilchrist (1993) attributed the retrogressive effect of the impact of the monetary policy on interest rate in the past ten years to the weak institutional framework and the emergence of the financial innovations in the United States of America (Bernanke and Gertler, 1995). This study is similar to the investigation carried out by Jayaraman and Sharma (2003). According to their findings, the drawback in financial sector development gave rise to high interest rate spread in the Pacific Island Countries.

Borio and Zhu (2008) considered the risk-taking channel of the monetary policy in developed economies and observed that adequate attention has not been given to risk-taking channel of the monetary transmission mechanism. The authors conclude that changes in financial sector regulation could be accounted for increase in risk-taking channel.

Studies on emerging economies have shown that interest rate channel of monetary transmission mechanism have the tendency to impact more on economic activities in Central and Eastern Europe (Egert, 2006, Ganley and Salmon, 1997).

Disyatat and Vongsinsirikul (2003) examined the level of pass through in Thailand from the money market rates and found that investment is sensitive to monetary policy shocks. In a similar study, Perri and Pablo (2001) investigated the empirical relation of interest rate among emerging economies (Brazil, Mexico, Philipines and Korea) and observed that consumption is more volatile than output. Hence they concluded that interest rate is crucial to explaining business cycle in emerging economies. The authors found out that over 50% of fluctuation in the business cycle was accounted for by the shocks in the interest rate in Argentina.

The study carried out in developing economies by Jankee (2003) on interest rate revealed that the Irvin Fisher theory of interest rate parity effect does not hold in Mauritius. In a related study Sergio, Schmukler and Serven (2004) showed that interest rates of the countries with more flexible regimes adjust more slowly to changes in international rate.

Mishra, Montiel and Spillimbergo (2010) and Davoodi and Dixit (2013) noted that, deficiency in institutional framework as well as the imperfection in the banking industry has aggravated the cost of lending in most developing economies.

Other research studies carried out in developing economies include Uanguta and Ikhide (2002); Romer and Romer (1990); Morsink and Bayoumi (1999). In the study conducted for the Namibian economy, Mishra, Montiel and Spillimbergo (2010), observed that interest rate have the tendency to increase while private investment is tending lower. Furthermore, cross country survey by Dedola and Lippi (2005); Giacinto (2002); Fratantoni, Schuh and Mae (2001) and DeFina, (1999); gave a useful insight in analyzing reaction to monetary policy on interest rate in selected economies across the globe using disaggregated data.

The earliest study on monetary policy transmission mechanism conducted for Nigeria was the survey by Uchendu, (1997). Other recent studies that have attempted to establish the impact of interest rate on monetary transmission mechanism include (Oyaromade, 2002; Ogun, 2006; Adebisi, 2006). In all, the study by Nwosa and Saibu (2012) pointed out that interest rate channel is the most effective channel transmitting monetary policy in Nigeria.

## THEORETICAL FRAMEWORK AND MODEL

The empirical approach adopted for this study is the cointegration and error correction method. The literature review has shed light on the model to be used in estimating the interest rate channel of the monetary transmission mechanism. There exist two distinctive channels of monetary policy transmission mechanism-the old or the traditional approach to measuring monetary transmission mechanism and the new approach to measuring monetary transmission mechanism (Rummel 2012).

The old approach focuses on interest rate, exchange rates and asset pricing channel while the new approach focuses on credit market friction. Based on the information given and the objectives of this study, our focus is strictly on the interest rate channel of monetary transmission mechanism.

The interest rate channel exists only on the condition that monetary policy action affect interest rate that causes individual and business decision making units to alter their spending decision which in turn, produced variations in the level of aggregate output and prices.

This channel which is built on the Keynesian intertemporal framework links monetary policy changes to changes in aggregate output and price in the following order.

$$(MS \uparrow \Rightarrow) R \downarrow \Rightarrow C \uparrow (I \uparrow) \Rightarrow AggD \uparrow \Rightarrow \Pi \uparrow$$

An expansionary monetary policy (MS) reduces real interest rate which in turn has positive effects on aggregate consumption and aggregate investment. An increase in investment translates into higher output and ultimately increased prices or inflation ( $\Pi$ ).

On the contrary, a tight monetary policy will produce a channel that links rising cost of credit induced by contraction in money stock to contraction in aggregate output and the price level as indicative of the following order;

$$(MS \downarrow \Rightarrow) R \uparrow \Rightarrow C \downarrow (I \downarrow) \Rightarrow AggD \downarrow \Rightarrow \Pi \downarrow$$

Although, Bernanke and Gertler (1989) suggestion that “macroeconomic response to policy-induced interest rate changes is considerably larger than implied by conventional estimates of interest elasticity of consumption and investment,” still holds true with the implication that mechanism other than interest rate channels of monetary transmission should be explored.

The need to examine the interest rate channel of monetary policy transmission mechanism in Nigeria is borne out of the Monetary Policy Council (MPC) continued insistence in holding monetary policy rates (MPR) fixed at 12 percent in the last 3 years. Although current evidence of published macroeconomic data of the central Bank of Nigeria (CBN) shows inflation has been trending downwards at a current single digit figure of 8.2 percent and exchange rate has been largely stable, there is need to track the interest rate channel and the speed with which this channel influences aggregate output and prices.

In formulating a model, we make use of the cointegration and error correction mechanism (ECM) developed to overcome the problem of spurious regression associated with nonstationary time series data. The theory of cointegration as propounded and propagated by Granger (1981 and 1986), Hendry (1986), Pagan and Wickens (1989) and Mills (1991), provides an integration between short-run dynamics and long run equilibrium.

In general, the cointegration theory involves two steps, the first step is the identification of the order of integration of the variables with the aid of the Dickey Fuller (DF) or the Augmented Dickey Fuller (ADF) set of unit root test. The second step is a test of the existence of long run (cointegrating) relationships between the endogenous and exogenous variables of the model. This test is based on the Engle and Granger two-step procedure Engle and Granger, (1987).

Based on cointegration theory, we estimate a long run relationship between interest rate and output (measured by real GDP) on the one hand, and interest rate and price level on the other hand. The models are expressed in linear estimation form as follows;

$$LRGDP_t = \alpha_0 + \alpha_1 INTR_t + \mu \quad (1)$$

On a priori,  $\alpha_1 < 0$

Where, LRGDP stands for the log transformation of real Gross Domestic Product and INTR stands for real interest rate.  $\alpha_0$  is the constant term while  $\alpha_1$  is the long-run coefficient.

To estimate the short-run and long-run dynamics of monetary transmission mechanism, we employ the single equation error correction model. After testing for unit root, and establishing the long-run relationship via Engle and Granger cointegration test, we obtained an error correction model using Kremers et al (1992) which takes the form;

$$\Delta LR GDP_t = \lambda + \sum_{i=1}^n \phi_i \Delta LR GDP_{t-1} + \sum_{i=0}^n \theta_i \Delta INTR_{t-1} + \gamma (LR GDP_{t-1} - \alpha_0 - \alpha_1 INTR) + \epsilon_t$$

(2)

Where;

$\gamma$  represents the speed of adjustment, measured as the percentage of the disequilibrium that is corrected quarterly. The coefficient  $\alpha_1$  represents the long-run output elasticity with respect to interest rate.

By eliminating insignificant variables and lags from equation 2 (using Hendry's general-to-specific-modeling approach), we obtained the short-run model below.

$$\Delta LR GDP_t = \lambda + \alpha_1 d(\Delta LR GDP_{t-1}) + \alpha_2 \Delta LR GDP_{t-4} + \beta_1 \Delta LINTR_{t-1} + \beta_2 d(\Delta LINTR_{t-2}) + \gamma (LR GDP_{t-1} - \alpha_0 - \alpha_1 INTR) + \epsilon_t$$

(3)

## EMPIRICAL ANALYSIS

To estimate the interest rate channel of monetary transmission mechanism we began by testing the unit root properties of the variables with the aid of the Augmented Dickey Fuller test. The result of the ADF test is summarized in Table 1 while the Mac-Kinnon critical value for rejecting the null hypothesis of the presence of unit root is reported in Table 2.

Table 1: Unit Root Test for the Variables

Variables	Augmented Dickey-Fuller Test			
	Levels	Status	First Difference	Status
LINTR	-2.2883	I(0)	-9.0215	I(1)
LRGDP	-2.1354	I(0)	-9.2684	I(1)

The table shows the result of the Augmented Dickey-Fuller (ADF) set of unit root test at the levels of the individual variables and at their first difference with I(0) indicating integrated of order 0 and I(1) indicating integrated of order 1.

From the ADF test reported in Table 1, the t-statistics is compared with specific values constructed by Dickey and fuller (1979, 1981) and Engle and Granger (1987). From the result, the two variables used for the study (prime lending rate and output variable) had strong evidence in favor of the null hypothesis of non-stationarity at their individual levels. This is so because all the test statistics (absolute values) were less than the critical values at 1 percent, 5 percent, and 10 percent respectively.

This justified the need to difference the variables to obtain stationarity. After the first difference of the variables, the test supports the rejection of the null hypothesis of non-stationarity of the series because all the variables became I(1) series. This is because after differencing once, all the test statistics in their absolute values were greater than the critical values at 1 percent, 5 percent, and 10 percent as reported in Table 2 for the interest rate variable and Table 3 for the Output variable.

Table 2: Mac-Kinnon Critical Value for Rejecting the Null Hypothesis of Unit root

Augmented Dickey-Fuller Test Criteria for LINTR		
Critical Values	ADF at Levels	ADF at First Difference
1%	-4.0966	4.0987
5%	-3.4762	-3.7727
10%	-3.1656	-3.1661

The table shows the Mac-Kinnon critical value for rejecting the null hypothesis of unit root for the variable LINTR. We reject the null hypothesis of no unit root if the critical Mac-Kinnon value greater than the observed ADF tau statistics at the 1, 5 and 10 percent levels respectively. By comparing the t-statistics obtained in Table 1 with that obtained in Table 2, the t-statistic values at the first difference of the variable was greater than the critical values at 1, 5 and 10 percent levels respectively.

Table 3: Mac-Kinnon Critical Value for Rejecting the Null Hypothesis of Unit root

Augmented Dickey-Fuller Test Criteria for LRGDP		
Critical Values	ADF at Levels	ADF at First Difference
1%	-4.1009	-4.1009
5%	-3.4783	-3.4783
10%	-3.1667	-3.1667

The table shows the Mac-Kinnon critical value for rejecting the null hypothesis of unit root for the variable LRGDP. We reject the null hypothesis of no unit root if the critical Mac-Kinnon value greater than the observed ADF tau statistics at the 1, 5 and 10 percent levels respectively. By comparing the t-statistics obtained in Table 1 with that obtained in Table 3, the t-statistic values at the first difference of the variable was greater than the critical values at 1, 5 and 10 percent levels respectively.

To examine the variables for long-run cointegrating relationship, we used the ADF test by examining if the residual of the variables is stationary at levels with no trend and zero mean. The ADF test for the residual is reported in Table 4.

Table 4: Unit Root Test for the Residual of LINTR and LRGDP

Variables	Levels	Status	Augmented Dickey-Fuller Test		Mac-Kinnon Critical Value for Rejecting the Null Hypothesis	
			Critical Values	ADF test at Levels	Critical Values	ADF test at Levels
ECM	-1.6827	I(1)	1%	-2.6010	1%	-2.6010
			5%	-1.9459	5%	-1.9459
			10%	-1.6135	10%	-1.6135

The table shows the result of the Augmented Dickey-Fuller (ADF) test for long-run relationship between the variables used in the model. ECM is the residual obtained by regressing LRGDP with LINTR. Since we do not expect the residual to a trend or a nonzero mean, we estimate the ADF test at levels with no trend and intercept. The test shows the ECM variable to be integrated of order 1 only at the 10 percent levels.

Having established the existence of long-run relationship between the variables we proceed to estimating the short-run and long-run cointegration model.

The result of the long run interest rate output model is reported in Table 5. The result shows the interest rate coefficient to be well signed and highly significant at the 1 percent levels of significance. By all standards, the result shows output elasticity with respect to interest rate in the

long-run to be 8 percent. Thus a 10 percent increase in lending rate will reduce output marginally in the long –run by 0.8 percent. The overall F-statistic value of 31.8, show the overall model has a very good fit. However, the low R2 value of 31 shows that only about 31 percent systematic variation of output is accounted for by changes in interest rate in the long-run. The DW statistics value of 0.22 shows the presence of serial correlation.

Table 5: Estimated Long-run Static Output-Interest Rate Model

Dependant Variable LRGD	
C	13.3437 (46.4351)***
LINTR	-0.0843 (-5.6405)***
R-squared ( R2 )	0.3187
Adj. R-squared	0.3087
F-statistic	31.8161
Durbin-Watson	0.2218

The Table reports result for static long-run output-interest rate model over the sample periods 1996:Q1-2013:Q2. The models reported includes:  $LRGD = \alpha_0 + \alpha_1 LINTR + U$ : where the dependent variable log of real GDP and the explanatory variable is prime lending rate (LINTR). The figures in parenthesis are the t-statistics and the symbol \*\*\*, indicate significant at the 1 percent level of significance.

Table 6 shows the result of the dynamic error correction model. We began with the over-parameterized model with a maximum lag length of 4 lags with the lag length chosen on the basis of Akaike information and the Schwarz criterion. Thereafter, we obtained the more parsimonious short-run error correction model (using Hendry's general-to-specific modeling approach) by deleting the insignificant variables.

The estimated result of the ECM of output and interest rate is reported in Table 6. The coefficients of the short-run model are in line with stated theory with the exception of the monetary policy variable-interest rate. The four period lagged values of Real GDP are positively and significantly associated with current real GDP with the short-run elasticity being 10.4 percent. One period lagged GDP although positively related to current GDP in the short-run is statistically not significantly related to RGDP.

Table 6: Short-run Error Correction Model

Dependant Variable dLRGD	
C	-0.0002 (-0.0584)
dLRGD(-1)	0.0365 (0.9687)
dLRGD (-4)	1.0458 (25.8159)***
d LINTR (-1)	0.0114(2.8682)***
ECM(-1)	-0.0024 (-0.1550)
R-squared ( R2 )	0.9204
Adj. R-squared	0.9151
F-statistic	173.6476
Durbin-Watson	1.9869

The Table reports result for short-run output-interest rate model over the sample periods 1996:Q1-2013:Q2. The models reported includes:  $dLRGD = \alpha_0 + \alpha_1 dLRGD_{t-1} + \alpha_2 dLRGD_{t-4} + \alpha_3 dLINTR_{t-1} + ecmt-1 + U_t$ : where the dependent variable is the logdifference of real GDP. The ecm variable is the error correction term expected to capture the short run dynamics of the model. The figures in parenthesis are the t-statistics and the symbol \*\*\*, indicate significant at the 1 percent level of significance.

The interest rate variable had a wrong sign but passed the test of significance at the 1 percent levels on the basis of the t-test. Specifically, the short-run interest elasticity of output (RGDP) is 1 percent showing that in the short-run, a 10 percent increase in interest rate increases output marginally by 0.1 percent.

The value of the coefficient of the error correction term is less than unity and negative but not significantly so. The insignificance of the error correction term rules out the existence of a long-run equilibrium relationship and the value of the coefficient 0.0024 show that any deviation from the long-run equilibrium relationship will fade away by 2 percent within a quarter of a year.

The equation yielded a very high R<sup>2</sup> and adjusted R<sup>2</sup> values of 0.92 and 0.91 respectively. This implies that over 91 percent systematic variation in output (RGDP) is explained by the explanatory variables and the error term. The F-statistic value of 173.6 shows the overall model has a good fit while the Durbin Watson statistic value of 1.986 indicates the absence of serial correlation in the short-run model.

## CONCLUSION

The main objective of this paper has been to assess the interest rate channel of monetary transmission mechanism in Nigeria for the period 1996:Q1-2013:Q2. Theoretically, the interest rate channel is the link through which changes in money supply and nominal interest rate is transmitted to the economy through its effect on aggregate output and prices. Following the Central Bank of Nigeria (CBN) continuous insistence to hold monetary policy rate (MPR) constant at 12 percent over a period of 9 quarters, to check volatility in prices and exchange rate, we set out to investigate the reliability of interest rate channel in Nigeria.

The paper adopted the cointegration and error correction modeling approach by first estimating the long run relationship between interest rate and output. Interest rate was found to be well signed and statistically significant in influencing long-run output. Specifically, a 10 percent increase in interest rate reduces output by 0.8 percent through its effect on investment and aggregate consumption.

In the short-run model, interest rate had the wrong sign but was statistically significant in explaining variation in output however, the error correction coefficient had the right sign but failed the test of significance and indication of an unstable long-run relationship between interest rate and output.

The major limitation of this paper is that it held other channels through which changes in monetary aggregates influences output and prices constant this does not go down well with the recent findings of Bernanke and Gertler (1989), that mechanisms other than interest rate channel may be responsible for the wide variation in interest elasticity of consumption and interest elasticity on investment that drives output and price changes in an economy.

Further studies will attempt to incorporate other channels of monetary transmission mechanism to ascertain the most reliable monetary policy transmission mechanism channel in Nigeria.

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# IMPROVEMENT OF HEALTH CARE SYSTEMS FUNCTIONING AS AN ELEMENT OF ALLIVIETING POVERTY

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## ABSTRACT

*Since the early beginnings of the civilization, people, in order to live and act normally, have been fighting illnesses, diseases and other threats to health. Despite decades of progress globally there is still an unacceptable level of preventable illness and death, and millions of people are denied their basic right to health. In many low-income countries health status indicators have either deteriorated or failed to improve. The principal cause is poverty and the poor bear the highest burden of sickness and ill health and have the least access to health services. Poor governance and weak capacity in the health sector have also hampered efforts to improve health. In this paper different factors that affect health, health care system functioning and economic well-being, that is, poverty around the world are studied as well as potential strategies of improving health care and mitigating poverty. By analyzing contemporary challenges facing global health care systems potential reform steps are presented. The conclusion of the analysis is that in order to fight poverty and improve health it is vital to include and connect different organizational, social, economic and legal elements and to provide adequate health services available to all.*

**JEL:** I15, F63

**KEYWORDS:** global, poverty, health, health care, economic development

## INTRODUCTION

Since the early beginnings of the civilization, people, in order to live and act normally, have been fighting illnesses, diseases and other threats to health. Despite decades of progress globally there is still an unacceptable level of preventable illness and death, and millions of people are denied their basic right to health. In order to improve health it is vital to include and connect different organizational, social, economic and legal elements and to provide adequate public health services. As already stated, the social environment and life conditions are recognized as vital determinants having a direct and indirect impact on the population health. Absolute and relative income, employment, education and other factors directly affect the access to health services and selection thereof, but they also have an indirect psychological influence. Economic growth is one of the main determinants of the health status, especially when it comes to poor and underdeveloped countries where malnutrition and infective diseases are the most common cause of death of mothers, children and premies. Also, health is one of the main prerequisites for people to be productive and productivity is one of the prerequisites of development and growth. Therefore, the connection among health and growth or poverty is twofold.

Development is the process of improving health and quality of life, and health is a central component of the development process (World Federation of Public Health Associations, 1996). In many low-income countries health status indicators have either deteriorated or failed to improve during the last years. The principal cause is poverty and the poor bear the highest burden

of sickness and ill health and have the least access to health services. When drawing up strategies for poverty suppression and health care policies, it is necessary to focus on illnesses affecting the poor, ensure financial accessibility of health care services and to improve efficient use of services (Ostojić, Bilas, Franc, 2013). In this paper different factors that affect health, health care systems' functioning and poverty around the world are being studied with the aim of drawing conclusions and giving recommendations for improving health care and mitigating poverty. In that order, by analyzing contemporary challenges facing global health care systems potential future reform steps are presented.

## LITERATURE REVIEW

Since the world is becoming more and more connected and defined by complex relationships, the population health is considered to be an integrated result of ecological, social, economic and institutional determinants (Huynen, Martens, Hilderink, 2005). In poor countries a slight increase in the gross domestic product (GDP) is followed by an increase in the life expectancy, but as the GDP continues to grow, this connection gets weaker. In developed countries, a significant link between GDP growth and life expectancy has not been proven (Madovsky, Alin, Masseria, Hernandez-Quevedo, McDaid, Mossialos, 2009). Health and poverty are connected in more than one way. Economic growth not only needs healthy people but also education and other supplementary investments, proportion of labor force in public and private sectors, active market, sovereignty and institutional mechanisms of the society (Peykarjou, Gollu, Gashti, Shahrivar, 2001). Health may have an impact on the rise of income at the micro-level and the macro-level by way of factors such as increased inclusion into the labor market, higher productivity, investments in human capital, savings, fertility, lifespan and population's age structure (Bloom and Canning, 2000).

In countries with a low level of income, health care results are worse than in the countries with high income. Poverty is associated with bad health, and bad health helps maintain the poverty. It can be concluded that health and a risk of falling ill are key features of poverty (WHO, 2006). It is a common viewpoint that the combat against poverty requires strategies which enable creation of welfare and provision of assistance to deprived population. This is possible by setting up a legal basis which will support the development of the society layers, by promoting public administration that will adopt objectives of economic development and equality, by promoting decentralization and development of a community, by promoting gender equality, and by eliminating various social barriers (Grgić, Bilas, Franc, 2012). Coordination of health care and social services is essential in the process of drawing up programmes for solving interrelated issues of poor and socially excluded society members (Koller, 2010).

### Discussion: the Efficiency of Health Care Systems for Health and Well-Being

#### Challenges to Health Care Systems' Functioning and Health

A high-quality health care system is supposed to establish a balance between people's wishes and needs in a way that it improves the health of individuals, families and community, protects citizens from different health hazards, determines reasonable treatment costs, ensures equal access to public health services to everyone, includes citizens in the process of building and managing the health care system (WHO, 2010b). Health care systems depend on a wider economic environment in which they function. The health care system personnel, institutions and funds necessarily reflect structural characteristics of the national economy (Saltman, 1997). It has become evident that the more developed a certain country is in terms of higher income per capita,

the more it earmarks for health care (Maxwell, 1981). Finding funds is among most serious issues of health care systems functioning. An increase in health care system expenditures may be explained through an increased demand resulting from an altered way of living, larger number of retired people and longer lifespan. Moreover, it can be concluded that demographic changes are potentially the biggest challenge to the performance of health care systems. Simultaneously with the decline in fertility rates (in developed countries) and longer life expectancy, the number of inhabitants decreases, whereas the number of elderly people increases. That demand for health services disproportionally goes up with the age is a generally known fact.

During the last 170 years, the life expectancy has been constantly rising (Münz, 2012). Considering population ageing trends, it is to be expected that in future there will be a decline in active workforce, an increase in public expenditures for pensions and in health care expenses. It is necessary to monitor demographic trends and to carry out longitudinal studies on ageing, and to pursue policies based on evidence and not on opinions (Čipin, 2012). Such changes significantly affect health care systems in developed countries, which are also faced with challenges caused by technological changes (Eckholm, 2010). In addition to the abovementioned, the creation of a welfare state has been influenced by an ever-growing role of developing countries, which causes not only a shift in orientation from developed countries to developing countries but also fiscal challenges when drawing up health care policies.

#### Poverty As a Risk Factor to Sustaining Health

Poverty is a multidimensional concept (WHO, 2006). It implies low income, lack of security, vulnerability, lacking access to skills and resources, social exclusion. Numerous economic, technical, natural, physical, human, social and politic factors affect the enhancement and maintenance of poverty. It is often associated with racial, religious or national affiliations. Poverty directly endangers human rights, limits possibilities of complete fulfillment of one's potentials, jeopardizes health, causes high social costs and disturbs sustainable economic growth. At the individual level, the following key factors enhancing poverty risk have been recognized (WHO, 2006): unemployment; low level of education; size and characteristics of the family; sex; damaged health ; affiliation to a minority group; dwelling in a remote or underdeveloped areas. Decrease of poverty is a crucial development issue which global institutions tend to solve in cooperation with governments of countries all around the world, and especially the poor ones. Deprived people do not have resources at their disposal. Lack of physical and financial capital usually derives from the limited access to financial markets and impossibility to control and reduce consumption.

Due to low education levels and poorly developed educational infrastructure, deprived population cannot have sufficient and appropriate human capital at its disposal. This problem is additionally aggravated by brain drain because those few with education very often leave their country in pursuit of better opportunities. Lack of natural capital is a consequence of rather frequent natural disasters which cause its decline. In addition, poor countries are characterized by fast population growth while the size of cultivated land remains the same. The issue of insufficient social capital can be associated with the shortage of social connections and relations among people.

Furthermore, health is affected by different factors related to households and living communities. For example, at the household level, available income, possibility of purchasing necessary victuals, possibility of accessing necessary curative or preventive health care affect adults' and children's health. At the community level, health is affected by sanitary conditions, access to water, air quality and many other factors. Education and income have a direct impact both on

health and poverty. Those with higher income can easier afford education, whereas better education and acquired knowledge enable making of more informed decisions and consequently, a potentially better health outcome. Education is therefore related to the level of use of health care services, selection of service providers, selection of private or public health care institutions, nutritional habits, etc. A reversed situation takes place in case of low income and deficient education, which is most often associated with poverty.

It is an undeniable fact that the poor have a more difficult access to health care services. Transport to health care institutions, payment of health care services or medications require certain financial resources which many lack, especially in underdeveloped countries. On the other hand, as already mentioned, health may have an impact on the rise of income at the micro-level and the macro-level by way of factors such as increased inclusion into the labor market, higher productivity, investments in human capital, savings, fertility, lifespan and population's age structure (Bloom and Canning, 2000).

Getting employed and earning income are possible ways of reduction of poverty and social exclusion, but they cannot completely remove the risk. Employed population may be in danger of poverty if a person has a badly paid part-time job or a job below his/her qualifications so that he/she ends up underpaid. Unstable, short-term jobs increase the risk of unemployment and poverty.

Health is one of the central components of different programmes for suppression of poverty. Health and poverty, being strongly connected and conditioned, require inclusion of the health concept in poverty suppression strategies and inclusion of poverty in health promotion strategies. If funds are properly allocated to health care, they may result in an improved health status and better quality of living of the population, which can in turn enhance working capacity and a possibility to generate added value as a consequence, and stimulates economic growth (WHO, 2006). In order to reduce poverty, health care systems should ensure the following (WHO, 2006): efficient prevention, disease control programmes and basic health programmes ; accessible and affordable health care services; efficient management systems so that the costs of accessible, high-quality and affordable services be sustainable for the economy.

## CONCLUSION

The development perspective of health care systems depends on various factors and trends in the global environment. It is beyond any doubt that health care systems in the countries worldwide will face challenges related to human resources management, defining and reinforcing of patients' rights, the need to better adapt to demographic trends, further developing and implementing of information technology systems, and increased concern about the health care quality. Health and economy are seemingly two separate and completely different categories. However, when taking into account different factors having an impact thereon, it may be concluded that people's health is a basic motive and a prerequisite for the functioning of the economy. The development of policies which would support individual efforts and investments of the community into the health promotion and encourage laws on health protection and safety is of utmost importance. In terms of this it is necessary to ensure supervision over public procurement, plan the health care at the local level, conduct strategic planning, study household needs and include them in planning of the health care system, set up national and local committees for control of the health care, conduct food inspections and other activities influencing the people's health.

When defining strategies and programmes for poverty suppression and health care policies, it is necessary to focus on illnesses affecting the poor, to ensure financial accessibility of health care services and to improve efficient use of services by encouraging demand. However, although certain successes and improvements are showing through, the progress differs from country to country and it is different in various regions of the world. Non-realization of these goals means the continuation and strengthening of negative consequences which leave the economic, social and epidemiological burden of diseases in the community and the country in its entirety. Considering non-satisfactory progress in certain health care-related areas, changes which will ensure surmounting of the challenges and enable efficient health care interventions along with the provision of equality of health care services and access to them, are crucial. Ensuring indispensable financial resources and development of health care systems are necessary preconditions for meeting the set goals.

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# IMPACT OF EMPLOYEE EVALUATION ON EMPLOYEE PERFORMANCE: A STUDY OF BANKING SECTOR OF PAKISTAN

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## ABSTRACT

*The purpose of this research is to pore over the employee evaluation influence on performance of the employees in Banking Sector. In this research the impact of employee evaluation on the Employee performance along with the impact on organizational performance was examined by accumulative information from banking sector of Pakistan. Data was collected through questionnaires from 150 employees and managers working in different Banks in Rawalpindi and Islamabad. Result indicates those appraisal blueprints incredibly affects the Employee Performance in Pakistan and Banking sector is intense to adopt it with all its factual/realistic features. Findings show that different practices of employee evaluation and employee performance have a burly relationship.*

## INTRODUCTION

Development is the basic need of every organization and employees wants to grow in their organization similarly organization wants to grow in the stream of competency. Competition is rising day by day and adaptation of new policies is a step towards new horizon of growth. To bring a change in any organization you have to work hard and need of loyalty from managers. Supervision needs to be vigilant concerning to the joint effort to the ramification of elevated technical integrity (chen, wu, leung, 2009). In old times organization works under the slow patterns where to bring a change must be very difficult for the management. To evaluate the work of any single employee was to deal with the dumb of heap, how much you investigate that deep dump you may find out. Now to get the accurate performance scale of the employee initiation of new modern procedures and even adaptation of spy services to look after whether organization is getting benefits from its employees or not. chen, wu & leung (2009) found that it has been disparage seeing that foremost to pessimistic team vibrant and upshots by personage performance appraising. As change brings benefits and perks for the middle management similarly it doubles the responsibilities and work load on the managers. The obligation of the supervisors by means to the main concern they situate on performance assessment and their expediency in mounting person resource within the corporation (Appelbaum, Nadeau, Cyr, 2008)

Organizations culture becomes affected when cultural differences created and organizational culture becomes province culture apart. This is also another focused discussion or issue of the organizations and path to solve this problem comes in our mind is in hands of the managers. Managers are the stature who builds impression on the employee's mind and its helps to eliminate this difference when they work out this practice along with their evaluation processes. Woodford & Maes (2002) argued that to remove cultural differences more supplementary exercises for administration to treat their employees. So change always brings positive improvement if it has a back of strong and affirmative school of thought. Major problems become minor and treated well by small effort.

Evaluating a employee performance is in benefit of his growth along with the growth of the organization. It is considered as the most workable event in the organization in the part of year. The value support compensation on work ability and endorsement, perceptions of the evaluation system are synonymous in an organization (Mayor, Davis, 1999). In the appraising period employee show more performance to get optimistic remarks from the supervisors. This specific part of the time of year is similarly to the huge money making machine. Appelbaum, Nadeau & Cyr (2008) a manifold structure is able to present a milieu business through unswerving and steady parameters with which to compute its workers. If you notice the work graph would lead to upward direction in this part of the year when performance appraisal has to be done in the organization. Mayor & Davis (1999) found that in addition obligation that the worker was in attendance at job on every of the inspection supervision days.

Educational institutes are highly keen to adopt the evaluation parameters similarly in practice of these parameters in Banks. Educational institutes are professionally treating this paradigm to fulfill their official requirements and also to improve their scheme of studies along with their management. Zhao (2009) argued that consideration to the instructors 'association, rake monitoring, and advisory reactions and that persuade on instructors' practiced presentation. We choose the banking sector in Pakistan because it is the most productive region in every country and in banking sector everyone has to perform more efficiently and according to the bank culture. Completion is high and they have to peruse more customers. Their behavior and treat-full attention to the customers shows organizations reputation. Our frame of work for this study in our research is for banking sector. As we know that these days the most complex structure of performance appraisal is in banking sector and even its become more hard for their teams because they invest on their employee. The investment on their employees is in terms of trainings and workshops for their employees to make them ready for the job. That's why they become more cautious about this thing in case of hiring and firing the employees. we find out this instinct in different organizations than we find it out that how difficult for them to spend money on trainings of their employees and managers for their better performance. For the appraisal of the employees they make it more obvious whether it is harmful for the organization to keep unsatisfactory employees or not. They don't take it for grant like some government organization where employees get their evaluation on the basis of their good contacts with their managers.

## LITERATURE REVIEW

### Employee Evaluation

The employee evaluation process is the gradual process that any institute can take up to cultivate outstanding performances in the workplace. This method gives the magnificent tool to the institute to find out the strengths and weaknesses of the employees. Employee opinions about performance assessment rationale relatively than on definite projected purposes of the assessments, as selected by the institute (Youngcourt, Leiva & Jones 2007). Employee's evaluation can have both positive and negative effects and rather it depends on the procedure of evaluation. Evaluation center first needs to explain the purpose of evaluation to the employees and to take them in confidence for their objectives. If evaluation is done in term of quality assurance then employees like to participate and give their feedbacks for the improvements and their satisfaction level. The information transference between administration and employees should be on personage basis even if they may achieve their objectives (Waal & Frijns, 2011).

It leaves a positive effect in term of performance improvement, when an employee knows that he/she will be evaluated based on her performance then he/she tends to give better services to towards his/her job requirements. Liu & Batt (2010). By incorporate personal training, managing the activities of focus group and enticement, superintendent persuades individual performance after particular time period.

It gives them an impression that there are some standards in the organization for the quality measurement with respect to their performance. And if they perform better, it will give them growing opportunities so they work better to prove their abilities. But this process works very well when decisions are taken on merits and people are given equal and fair chances. Youngcourt, Leiva & Jones (2007) argued that complete understanding of the strict manacles of in-servings, amendments of the locality and it's formulate could dole out to achieve the administrative efficacy devoid of edifice uncomfortable strain on the plateful. For any organization the most important thing is to write a clear job description for each position and every employee should be clearly explained with their roles. Pater, Vianen, Bechtoldt & Klehe (2009) found that human resources should give preferences to the commotion selection which they formulate in their work and profession. They should be aware with the process of evaluation and also should know the minimum factors or criteria of the evaluation process. And also the process is done fairly in the interest of the organization to know if the person is suitable for the job/organization or not. And if there are few problems, he/she will be given an improvement plan with the clear feedback. Guerrero & Herrbach (2009) argued that Organizations that take peril by schooling their employees, mounting them and allocation of Information with them are performing measures that are professed generous, and consequently facilitation create conviction. This takes an employee into confidence and leaves a positive effect as well as a motivation towards better performance.

But it is also observed that a sector of employees is dissatisfied with the evaluation process when it affects the hiring or firing rate of an organization. Meticulous occupation position may possibly dole out as a timely for human resources to imitate backside on peer or administrative rejoinder (Cob & Alfred, 2010). When all renewals are based on evaluations then it always pressures an employee as there can be many human personal factors involved in the process. Especially if an employee does not have a good relationship with the boss it would always feel pressured that no matter what he the boss will not gives him a good evaluation. And it is a subject of discussion for a long time. Farndale, Hailey & Kelliher (2009) argued that draw attention to the shrewd part of reliance in attaining worker perseverance and opinions of veracity. Also there are some jobs (more like technical or engineer based jobs) where many employees do not have right communication skills because by the time they get so technical that administration does not understand them and they a level of difference or gap in them. These people do not tend or work towards impressing their bosses and again it leads to a bad or incorrect evaluation.

### Employee Performance

After myth of employee evaluation is impact on employee performance. It can affect the employee performance in both ways as we discuss it earlier in employee evaluation that it can be positive and it can be negative. The pressure on employee's mind during the tough evaluation period can decrease the efficiency of the employee. According to Appelbaum, Roy & Gilliland (2010) budding conviction and unfasten associations between administrators and workforce is essential to attaining a valuable performance appraisal. We also find a conclusive discussion in another research paper which brought the clear picture. Wooford & Maes (2002) argued that the procedural performance appraisal can be used to make assurance that every worker is properly getting that his responsibility is part of the strategic planning in organization along with worker improvement is taking organization towards its goal.

Employees are main figure of any organization who takes the organization towards the goal and man power is need of every organization. In fact every organization wants the best manpower for

it and bears heavy mechanism to judge the employees either they are loyal to the organization or not. The conduction of such evaluating paradigm for the employees bring frustration in employees occasionally in the work force when they don't get the resultant feedback from the employer. The optimization may perhaps upshot in economize, even though this is not a crucial principal of the executive (Sitlington & Marshall, 2011). The most crucial decision can harm the manpower as well as the organization. For the benefit of organization and also increase the employee performance to get more positive results always try to give them healthy feedback. That can easily motivate the employees to give more attention to their job. Davis & Gibson (1994) proposed that requirements evaluation should aspire to make **available an assortment** of in sequence which will impinge on the blueprint of successive intercession.

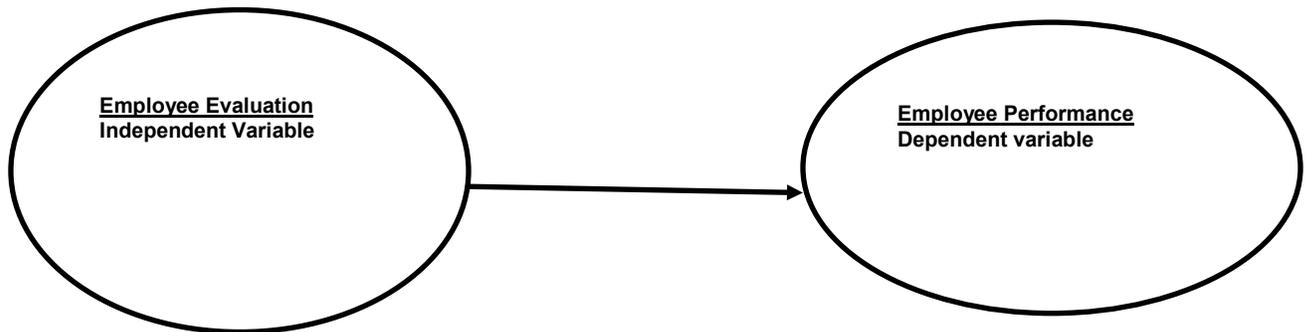
The pressure on employees can bring the unsupportive environment in the organization which can least the production or customization for the time being. To increase the production of the organization the atmosphere should be lean and calm as in the normal days for the employees as well as the administrators. It can bring mental stress to the administrator as well. Berman & McCabe (2006) found that directorial due development in the nonunion intercession stadium for the worker **associations is a principled and** very important. It is plausible that employees were no longer provoked to exercise improvement since there was no longer a connection flanked by progress and conclusions such as salary increases and promotions (Boswell & Boudreau, 2002). Intense environment can harm the organizational strategies and it may build the gap between the employees and administration, which is more harmful than the less productivity due to the malfunction of the organizational instruments. Carmeli & Thishler (2004) proposed that the insubstantial rudiments, jointly with environmental vagueness and geo graphical locality, robustly influence the performance of the confined establishment.

The satisfaction level of the workers increased by suitable training sessions provided by the administration which enhances their working capabilities and professional skills. Employee's productivity also increases after a positive feedback on their evaluation and appreciation. Bosewell & Boudreau (1999) proposed that measurements generally supports the workers work out together with enticement, support or extermination decisions, and resemblance and/or appreciation of finer or deprived performances. The perception of the appraisal automatically changes when it comes with the trust and productivity for the employee. He start believes that it is for his benefit along with the organization. The trauma which is generated be the stress of the appraisal system will be demolished. The after myth result will be the positive one. The assessment must be levelheaded and premeditated, and without predestined philosophies, it can be success of an assessment if it replicate of its plus points by the employees being evaluated (Appelbaum, Nadeau & Cyr, 2009).

Najafi, Hamidi, Vatankhah & Purnajaf (2010) argued that the institutions which are persistently drawn in recognize their prospective by using a few scheming and upsetting apparatus, will definitely proceed more triumph copious in the exterior aggressive surroundings. So when an employee knows that a regular evaluation is done for the improvements, it gives an encouragement. Also evaluations are not worth if a proper feedback is not provided to an employee. It leaves an open loop and does not complete the whole process. Steel & Scotter (2003) argued that employees were capable to assess their own competency, and this self-knowledge spigot into supporting aspects in the performance procedure itself. Evaluation makes stress on employee's mental status.

Hypothesis 0 (Ho): Employee evaluation has positive relationship with employee performance.

## Theoretical Frame Work



## RESULTS

Table 1: Correlation Analysis

	Employee Performance	Employee Evaluation
Employee Performance	1	.764**
Employee Evaluation	.764**	1

Correlation Analysis indicates a normal relationship between employee evaluation and employee performance.

Table 2: Regression Analysis

	beta	t	Sig
Employee Performance		3.291	.001
Employee Evaluation	.764**	13.551	.000

*N=250, employee satisfaction. R square= .584, adjusted R square= .580 F=183.624, sig= .000 Regression analysis indicate value of .584 for R square which indicate that 58% covered by leadership while 42% remains unexplored. The value of F is 183.624 which are significant at 0.000 which indicates that the relationship of employee evaluation and employee performance. The beta value is .764\*\*.*

Discussion and future work

The result of calculated data is very much significant and it shows that there is very strong relationship with employee evaluation and employee performance. Significance result also shows that we select best sector to take the results for our research. It is for sure that employee performance in any organizations has many instincts to keep their moral high or low. To find out these instincts researchers have to study their behavior as well along with the environmental effects or cultural effects on their performance. Our selected instinct which has high impact on the employee performance is employee evaluation. Employee evaluation can bring the charging institution in employees either it may be in positive direction or in negative direction. Positive feedback always brings positive results in employees. These days banking sector of Pakistan is the most active sector which is trying to modify the old scheme of their development plans in their organizations and they are trying to adopt new developing paramounts in their organization so they can compete the market by bringing new line of products. We get the most significance results for our research in this sector that they are in actual trying to adopt the evaluation profiles for their employees to create best possible employees teams for their working environment.

Our focus for future study in the similar research would be the comparison between private sector and government sector. As we already discuss in our research that in government sector the system followers are very few and even their paragon's measures are in very bad condition. They never try to absorb the change in their official environment. They always prefer to work in a relaxing and conditional environment which is suitable for them. The working archetype of banking sector is totally different from the other sectors of Pakistan. The think tank of appraisal systems should develop implications of the theoretical explanation to adopt the evaluation system in companies in such way that system should not be disturbed and the effect of the performance of the employees during the assessment period. Pakistan has different culture and working environment from the west and they have many systems which need to be more refined and the evaluation system is one of them. Even though multinational companies bring many those systems in Pakistan which was not followed before. In terms of professional working environment those systems are likely adopted by the born companies of Pakistan. Evaluation system is one of the important and affecting figures of organization because many decisions are based on it. Employees look for their promotion and incentives through this evaluating process and companies make decision for the future prospect of employees after this comprehensive process of evaluation.

Our result brings us almost 100% result for our studies which bring more vivid side of picture that employees are really get stressed because of this evaluation process and their performance fluctuates in different frames of periods. In the normal period of year they perform normal even some of them do not perform good but in the season of assessment they perform more and show their hard work to get good evaluation results.

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# **DETECTION AND PREDICTION OF MANAGERIAL FRAUD IN THE FINANCIAL STATEMENTS OF TUNISIAN BANKS**

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## **ABSTRACT**

### **INTRODUCTION**

Garner (2009) defines fraud as “A knowing misrepresentation of the truth or concealment of a material fact to induce another to act to his or her detriment”. Nevertheless, fraud in the financial statements is defined differently in the professional and academic literature. In fact, The International Federation of Accountants (IFAC), in the International Standard on Auditing (ISA) 240 -The Auditor’s Responsibilities Relating to Fraud in Audit of Financial Statements, 2009-, defines fraud as “an intentional act by one or more individuals among management, those charged with governance, employees, or third parties, involving the use of deception to obtain an unjust or illegal advantage”.

Moreover, the American Institute of Certified Public Accountants (AICPA) in the Statement on Auditing Standard (SAS) N°99 -Consideration of Fraud in a Financial Statement Audit- refers to fraud as “an intentional act that results in a material misstatement of the financial statements that are the subject of an audit”. In the SAS 99, two types of fraud are considered. First type of fraud are misstatements arising from fraudulent financial reporting such as falsification of accounting records or intentional omission from the financial statements of events, transactions, or other significant information. The second types of fraud are misstatements arising from misappropriation of assets such as theft of assets, embezzling receipts or causing an entity to pay for goods or services that have not been received.

The results of the latest report published by the Association of Certified Fraud Examiners (ACFE) in 2012 are alarming. Indeed, the lighthouse observation of this report is that fraud costs 5% of total annual turnover of the companies affected.

Our study is focused on the Tunisian banks since it came out that the banking sector had been subject to misuse of funds in form of granting large credits for projects without securing them or at an interest lower than it should be.

### **LITERATURE REVIEW AND HYPOTHESIS**

The common motivations for companies to commit financial statements fraud are numerous. Economic incentives are common cases of fraud in the financial statements, as well as psychotic motivations, self-centered, or ideology. All these motivations can play important role of fraud in the financial statements. Pressures and economic incentives to match analysts' forecasts are fundamental motivations for listed companies subject to financial fraud. The psychological motivations associated with criminal behavior are very rare in our case. Egocentric motivations are outlined up in the fact that through fraud the person increases his personal prestige. In reality, this type of motivation can be seen as the desire of managers to fulfill a functional authority in

society. Ideological motivations encourage executives to think that through fraud, they can become market leaders and consequently, improve their position in the society.

Fraud in the financial statements are made, if the company has strong incentives, as well as economic reasons to announce a more favorable than it really should be, in accordance with Generally Accepted Accounting Principles (GAAP), financial performance. Empirical investigations (Carter and Stover (1991); Latham and Jacobs, (2000a, 2000b)) identified two fundamental variables, managerial ownership and the debt limit, which affect the extent of fraud in the financial statements. These studies have shown that when managerial ownership is between 5-25%, the opportunistic behavior of managers are expected and that the likelihood of engaging in financial statement fraud is higher. Previous research (Carcello and Palmrose (1994); Dechow et al. (1996); Lys and Watts (1994)) focused on examining measures of financial difficulties in terms of weak financial conditions and weak financial performance as motivational mechanisms. The conclusions reached by this researches, argue that the motivations of commitments of fraud in the financial statements increase when the firm encounter financial difficulties. Moreover, when the financial conditions of the company and its performance deteriorate, the chance to engage in fraud in the financial statements increase.

Recent corporate governance scandals showed that in most companies, executives have incentives to increase profits to improve their bonuses. Giving shareholders the authority to choose the elements of bonuses to executives can eliminate these incentives.

Studies developed on banks financial statements fraud are very rare, although the 2012 report of the ACFE shows that the banking and financial services are leading organizations victim by generating 16.7% of fraud cases. Moreover, according to the report, the managerial fraud ranks first and second in the ranking of fraudsters. Indeed, there is a strong correlation between the fraudster function within the company suffered from the fraud and the losses caused by the fraud. The median loss caused by the owner / manager is more than three times the loss caused by the managers, and more than nine times the losses caused by employees. Ramage et al. (1979) noted that financial institutions have different characteristics of errors than other sectors. Palmrose (1988) and Saint-Pierre and Anderson (1984) showed that about 30% of trials involved banks and loans institutions auditors. Kreutzfeldt and Wallace (1986, 1990) noted that the characteristics of inaccuracies in terms of error rate and false accounts vary across sectors. For example, banks are exposed to significantly higher error rates than other sectors companies in the liquidity accounts. In the same idea, Maletta and Wright (1996) examined 36 commercial banks and 14 savings and loan institutions. They showed that they are assigned the highest error percentage that overstated net income of about 68.8%.

Following this review of the literature on the determinants of Fraud in the Financial Statements (FFS), which allowed us to discern the main reasons for it, we formulate now our assumptions and methodology that we will follow in the context of our empirical validation for Tunisian banks. The assumptions are classified into three groups, depending on the nature of ratios:

Assumption relating to performance ratios H1

H1<sub>1</sub>: banks with low performance ratios are exposed to a greater occurrence of managerial fraud.

Assumption about growth ratios H2

H2<sub>1</sub>: banks with high growth ratios are exposed to a greater occurrence of managerial fraud.

Assumptions regarding capital ratios H3

H3<sub>1</sub>: banks with low capital ratios are exposed to an increased frequency of managerial fraud.

## METHODOLOGY

The objective of this study is the prevention of managerial fraud before its occurrence. This is to test the predictive ability of a battery of ratios, one year, two years and three years before the occurrence of fraud. We adopt the methodology McAteer (2009). This choice is actually based on several arguments.

Indeed, in addition to the scarcity of studies on the detection and / or prevention of fraud in banks financial statements, McAteer (2009) methodology uses three groups of financial ratios produced by the Federal Deposit Insurance Corporation (FDIC). Table 1 present the detail of the ratios used in our study. This methodology is based primarily on fraud prevention so; there is a concern for the prediction-detection and prevention of fraud, an issue that seems to be relevant in regards to the risk of banks failure.

The period and selection of the sample

The period chosen is based on the year of fraud; it generally extends from 1999 to 2010. For our analysis, we took into account three-year period prior to the occurrence of the fraud for fraudulent and non-fraudulent bank. We consider that a bank commit a fraud when the Financial Market Council (the Tunisian equivalent of the SEC) or the Government Accountability Office announced the occurrence of the fraud or its external auditors issued an adverse opinion to the financial statements.

The data were collected directly from the web sites of the banks or from the printed annual reports available at the library of Central Bank of Tunisia (BCT).

We conducted our empirical tests on a sample of 10 Tunisian universal banks, namely Attijari Bank (AT), Banque Internationale Arabe de Tunisie (BIAT), Banque Nationale Agricole (BNA) Tunisian Banking Company (STB), Banque de Tunisie (BT), Banque de l'Habitat (BH), Amen Bank (AB), Arab Tunisian Bank (ATB), Union Internationale de Banques (UIB), Union Bank for Trade and Industry (UBCI). The sample of fraudulent banks is composed of the BIAT, BH, BNA, STB, UIB, Amen Bank and Attijari Bank. This means that each bank perpetrated at least a fraud in one year. The control group or the control sample is composed of the remaining three banks namely BT, ATB and UBCI.

Table 1 : Variables in the Study

Variable	Definition
<b>Performance ratios</b>	
V <sub>1</sub> (ASTEMPM)	Assets per employee
V <sub>2</sub> (EEFFR)	Efficiency ratio
V <sub>3</sub> (IDDIVNIR)	Cash dividends to net income
V <sub>4</sub> (IDLNCORR)	Net loans and leases to core deposit
V <sub>5</sub> (INATRESSR)	Loss allowance to loans
V <sub>6</sub> (INLSDEPR)	Net loans and leases to deposits
V <sub>7</sub> (INTEXPY)	Cost of funding assets
V <sub>8</sub> (INTINCY)	Yield on earning assets
V <sub>9</sub> (NIMY)	Net interest margin
V <sub>10</sub> (NOIJY)	Net operating income to assets
V <sub>11</sub> (NONIYY)	Noninterest income to earning assets
V <sub>12</sub> (NONIXY)	Noninterest expenses to earning assets

V <sub>13</sub> (ROA)	Return on assets
V <sub>14</sub> (ROE)	Return on equity
V <sub>15</sub> (ROEINJR)	Retained earnings to average equity
<b>Growth ratios</b>	
V <sub>1</sub> (ASTEMPM)	Assets per employee
V <sub>16</sub> (EQV)	Equity capital to assets
V <sub>17</sub> (ROLLPSSTA)	Growth ratio 1
<b>Capital ratios</b>	
V <sub>16</sub> (EQV)	Equity capital to assets
V <sub>18</sub> (RBC1AAJ)	Core capital (leverage) ratio

### The Model

The McAteer (2009) methodology is adapted to the Tunisian context. The dependent variable is a dichotomous variable equal to 1 (probability of 100%) for fraudulent banks and is equal to 0 for non-fraudulent banks (probability of 0%). The independent variables are 18 financial ratios out of the 26 ratios produced by the FDIC. Indeed, some data are not available for all banks and / or for the entire period, such as the ‘credit loss provision to net charge-offs’, ‘loan loss allowance to noncurrent loans’, ‘net charge-offs to loans’, etc. These ratios are classified into three categories, that is, performance ratios, growth ratio and capital ratio. Moreover, since the regression is to anticipate the managerial fraud before its occurrence on several time intervals, the fraud model can be rewritten as follows:

$$Y = B_0 + B_1X_{1(t-y)} + B_2X_{2(t-y)} + \dots + B_kX_{k(t-y)} + \varepsilon \quad (1)$$

Where P is the probability of occurrence, B<sub>0</sub> is a constant and B<sub>i</sub> are the coefficients associated with the independent variables, X<sub>i</sub> are the independent variables, t is the year of occurrence, y there is the interval in years, and  $\varepsilon$  is the model error. The list of the financial ratios (independent variables) used our analysis summarized in table 1.

The use of the logistic regression completes the predictive aspect of the study. In fact, logistic regression predicts or explains a nonparametric binary dependent variable by determining the probability of the independent variables that influence the dependent variable.

### THE RESULTS

The examination of the correlation matrix presented in table 4, allows us to conclude the existence of multicollinearity. According to Kennedy (1998) multicollinearity in a data set is considered if at least one simple correlation coefficient between the independent variables is at least 0.8 in absolute value. This observation brings us to eliminate four variables from the model to avoid having a biased model. The eliminated variables are:

- V<sub>5</sub>: Loss allowance to loans
- V<sub>9</sub>: Net interest margin
- V<sub>12</sub>: Noninterest expenses to earning assets
- V<sub>18</sub>: Core capital (leverage) ratio

The logistic regression estimates of the equation  $F_i = \alpha_0 + \alpha_1V_1 + \alpha_2V_2 + \alpha_3V_3 + \alpha_4V_4 + \alpha_5V_6 + \alpha_6V_7 + \alpha_7V_8 + \alpha_8V_{10} + \alpha_9V_{11} + \alpha_{10}V_{13} + \alpha_{11}V_{14} + \alpha_{12}V_{15} + \alpha_{13}V_{16} + \alpha_{14}V_{17} + \varepsilon_i$ , where V<sub>i</sub> are defined in table 1.

We created lagged variables for one year, two years and three year before the year when a bank perpetrates fraud. Hence, the structure of our variables is V<sub>i,t</sub>, V<sub>i,t-1</sub>, V<sub>i,t-2</sub>, V<sub>i,t-3</sub>, where i varies from 1 (V<sub>1</sub>) to 17 (V<sub>17</sub>). The results show that the eleven variables selected by the logistic regression procedure (Forward Stepwise) to be in the model, explain the fraud at 59.1 for Cox and

Snell Pseudo  $R^2$  and 71.1% for McFadden Pseudo  $R^2$ . Both measures are a good value for a logistic regression performed on a number of observations of 120 (10 banks observed over 12).

Nine ratios out of eleven are significant. These ratios measure the performance. We can conclude that the hypothesis  $H1_1$ : banks with low performance ratios are exposed to a greater occurrence of managerial fraud is verified. The ratio  $V_1$  is also a measure of the growth (Growth ratio) and significant. We can conclude, also, that the hypothesis  $H2_1$ : banks with high growth ratios are exposed to a greater occurrence of managerial fraud is verified. The absence of significant Capital ratios allows us to reject and hypothesis  $H3_1$ : banks with low capital ratios are exposed to an increased frequency of managerial fraud.

The model for prediction and detection of fraud in the Financial Statements of Tunisian Banks can be written as follow:

$$F_t = -413.85V_{2,t-2} - 611.12V_{2,t-3} + .72V_{3,t} + 4.58V_{3,t-3} + 14.16V_{4,t} \quad (2)$$

$$- 24.03V_{4,t-1} - .382V_{6,t} - 248.48V_{10,t} - 804.13V_{11,t}$$

$$- 97.04V_{14,t-2} + 25.47$$

The percentage of correct classification banks as non-fraudulent is 93.4% and for the fraudulent banks is 82.8%. The Overall Percentage classification rate is 90%, which is considered as a good classification rate.

From this analysis, we can conclude that Tunisian banks having low performance or high growth ratios are exposed to commit managerial fraud. However, Tunisian banks having low capital ratios are less exposed to commit managerial fraud. The logistic regression model developed is a good tool for detecting and predicting managerial fraud for Tunisian Banks. This model shows and confirms (McAteer (2009)) findings that managerial fraud is a process can take up to three before its occurrence and detection.

## CONCLUSION

Fraud is defined by Garner (2009) as “A knowing misrepresentation of the truth or concealment of a material fact to induce another to act to his or her detriment”. Nevertheless, fraud in the financial statements is defined differently in the professional and academic literature. The results of the latest report published by the Association of Certified Fraud Examiners (ACFE) in 2012 are alarming. Indeed, the lighthouse observation of this report is that fraud costs 5% of total annual turnover of the companies affected. Moreover, banks are ranked first among companies’ victims of fraud.

This paper presents a model for prediction and detection of fraud for Tunisian banks. The methodology is to take a battery of financial ratios used by the Federal Deposit Insurance Corporation (FDIC) as indicators of the financial situation of a U.S. bank and tries to test their predictive power before the occurrence of fraud. The results we have achieved, obtained by performing a logistic regression, show that Tunisian banks having low performance or high growth ratios are exposed to commit managerial fraud while Tunisian banks having low capital ratios are less subject to increased frequency of managerial fraud.

The logistic regression model developed in this paper explains the fraud at 59.1 for Cox and Snell Pseudo  $R^2$  and 71.1% for McFadden Pseudo  $R^2$ . Both measures are a good value for our logistic

regression. The Overall Percentage classification rate is 90%, which is considered as a good classification rate for the model.

Many users, such as, the Financial Market Council (the Tunisian equivalent of the SEC), the Government Accountability Office, the auditors, among others can rely on the model developed in this paper and use it as a tool to detect and predict managerial fraud.

## **BIOGRAPHY**

S. L. Boumediene Has a PhD in Business Administration (Accounting) from the University of El Manar, Tunisia. Before Joining Montana State University Billings, Dr. Boumediene taught both financial and managerial accounting in both undergraduate and graduate levels at the top business schools in Tunisia. Dr. Boumediene has been publishing his research work in academic journals such as Journal of Modern Accounting and Auditing and the Journal of Management and Business Research among others. Dr. Boumediene published a book on statistical characteristics and quality of accounting information in 2013. E-mail: salem.boumediene@msubillings.edu

# STRATEGIC IMPLICATIONS OF DIFFERENT CRITERIA FOR PROJECT PORTFOLIO SELECTION

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## ABSTRACT

*This paper evaluates the relationship between corporate strategy and quantitative financial criteria for choosing the optimal set of projects for the Capital Budget. On the basis of the competitive dynamics of the industry and the corporate strategy, different sets of projects should be selected to compose the project portfolio. The choice of the best criteria for project selection is mandatory, even though it is hard to find in both corporate and academic literature recommendation about which criteria should be selected to fit a predefined strategy. In order to evaluate that, this paper analyzed several combinations of risk and return metrics to compare the resultant set of projects and their strategic implications. The results pointed out that while Net Present Value combined with Value at Risk provided the most relevant results in terms of long term value creation, it is important to figure out how different strategies can be best implemented through portfolios selected by other criteria – e.g., fast returns on investment obtained by the Adjusted Payback Period and high profitability based on the Profitability Index or Internal Rate of Return. Such results present a relevant contribution for managers who typically face with the Capital Budget problem.*

**JEL:** G11, G31

**KEYWORDS:** Capital Budget; Project Portfolio Management; Project Portfolio Strategy; Project Selection; Monte Carlo Simulation; Investment Decision Criteria

## INTRODUCTION

The current globalized economy poses the challenges of increased competition among companies, and the mobility of capital and changeability of stakeholders (Bötzel and Schwilling 2000). Companies aim to create sustainable value in order to face such challenges. The long-term market value maximization of a company is the best criterion to equilibrate the tradeoffs among conflicting stakeholders, where value creation can be understood as the increase in a firm's market value, that is, the expectation of present and future cash flow generation (Brigham and Ehrhardt 2007; Hawawini and Viallet 2007). According to Porter (1980), companies competing in high growth industries may establish their position and increase the firm's market value through product development, marketing, innovation, acquisition of new clients, etc. Such companies are focused on growth; therefore, value creation is related to investments that aim for long-term cash flow generation. In addition to growth, if the industry is newly formed or emergent, risk appetite could increase because of the high level of uncertainties about the future.

When competing in large revenue industries that are slow growing, companies look for economies of scale, cost efficiency, selective product improvements, retention and acquisition of profitable clients, etc. Value creation is related to efficiency in capital allocation, which means that investments are more selective, risk taking is an important concern, and profitability may be

more important than simply growing revenues. On the other hand, if the industry's market is shrinking, or competition is severely damaging profitability, the companies would have to maintain or mitigate the decrease of value. Among the options, companies could change business lines, client segments, divest and capture residual value, etc. When investing in such situations, companies look for short- or medium-term returns; therefore, concerns about investment payback and divestment options may drive the capital budgeting process.

Companies implement their investments through projects that have to be managed in a portfolio structure. Only the most favorable investments have to be chosen, since companies have limited resources. According to Chen and Jiang (2004), Pennypacker and Dye (2002) and Almeida and Mota (2011), the main problems in project selection and portfolio management include the gap between strategy and investment selection, unprofitability, and unbalanced portfolios in terms of risk, schedule, and size of projects. The first step in facing such challenges is to improve the project selection methodology.

The selection must consider quantitative financial metrics, such as Net Present Value (NPV), Internal Rate of Return (IRR), etc., and could be complemented by qualitative criteria, such as strategic alignment, company expertise and efficiency in resource allocation. For example, Archer and Ghasemzadeh (2000) evaluated a weighted average approach using several qualitative criteria (such as market suitability, resource limitation, and project interdependencies), and quantitative criteria (NPV and project timing). Such models aimed to solve the strategic alignment problem of investment in a qualitative way; however, qualitative judgments could lead to disputable results. In addition to these limitations, their conclusions ignored the intrinsic relationship between the financial criteria and corporate strategy.

Although such studies apply quantitative financial criteria to select project for the Capital Budget, they do not present nor discuss the strategic implications of the different resultant set of projects. Thus, the objective of this paper is to evaluate the benefits of the different quantitative financial criteria and their strategic implications for project selection. Section 2 presents the criteria for project selection, implemented through a stochastic simulation method described in Section 3. Section 4 presents the major results from the simulations and Section 5 summarizes the conclusions of the study.

## LITERATURE REVIEW

One of the most commonly used metrics is the Net Present Value (NPV), which is the sum of discounted cash flows of the project. Present Value is considered to be the metric that is most aligned to long-term value creation, since it measures the amount of present and future cash flows generated by an investment. Two other important metrics are the Internal Rate of Return (IRR) and the Profitability Index (PI). They measure the return of invested capital, that is, capital efficiency. The Payback Period (PBK) consists of the amount of time needed for cash flows to achieve breakeven. It is a measure of how fast the capital returns. Given that the traditional Payback Period criterion ignores the time value of money, Hawawini and Viallet (2007) recommended the Adjusted Payback Period (APBK), which uses discounted cash flow figures instead of non-discounted amounts. According to the same authors, each selection criterion takes into account a different aspect of an investment's cash flow. While NPV "estimates how much the project would sell for if a market existed for it", APBK focuses on how fast the investment delivers return. So, while the latter criterion is favorable for short-term investments, NPV selects high-value cash flows, which usually happens in the long term. The resultant portfolios are different and they support different strategies: fast return versus long-term value creation.

Although return metrics alone can be used to define criteria for project selection, it is important to consider risk components when dealing with relevant uncertainties. Risk may be incorporated directly into the maximization objective function, or indirectly into the interest rate applied to discount cash flows. The composition of the discount rate may include three components: the risk-free rate, the additional cost of capital employed in the project and the additional risk given the cash flow uncertainties (Brigham and Ehrhardt 2007; Eschenbach and Cohen 2006; Hawawini and Viallet 2007). This method involves several complexities, since the third component is difficult to calculate because it represents the uncertainties in future cash flows. Moreover, the use of the third component implies a different discount rate for each project, which complicates project comparison. Another problem with this approach is the lack of historical data to compare the project's discount rate with similar earlier projects (Eschenbach and Cohen 2006). The alternative approach that is implemented in this paper involves the consideration of a risk statistic directly in the maximization formula. There are three methods to implement this last approach. Better and Glover (2006) showed that the first method maximizes the mean NPV of portfolios, imposing a constraint that the standard deviation of NPV be smaller than a predefined value. The second method involves considering risk as a separate measure plotted on an axis different from that of the return metric, which leads to a frontier visualization as the standard Markowitz frontier. Such approaches are more complex to analyze, because the decision-making process involves complex questions, such as “what is the risk appetite of the company?” and “how much risk should we bear to achieve our strategic goals?” The third method consists of using an indicator that mixes the return metric and the risk statistic; for example, divide the mean of the return metric by its standard deviation, which implies that the company aims for the highest return per unit of risk. Another indicator that mixes risk and return is the Risk-Adjusted Return on Capital (RAROC), which consists of the mean of the return metric divided by its VaR (or CFaR). The expressions (1) and (2) present these indicators, as discussed in Better and Glover (2006) and Prokopczuk, Rachev, and Träuck (2004), respectively:

$$SNR = \frac{\mu(X)}{\sigma(X)} \quad (1)$$

$$RAROC = \frac{\mu(X)}{CFaR(X)} = \frac{\mu(X)}{\mu(X) - pct_i(X)} \quad (2)$$

Where:

SNR = Signal to Noise Ratio, the reciprocal of the Coefficient of Variation; RAROC = Risk-Adjusted Return on Capital;  $\mu(X)$  = expected value of the distribution of the random variable X;  $\sigma(X)$  = standard deviation of the distribution of X; CFaR(X): Cash-flow at Risk of the distribution of X;  $pct_i(X)$ :  $i^{\text{th}}$  percentile of the distribution of X (e.g., fifth percentile for 95% of confidence interval); X = any return metric (e.g., NPV, IRR, PI or APBK).

## DATA AND METHODOLOGY

In order to analyze the strategic implications of each criterion for project selection, a Monte Carlo simulation model was implemented to compose portfolios from a total of ten projects. These projects' cash flows were based on the projects under evaluation by a Brazilian electric energy company. Even though companies in general have hundreds of projects and the selection process

must consider such larger amounts, this paper evaluated a small set of projects in order to test the metrics in all project combinations and to focus on the project selection criteria comparison. The simulation model calculated the return and risk statistics of all 1024 portfolios formed by any combination of the 10 projects. For a larger number of projects, optimization techniques such as mixed integer programming should be used to reduce the processing time (Kitanidis and Philbrick 1999).

The structure of the simulated projects consisted of 4 phases: two initial investment phases, the operational phase, and the project closure phase. The model took into consideration uncertainties in revenues and costs (Hawawini and Viallet 2007). Revenues had two sources of uncertainties (i.e., the number and the price of sales), while costs had one source of uncertainty (i.e., the fixed cost amount). The uncertainties were modeled using two factors: intensity and randomness. Each project cash flow was calculated on a monthly basis according to expressions (3) to (6).

$$CF_t = RV_t - CT_t - IV_t \quad (3)$$

$$RV_t = RB \cdot (1 + \alpha_v \cdot u_v) \cdot (1 + \alpha_p \cdot u_p) \cdot \frac{1}{N_3} \quad (4)$$

$$CT_t = CB \cdot [(1 - \varphi) \cdot (1 + \alpha_c \cdot u_c) + \varphi \cdot (1 + \alpha_v \cdot u_v)] \cdot \frac{1}{N_3} \quad (5)$$

$$IV_t = \begin{cases} I_1 / N_1, t \leq N_1 \\ I_2 / N_2, N_1 < t \leq N_2 \\ RI, t > N_2 \end{cases} \quad (6)$$

Where:

$RV_t$  = revenue of the project in time  $t$ ;  $CT_t$  = total cost of the project in time  $t$ ;  $IV_t$  = investment of the project in time  $t$ ;  $RB$  = baseline of the total revenue of the project;  $CB$  = baseline of the total cost of the project;  $\alpha_v$  = uncertainty (intensity) factor related to volume of sales;  $\alpha_p$  = uncertainty (intensity) factor related to price of sales;  $\alpha_c$  = uncertainty (intensity) factor related to fixed costs;  $u_v$  = random variable sample related to volume of sales;  $u_p$  = random variable sample related to price of sales;  $u_c$  = random variable sample related to fixed costs;  $\varphi$  = a constant related to the ratio of variable per fixed costs;  $N_1$  = number of time units of the first investment period;  $N_2$  = number of time units of the second investment period;  $N_3$  = number of time units of the operational phase of the project (project's total duration minus the duration of the investment phases);  $I_1$  = total amount of the first investment period;  $I_2$  = total amount of the second investment period;  $RI$  = Recurrent investments (during the operational phase of the project).

The Appendix A presents the total investment amounts for the ten projects are presented. After the two investment phases, projects start their operational stage, during which there are revenues, costs, and recurrent investments. These first two cash flow components are calculated using the formulae in (4) and (5); the recurrent investments are presented in Appendix B. Uncertainty intensities ( $\alpha$  values in (4) and (5)) were adopted as fixed values depending on each project component (see Appendix C).

## RESULTS AND DISCUSSION

Based on the simulations, the 1024 portfolios were ranked for each selection criterion (presented in Appendix D). The results (Appendix E and Appendix F) show that portfolios ranked by NPV present long term value creation potential, since the resulting portfolios were composed of long lasting projects with largely positive cash flows. When risk is taken into consideration, the portfolios typically excluded risky projects. Portfolios ranked by the ratio of NPV/CFaR or NPV/Standard Deviation criteria present smaller NPV when compared to the portfolios selected without including risk. This happens because such criteria select projects with high return per unit of risk rather than high absolute return projects, as projects with highest returns may be riskier.

When evaluating the portfolios optimized by the other criterion, IRR and PI selected portfolios that generate high return on investment, which does not necessarily mean portfolios with large cash flows. Small and very profitable projects may be selected, instead of large and not so profitable projects. Portfolios optimized by APBK focus on short-term returns, instead of long term value creation; this result was as expected. Portfolios optimized using the IRR or PI presented higher APBK than portfolios optimized by NPV, indirectly implying the reduction of the amount of time until the cash flow achieves break even. To evaluate how general are the conclusions, all simulations were repeated four times using 10 new projects each time. Each new project changed in size (investment amount and schedule), risk profile (degree of uncertainty) and economic feasibility (total revenue and total costs amounts). All above mentioned conclusions were verified on the additional simulations.

## CONCLUDING COMMENTS

The choice of projects to make up the portfolio must be aligned with the corporate strategy and the context of the industry in which the company is competing. The researched studies in the literature usually compare only few metrics or frameworks for project selection but do not consider the strategic implications of each criterion. This paper deals with the most common frameworks and criteria for project selection, and also focuses on implementing transparent financial criteria, instead of complex models or “black-box” weighted average criteria. Comparing the portfolios ranked by each criterion, the relationship between project portfolio selection and corporate strategy becomes evident. The NPV criterion generates portfolios with long term large and positive cash flow streams, which could foster a company’s growth when competing in high growth industries.

The IRR and PI criteria generate higher return on capital investment, which drive capital efficiency. Such properties are interesting for companies competing in slow growth but large revenue industries, where capital efficiency is required. Interestingly, portfolios optimized by these criteria selected both long term and short term projects. The APBK criterion generated portfolios that were focused on short term returns, which may be required by companies that are competing in shrinking industries or aiming to phase out a specific business line.

The introduction of risk in the selection criteria, combined with NPV, generated portfolios with higher return per unit of risk. Thus, when operating in a critical economic environment, companies should use risk-return criteria to select their project portfolios. It is important to pay attention that risk-return criteria work when the discount rate does not consider the project inherent risk. When the cash flow discount rate considers the project risk, it is suggested not to use a risk return criterion to avoid double counting. The use of only 10 projects was a constraint imposed by the authors to test exhaustively all possible project combinations. For larger groups of

projects, it is recommended to employ optimization techniques, even though there would be no guarantee to find the global optimum result.

## APPENDIX

### Appendix A: Duration And Investment of Each Project (Represented on Each Column)

duration and investment	project number									
	1	2	3	4	5	6	7	8	9	10
total duration (in months)	16	24	16	13	14	16	16	9	22	26
n <sub>1</sub> : duration (in months)	3	4	2	1	3	3	3	1	1	3
n <sub>2</sub> : duration (in months)	1	5	2	1	2	2	1	1	2	1
i <sub>1</sub> : investment (in \$ million)	36,1	40,1	17,4	35,1	7,9	8,7	23,5	20,1	15,1	14,1
i <sub>2</sub> : investment (in \$ million)	15,0	14,1	55,4	12,7	44,8	24,0	28,5	22,5	22,1	49,3

Each project was considered to have two investment phases: one related to a feasibility study and the second the investment to rollout the project itself.

### Appendix B: Revenues, Costs, and Other Characteristics of Each Project's Cash Flow

project characteristics	project number									
	1	2	3	4	5	6	7	8	9	10
rb: revenues <sup>1</sup>	271.8	178.2	245.5	79.3	140.8	136.1	228.5	123.2	120.5	80.6
cb: cost <sup>2</sup>	30.7	56.3	81.6	45.9	65.9	26.1	43.1	42.2	30.5	53.9
ri: recurrent investments <sup>3</sup>	5.1	4.3	3.6	5.7	3.7	2.6	0.5	3.0	2.2	7.6
φ: variable/total costs <sup>4</sup>	60%	60%	60%	70%	70%	40%	50%	50%	60%	70%
final investments as percentage of investment <sup>5</sup>	6%	8%	6%	7%	6%	7%	6%	7%	3%	10%
revenues at the end of the project as percentage of revenue <sup>6</sup>	9%	17%	10%	10%	10%	17%	12%	24%	11%	14%

<sup>1</sup>Total baseline revenue of the project, in \$ millions <sup>2</sup>Total baseline cost of the project, in \$ millions <sup>3</sup>Total monthly investments during operation phase (non-investment periods), in \$ million <sup>4</sup>Relation between variable and fixed costs (percentage) <sup>5</sup>Final investments to close the project <sup>6</sup>Final revenues from selling non-depreciated assets

### Appendix C: Uncertainty (Intensity) “α” Factors of Each Cash Flow Component of a Project

UNCERTAINTY FACTOR	PROJECT NUMBER									
	1	2	3	4	5	6	7	8	9	10
Uncertainty of number of sales	3	1	4	4	4	2	4	3	2	3
Uncertainty of price of sales	2	1	3	2	4	3	4	3	1	4
Uncertainty of costs	4	3	3	3	3	4	1	2	3	4

These factors were multiplied by random variables  $u$  in the model to implement randomness.

### Appendix D: Criteria For Project Portfolio Selection Implemented in the Simulation Model

criteria for project selection	
criterion 1	maximize the mean of npv
criterion 2	maximize the mean/cfar of npv
criterion 3	maximize the mean/standard deviation of npv
criterion 4	maximize the mean of irr
criterion 5	maximize the mean/cfar of irr

criteron 6	maximize the mean/standard deviation of irr
criteron 7	maximize the mean of pi
criteron 8	maximize the mean/cfar of pi
criteron 9	maximize the mean/standard deviation of pi
criteron 10	minimize the mean of apbk
criteron 11	minimize the cfar/mean of apbk
criteron 12	minimize the standard deviation/mean of apbk

### Appendix E: Percentage of Participation of Each Project in the Top 8 Portfolios Selected by Each Criterion

SELECTION CRITERION	PROJECT NUMBER									
	1	2	3	4	5	6	7	8	9	10
NPV	100%	90%	30%	10%	30%	100%	80%	60%	100%	20%
IRR	100%	70%	30%	30%	30%	100%	70%	20%	100%	0%
PI	90%	100%	20%	60%	40%	90%	60%	80%	100%	60%
APBK	70%	0%	0%	0%	0%	30%	40%	90%	20%	0%

For example, the top 8 portfolios selected using the NPV criterion were composed basically by projects 1, 2, 6, 7 and 9, in general projects with long term positive cash flows.

### Appendix F: Simulation Results For the Project Group Under Evaluation by a Brazilian Energy Company

return statistics of the portfolio				
optimization criteria	$\mu(\text{npv})$	$\mu(\text{irr})$	$\mu(\text{pi})$	$\mu(\text{apbk})$
npv	708	17.6%	2.9	7.5
npv / cfar	577	17.9%	3.0	7.6
npv / std	603	18.7%	3.1	7.3
irr	318	27.3%	4.2	6.0
irr / cfar	534	18.4%	3.2	7.6
irr / std	492	18.0%	3.2	7.9
pi	363	26.7%	4.3	6.2
pi / cfar	525	15.1%	2.6	8.2
pi / std	492	14.0%	2.5	8.7
apbk	294	25.0%	3.6	5.8
apbk / cfar	225	10.1%	2.0	13.8
apbk / std	265	9.9%	2.1	11.6

The 10 projects were combined in all 1024 possible portfolios and the portfolios were ranked by the Optimization Criteria (in each line). For the top ranked 8 portfolios by each criterion, the table presents the average of the return statistics (in each column). For example, the gray cell (first line, first column) is the average NPV of the top 8 portfolios ranked by the NPV criterion. The right adjacent cell (first line, second column) presents the average IRR of the top 8 portfolios ranked by the NPV criterion, and so on.

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# THE ASSESSING OF GOING CONCERN FOR THE ITALIAN LISTED COMPANIES: RELEVANCE AND IMPLICATIONS

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## ABSTRACT

*The research is aimed to carried out dual purpose. The first to investigate the going concern assumption for Italian listed companies by analyzing the contents of the audit reports issued by the independent auditors. For the definition of the statistical sample of companies we considered the following parameters: a) all the companies listed on the Italian Stock Exchange; b) it was excluded the foreign companies listed on the Italian stock market, c) it has been considered the report of the auditors on the 2012 consolidated financial statements; d) companies for which they are listed different types of shares were considered a single once. The results attest that 80% of Italian listed companies have no problems of business continuity but the remaining 20% showed significant problems. The second purpose to analyze the trend of the going concern assumption for Italian listed companies, by making a comparison over time between 2009 - 2012 using a research issued Italian Chartered Accountants Association.*

**JEL:** M41, M42

**KEYWORDS:** Going Concern, Audit's Opinion

## INTRODUCTION

The economic crisis has affected the whole world since 2008 and especially in Italy it is still ongoing and there seems. Emerging economies has slowed their growth economies also the "mature" have entered a downward spiral that led to a drastic deterioration of the macroeconomic indicators. In this difficult economic environment it is essential to stakeholders receive accurate information from companies on their health status and their ability to continue the business and to safeguard f going concern assumption.

The problem of verifying the existence of the assumption of going concern is particularly relevant in the current period, not only in Italy but worldwide. The heightened importance is due to the slowdown of the world economy which led to recession. The standardization of accounting standards has allowed us to standardize the procedures for the preparation of financial statements in all its aspects. Even the assumption of going concern assumes a certain uniformity of measurement and presentation in the financial statements. The going concern assumption is a fundamental principle in the preparation of financial statements. Under the going concern assumption, an entity is ordinarily viewed as continuing in business for the foreseeable future with neither the intention nor the necessity of liquidation, ceasing trading or seeking protection from creditors pursuant to laws or regulations. The remainder of the paper is organized as follows. The next section describes the relevant review and the standards related to the scope of this research on going concern assumption. Next we describe and discuss the data of analysis and in the final section some concluding comments.

## LITERATURE REVIEW AND STANDARDS PRINCIPLE

The going concern assumption is universally understood and accepted by accounting professionals, however it has never been formally incorporated into U.S GAAP ( Hahn, 2011). In the Italian system the main standard rules relating to going concern are contained in:

- 1) Civil Code, Article 2423-bis;
- 2) No OIC. 5 - Financial Statements for liquidation's company
- 3) No OIC. 11 - Financial Statements, objectives and postulates;
- 3) IAS 1 - Presentation of Financial Statements;
- 4) Auditing Standard nr. 570 - Going Concern;
- 5) The Bank of Italy / Consob / Isvap. 2 of 6 February 2009;
- 6) Consob Communication no. 9012559 dated 6 February 2009

Particularly Article 2423-bis of the Civil Code entitled "Basis of preparation of Financial Statements" states that: "In preparing the financial statements, the following principles should be observed:" the evaluation of the financial statement must be made prudently and in a going concern basis, as well as considering the economic function of the assets and liabilities;" The principle of preparation of the financial statements on a going concern assumption is relevant for Italian companies. The OIC 5, entitled " Financial Statements for liquidation's company", in paragraph 7 defines a company in continuity ("going concern") as "company functioning and intended to continue the business for at least twelve months after the date of the balance sheet. The OIC 5, unlike the provisions set out under the Civil Code, defines a time-frame of 12 months to refer to evaluate business continuity.

The OIC 11, entitled "Financial Statements - purpose and postulates", interprets and describes the main postulates and principles for annual financial statements, including the going concern assumption. The OIC 11, aims to describe the goals and assumptions in the preparation of the financial statements. Even before listing the postulates states that "the financial statements is the accounting document that provides financial and economic information relating to companies, characterized by business continuity. It 'obvious that the going concern basis, although not counted among the 11 OIC fundamental postulates, is mentioned even before the same, placing it in a prominent position. It is clear from reading the rules and principles just referred to as the going concern assumption should be considered an element of absolute dominance. Among the international accounting standards, there are numerous references to the assumption of going concern. First, the principle of going concern is included in the IFRS Framework as "underlying assumption" for the preparation of the financial statements.

The theme is explored in IAS 1, the Paragraphs 23 and 24 entitled "Presentation of Financial Statements", which states: "In the process of preparing financial statements, management shall make an assessment of the entity's ability to continue as a going concern ..." In estimating the assumption of a going concern, management takes into account all available information about the future, which must be at least, but not limited to, twelve months after the date of the financial statements. The degree of consideration depends on the circumstances relating to each specific company. Three main considerations emerge by reading the paragraphs:

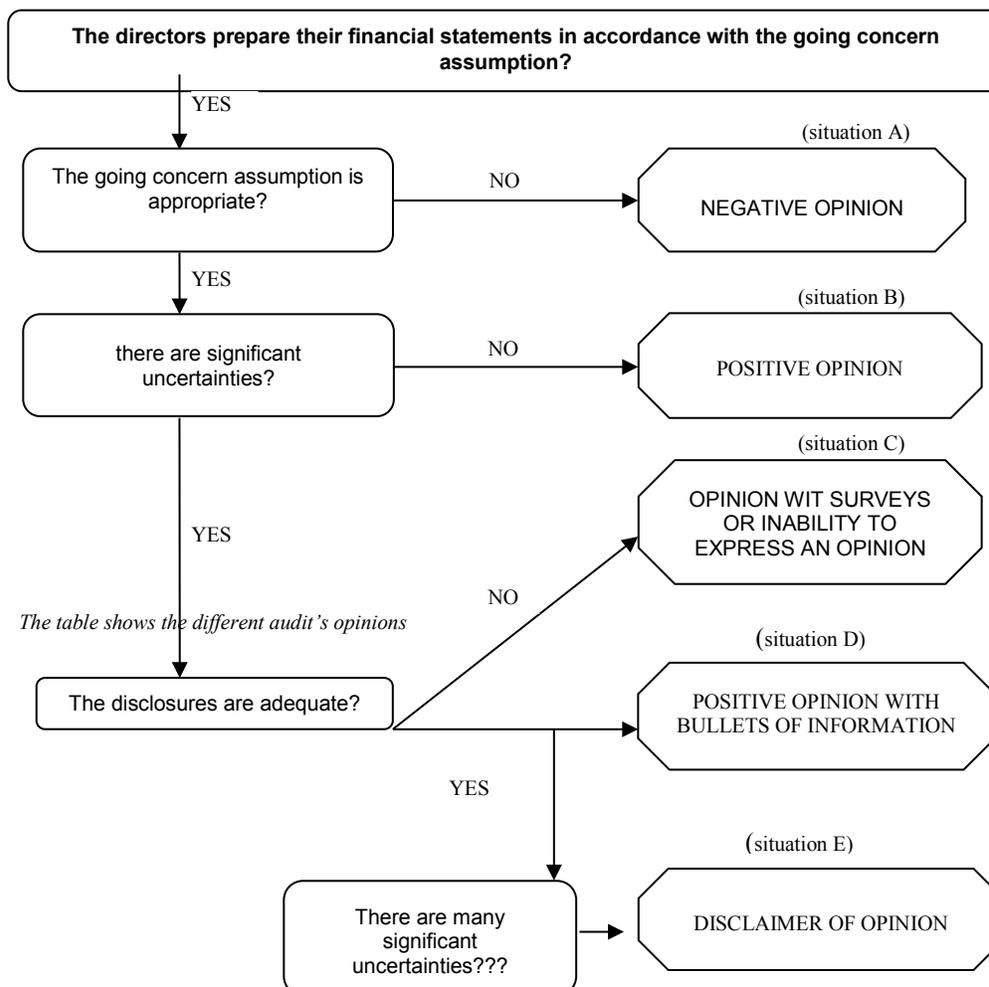
- a) In preparing the financial statements, the management must always assess whether the conditions for the company to consider in continuity of activities are respected. These assumptions must be adequately documented in financial reporting.

b) The financial statements must be drawn up with a view to going concern. When financial statements are not prepared on a going concern basis, that fact shall be disclosed, together with the basis on which it was prepared and the reason why the entity is not regarded as a going concern.

c) The period of twelve months is not to be considered as a limit for the assessment of going concern, but as a minimum threshold of reference. Even the international auditing standards show certain uniformity on the review of the principle of going concern: the ISA No. 570 Going Concern, led to a progressive homogeneity on the topics covered and the procedures that auditor must follow in its assessments.

An additional element of "globalization" of the process review of the going concern basis has been introduced and pursued by the Big Four that made possible the homogenization of rules explained in the "guides" that auditors must follow. The purpose of ISA No .570 is to establish standards and provide guidance on the auditor's responsibility for the correctness of the going concern assumption used as a basis for the preparation of financial statements. Based on the considerations made by the directors on the going concern, the auditor expresses its opinions in the audit report on the financial statements. ISA 570, in the section "Conclusions of the review and drafting of the auditor's report," explains the different types of auditor's opinion which are summarized in the following table:

Figure 1: Auditor's Opinions



### Analysis of Possible Situations

- A) The auditor must describe the reasons why the use of the going concern assumption is not appropriate.
- B) In this case no reference to business continuity will appear in the report.
- C) This hypothesis is planned and regulated by the Standard on Auditing. 570 that in paragraphs 37 and 38, says: "In certain circumstances [...] the auditor may find it necessary to ask management to make or extend its assessment. If management refuses, it is not the auditor's responsibility to correct the lack of such an analysis; in this case, it may be appropriate for the auditor to issue a report with an opinion other than unqualified because it may not be possible to obtain sufficient appropriate audit evidence about the correctness of the going concern basis in preparing the financial statements.

[...] In the absence of feedback from the management, the auditor may not be able to assess the existence of events or circumstances that cast significant doubt about the going concern of the company, or the existence of plans direction to cope with such events or circumstances or to assess other mitigating factors. In these cases, the auditor should express a qualified opinion for limitations to the review process or declare the impossibility of expressing an opinion. If the refusal by management to make or extend the evaluation of the going concern assumption constitutes a deviation from the applicable financial reporting framework applicable to the financial statements, the auditor should disclose this fact in its audit report in the same paragraph in describing the limitations to the review process, expressing a qualified opinion for limitations to the review process, or declaring it impossible to make a judgment”.

D) According to the auditor's opinion there is significant uncertainty, but the going concern assumption is considered appropriate. The auditor has verified that the budget adequately describes the main events and circumstances that raise doubts about the business continuity and management's plans to deal with such events, the budget also shows clearly that a material uncertainty exists related to events or conditions that raise significant doubts about going concern and therefore that the firm may not be able to realize its assets and discharge its liabilities in the normal course of its business. In audit opinion it will be an emphasis about these aspects to attract the reader's attention

E) With respect to this circumstance, the Standard on Auditing. 570, paragraph 33, states: "When the going concern assumption is subject to multiple relevant uncertainties, the auditor may conclude, in extreme cases, not to be able to express an opinion on the financial statements “

### **DATA AND METHODOLOGY**

In 2011, the ODCEC (Italian Association of chartered Accountants) carried out a research on the respect of the business continuity assumption of Italian listed companies, by analyzing the Auditors Report on the financial statements dated 2009. In accordance with the standards, the

requirement to assess whether an entity is a going concern or not should rest with the management team, the independent auditors must to assess and analyze:

- 1) The process followed by management in assessing business continuity;
- 2) The assumptions underlying the process;
- 3) management's plans for future action.

The auditor's responsibility is to obtain appropriate audit evidence about the appropriateness of management's use of going concern assumption in the preparation of the financial statement and to conclude whether there is a material uncertainty about the entity's ability to continue as a going concern.

Each audit's report has been classified according to the five possible types of opinion:

- 1) Unqualified Opinion ;
- 2) Unqualified Opinion with emphasis;
- 3) Qualified opinion;
- 4) Negative opinion;
- 5) Disclaimer opinion

The research results are summarized in the table below:

Table 1: The Going Concern Italian Listed Companies Opinions dated 2009

<b>Opinion</b>	<b>Number</b>	<b>%</b>
Unqualified Opinion	254	87%
Unqualified Opinion with emphasis	24	8%
Qualified opinion	1	0%
Negative opinion	2	1%
Disclaimer opinion	9	3%
Not available	1	0%
<b>Total</b>	<b>291</b>	<b>100%</b>

*The table shows that for 254 companies analyzed in 2009 the going concern assumption is respected for the remaining 37 there are problems.*

Considering this research data we performed the same analysis on 2012 financial statement in order to allow a comparison over time between the two years. The research investigates the only Italian companies listed on the Italian Stock Exchange, 272 listed companies in 2012 as reflected in the website of the Italian stock exchange ([www.borsaitaliana.it](http://www.borsaitaliana.it)) with the exclusion of foreign companies admitted to listing in Italy (for their exclusion we have analyzed the registered office of the parent company) including only once the company for which they are listed different types of shares. The sample was selected including auditors reports of these companies identified.

Table 2: the Going Concern Italian Listed Companies Opinions Dated 2012

<b>Opinion</b>	<b>Number</b>	<b>%</b>
Unqualified Opinion	200	74%
Unqualified Opinion with emphasis	50	18%
Qualified opinion	0	0%
Negative opinion	0	0%
Disclaimer opinion	12	4%

Not available	10	4%
Total	<b>272</b>	<b>100%</b>

The table shows the results of the analysis of 272 Auditors Reports to the Financial Statements dated 2012

## RESULTS AND DISCUSSIONS

From table 2 we can deduce:

a) Companies with a fully unqualified opinion are 200 (74% of the total);

b) companies with an unqualified opinion with emphasis are 50 (18% of the total). This category can be further divided in two types: the one with emphasis on going concern assumption (35 companies, 13% of the total) and the others with emphasis related to other topics (15 companies, 5% of the total).

The companies with explicit emphasis on going concern assumption are the following:

Table 3: Listed Companies highlighted unqualified audit report with emphasis on going concern

<b>A.S. Roma</b>	<b>Eukedos</b>	<b>Mediacontech</b>	<b>Primi Sui Motori</b>
Aedes	Fintel Energia Group	Molmed	Rcs Mediagroup
Bastogi Spa	Gabetti	Moviemax	Screen Service
Borgosesia	Hi Real	Nova Re	Sintesi
Brioschi	Imvest	Olidata	Snai
Cape Live	Industria E Innovazione	Pierrel	Stefanel
Ceramiche Ricchetti	Invest E Sviluppo	Pininfarina Spa	Telecom Italia Media
Chl	K.R.Energy	Pms	Tiscali
Cobra	Maire Tecnimont	Prelios	

The table shows the companies that according to auditors reports highlight doubts on going concern assumption

For these companies, although differently, there are significant doubts about the entity's ability to continue as a going concern for a reasonable period of time, not to exceed one year beyond the date of financial statements being audited. In these cases, the external auditors have considered positively the management deepening on the issue of going concern, inviting the stakeholders to consider carefully the section of financial statement where the topic is discussed.

Table 4: Listed Companies Highlighted Unqualified Audit Report With Emphasis on Other Topics

<b>Acea</b>	<b>Falck Renewables</b>	<b>It Way</b>
Acque Potabili	Fiera Milano	Mc-Link
Autostrade Meridionali	Finmeccanica	Prysmian
Banca Mps	First Capital	S.S. Lazio
Dea Capital	Impregilo	Vita Società Editoriale

The table shows the companies that according to the auditors reports highlight emphasis on other topics

The topics on which to turn the requests for information are mainly: the related party transactions, ongoing litigation, changes in accounting standards compared with the previous year and assessment methods of fixed assets. For these companies according to the audit's firms there

aren't problems of business continuity. c) The companies for which it has been notified of the impossibility of expressing an opinion by auditors (Disclaimer of opinion) are 12, corresponding to the 4% of all companies analyzed. In detail, the companies are:

Table 5: Listed Companies Highlighted Disclaimer of Opinion

Antichi Pellettieri	Dmail Group
Beghelli	Eems
Biancamano	lkf
Cdc	Pramac
Ciccolella	Uni Land
Cogeme Set	Zucchi Spa

*The table shows the companies without an audit opinions*

For these companies there are “significant and substantial” evidence of events or conditions that may cast significant doubt on the entity’s ability to continue as a going concern. This situations led the auditor to express the impossibility an of audit opinion. It is therefore considered that for these companies the going concern assumption has been seriously compromised. d) For 10 companies, about the for 4% of the total, it has not been possible to obtain the auditors report because financial statements dated 2012 are not available. The following table shows the companies belonging to this category and the causes that didn’t allow to obtain the audit’s report.

Table 6: Listed Companies without audit report available

Aicon	bankrupt company dated 21/01/2013
Aion Renewables	bankrupt company dated 18/03/2013
Arena	creditors arrangement procedure from 08/08/2012
Banca Popolare di Spoleto	extraordinary administration procedure from 12/02/2013
Crespi	liquidation procedure from 29/04/2013
Rdb	extraordinary procedure from 10/09/2012
Seat Pagine Gialle	creditors arrangement procedure from il 28/06/2013
Sopaf	Liquidation procedure from 01/07/2013
Montefibre	Financial Statement not available either on the company's website or on the website of the Italian stock exchange
Valore Italia Holding Di Partecipazioni	Financial Statement not available either on the company's website or on the website of the Italian stock exchange

*The table shows the companies without an audit opinions and the causes*

For Montefibre and Value Italian Holding we haven’t the financial statement report. The documents do appear neither on the company website nor on the Italian Stock Exchange website. It can be reasonably assumed that the report of the independent auditors is not positive. This hypothesis is strengthened by the fact that for previous annual reports the auditors have communicated the inability to make an opinion.

I should be noted that for the purposes of our research we considered appropriate to consider insert in the sample the companies just mentioned, as they were all operating and listed on the Italian Stock Exchange in the in 2012. The following table shows the results of two studies, a temporal comparison between the two researches both in absolute terms and in relative terms.

Table 7: Final aggregate on going concern assumption

Opinion	2012	%	2009	%	Δ
Opinion unqualified	200	74%	254	87%	-14%

Opinion unqualified with emphasis	50	18%	24	8%	10%
Qualified opinion	0	0%	1	0%	0%
Negative opinion	0	0%	2	1%	-1%
Disclaimer opinion	12	4%	9	3%	1%
Not available	10	4%	1	0%	3%
<b>Totale</b>	<b>272</b>	<b>100%</b>	<b>291</b>	<b>100%</b>	

*The table shows the comparison between the data for 2009 and 2012*

It is known primarily as the number of companies listed on the Italian Stock Exchange has declined over the next three years. This shows once again that Italian companies are reluctant to stock exchange. Changed the number of listed companies in the three years considered, the comparisons will be made on the deviations. Audit reports with unqualified opinion have decreased of 10% while those with unqualified opinion with emphasis increased by 10%. The results of ODCES search do not provide a detail of cases to emphasis if they refer to going concern or other aspects. It can therefore be assumed that these two variations reflect a worsening of the situation of Italian listed companies on their business continuity. Another significant negative aspect is the increase of the number company for which it was not possible to find the financial statements. We aggregated the data analysis to obtain a single parameter analysis of going concern assumption.

Table 8: Final Aggregate on Going Concern Assumption

<b>Categoria</b>	<b>Numero</b>	<b>%</b>
Unqualified Opinion and Unqualified with emphasis on other topics	215	79%
Opinion with emphasis on going concern	35	13%
Significant and substantial doubt the entity's ability to continue as a going concern	18	7%
companies that have gone out of business activities	4	1%
<b>Totale</b>	<b>272</b>	<b>100%</b>

*The table shows the final aggregate on going concern assumption*

The first group includes all companies with an unqualified opinion and c with an unqualified with emphasis related on other topics not to on going concern assumption. The second category all companies for which the auditors issued an unqualified opinion with emphasis on going concern. The third group includes companies for which the auditors have manifested the inability to express an opinion because there are conditions and events that indicate substantial doubt about the entity's ability to continue as a going concern. Finally, the fourth group includes the two companies declared bankrupt (Aicon and Aion Renewables) and the two in liquidation procedure (Crespi and SOPAF). In conclusions we can attest the percentage of Italian listed companies with no problems on going concern assumption are about 80% which means a marked decline compared to 2009: the Italian listed companies decreased is not only in quantity but also the quality of their business activity. So the situation of the Italian economy is reflected in the performance of listed companies. This situation is true in absolute terms as one company every

five listed company highlights problems of business continuity and in terms of temporal comparison it is clear worsening 2009-2012.

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# SELF-ASSESSED RESPONSES VS. RESEARCHER-IDENTIFIED STAGES: THE CASE OF BALANCED SCORECARD IMPLEMENTATION

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## ABSTRACT

*Most existing research on management accounting application has relied on self-assessed responses although they could influence the research outcomes, as pointed out in this research paper. This research asked respondents to identify the BSC implementation stage (i.e. self-assessed responses) and the characteristics of firms' performance measurement system (i.e. BSC attributes), the latter of which enable the determination of BSC implementation stages (i.e. researcher-identified stages). By the self-assessed responses and the researcher-identified stages, the BSC implementation rates are 44% and 64%, respectively, highlighting the existence of misclassification. Additionally, the determinant studies using the self-assessed responses and researcher-identified stages reveal conflicting views with regard to the key determinants in BSC implementation. In the self-assessed responses scenario, environment uncertainty, participation and top management support are uncorrelated with attaining a BSC implementation stage. Meanwhile, in the researcher-identified stages scenario, participation and top management support excluding environment uncertainty are positively associated with attainment of a BSC implementation stage. The findings reaffirm the existence of different interpretations of BSC implementation as implied in previous studies in that self-assessed responses lead to misclassification and thereby bias the outcomes. As such, it is imperative that proper classification of BSC implementation be made prior to determinant or consequence tests.*

**JEL:** M190, M490

**KEYWORDS:** Balanced Scorecard, Self-Assessed Responses, Balanced Scorecard Attributes, Researcher-Identified Stages

## INTRODUCTION

Management accounting innovations have long been adopted by a variety of organizations to create or enhance their competitive advantages. Thus, it is of great interest and of use to conduct a research work. Previous research studies examined the implementation of certain management accounting techniques, the determinants of and the consequences following the implementation. A majority of previous research studies relied on firms' self-assessed responses with respect to the stages of application (i.e. non-implementation or implementation) of management accounting innovations despite the fact that such reliance could lead to the issue of misclassification. It is possible that respondents may hold a different view on a particular management accounting innovation and thus misclassify the stage of application. Some respondents misperceive that their firms do not adopt any management accounting innovation, while others hold the incorrect belief that their companies have implemented the innovation. Self-assessed responses could bias the research results with respect to the stage of application and the determinants and consequences of management accounting implementation. Hence, it is of paramount importance that correct classification of management accounting application be made from the outset.

Balanced Scorecard (BSC) is an important development in strategic performance measurement systems. BSC offers a balanced view of strategic non-financial and financial measures that can be illustrated in the cause-and-effect relationships (Kaplan, 2010). Due to its anecdotal cases of success, BSC has attracted interest worldwide. Prior research studies have examined the application rate, the determinants and the impacts of BSC implementation relying solely on the firms' self-assessed responses with regard to BSC application. Surprisingly, some determinant studies (e.g., Chen, Duh & Lin, 2006) revealed that the vital determinant (i.e., top management support) is inversely associated with BSC implementation; in other words, top management support impedes the implementation of BSC. This phenomenon has cast doubt on the reliability of self-assessed responses.

Only recently have researchers looked into the issue of awareness and then created a BSC classification framework for examination of the application levels of BSC (Soderberg, Kalagnanam, Sheehan, & Vaidyanathan, 2011; Shutibhinyo, 2012). Nevertheless, no study has attempted to investigate whether the self-assessed responses do influence the research results with respect to the application and the determinants of management accounting implementation. Thus, this study examines the influence of self-assessed responses on the research outcomes in the context of BSC implementation, i.e. BSC application rate and the determinant study. Specifically, this study intends to prove that the self-assessed responses scenario produces dissimilar outcomes from the researcher-identified stages scenario. The self-assessed responses on the application stage in this research work were gleaned with a Yes/No question. Meanwhile, for the researcher-identified stages, the BSC framework developed by Shutibhinyo (2012) is modified to determine the BSC attributes embedded in the firms' performance measurement systems and subsequently the BSC application stages. This would allow for a direct comparison of the results employing the self-assessed responses with those basing on the stages as identified by the researcher.

This paper contributes to the area of management accounting research by unveiling the distorting effects on the research outcomes of the sole reliance upon self-assessed responses. To mitigate the distorting effects researchers contemplate the key attributes of management accounting innovation under investigation prior to establishing the framework so that the application level could be accurately identified. This paper emphasizes the paramount importance of correct assigning of level of application of management accounting innovation from the outset of a research project, based on the stages as identified by the researcher (i.e. researcher-identified stages) rather than the self-assessed responses.

## LITERATURE REVIEW

### The Balanced Scorecard

BSC was originally devised by Kaplan and Norton as the multi-dimensional performance measurement system with a collection of financial and nonfinancial measures (Kaplan & Norton, 1992). BSC has since then been transformed into a strategic performance measurement system (Kaplan & Norton, 2001, 2008). The key feature of BSC is translating a strategy into operational terms that incorporate three main attributes as shown in Table 1.

Table 1: The BSC Attributes

Key attributes of BSC	Explanation
Multiple perspectives	Grouping the financial and nonfinancial measures into multiple and interrelated

Strategy-linked measures	dimensions to allow managers a comprehensive view of the business performance. The measures should be derived from the organization’s strategy. Firm’s key measures can infer firm’s strategy.
Cause-and-effect relationships between or among the strategic objectives or measures.	The linkages between/among the strategic objectives or measures within and across perspectives inform of firms’ business strategy or illustrate the value-creation process.

*These three attributes embedded in the operational terms eliminate a misunderstanding and build a consensus among concerned individuals about the firm’s strategy and thereby an environment conducive to the BSC application. Incorporating three attributes allows firms to properly align their organizational units to the strategy (i.e. Alignment), to effectively communicate the strategy to their employees (i.e. Communication), and to provide feedback and promote learning (Feedback).*

**Identify the Stages of BSC Application**

In determination of the stages of BSC application (i.e. either non-implementation or implementation) among the target firms, the majority of existing research studies have solely relied on the self-assessed responses. A handful of research works have taken into account the characteristics of firm-level performance measurement systems in identification of the level of BSC application. Most of the previous research studies either asked the participating firms to indicate whether their firms were BSC users or required the participating firms to specify their organization’s stage of BSC application (e.g., Ittner, Larcker & Randell, 2003; Speckbacher, Bischof & Pfeiffer, 2003). Consequently, these researchers designated the participating firms as either non-BSC or BSC users according to the firms’ self-assessed responses. As shown in Table 2, for example, Ittner et al. (2003) classified the stages of BSC implementation into six stages.

Table 2: Ittner Et Al.’S (2003) Classification Framework

BSC Stages	Classification
(1) Not considered (2) Implemented&abandoned (3) Considering (4) Implementing now	Non-BSC firms
(5) Used (6) Used extensively	BSC firms

*Firms in stages (1) – (4) are subsequently classified as non-BSC firms whereas those in stages (5) – (6) are regarded as BSC firms*

Some research studies further divided BSC firms into more specific types of BSC users according to the BSC attributes. Speckbacher et al. (2003), for example, classified the stages of BSC implementation into seven stages and assigned the participating firms as either a non-BSC or BSC firm according to the responses given by the firms. In case of BSC firms, they are specifically grouped in one of three sub-classifications on the basis of the BSC attributes.

Table 3: Speckbacher Et Al.’S (2003) Classification Framework

BSC Stages	Classification	Criteria
(1) No contact with BSC thus far	Non-BSC firms	
(2) Know BSC		
(3) Studied BSC, but no concrete steps taken	BSC firms	
(4) First steps already taken		Type I (1) Identify strategic measures/objectives
(5) BSC project has existed		Type II (2) Group strategic measures/objectives into perspectives
(6) BSC implemented in individual business units		Type III Type I with the additional criterion:
(7) BSC implemented for entire company		Type II with some or all of the additional criteria:
		(4) Contain action plans/target
		(5) Link Measures to incentives

*Participating firms were classified as non-BSC firms if they identified that they belonged in stages (1) – (5), whereas those in stages (6) – (7) were viewed as BSC firms. The BSC attributes of the BSC firms were subsequently examined to further categorize these BSC firms into three specific groups as shown in Table 3. BSC firms with strategic measures grouped into perspectives belong to Type I BSC users. If these Type I firms also have cause-and-effect chains, they are upgraded to Type II BSC users. Type II BSC users with*

*action plans/target and/or incentive linked measures will advance to Type III BSC firms, accordingly. Conceptually, the key feature of BSC is translating the strategy into operational terms whereby measures are grouped into multiple perspectives, the measures are derived from the strategy, and the value-creation process are illustrated through causal links. Accordingly, only Type II and III BSC firms meet the criteria and could be regarded as firms at Implementation stage (or BSC users), whereas Type I firms are those at Non-implementation stage (or Non-BSC users).*

At this juncture, it is vital to call attention to the issue of differing interpretations of BSC as many academics and financial practitioners still base their understanding and thereby interpretation of the BSC concept on the original 1992 BSC article, which constitutes a less significant part of the current BSC concept (Kaplan, 2010). As previously mentioned, differing interpretations of BSC can have an impact on the firm's self-assessed responses with regard to the BSC application and thereby bias the research outcomes. Interestingly, firms with similar BSC attributes could identify themselves with differing BSC stages. In addition, certain firms, even with all three attributes, perceive that they lack qualifications to be called BSC users due to the absence of an effective system. They probably opt for the "implementing now" or "first step has been taken", thereby leading to the researchers' classifying these firms as non-BSC users despite the fact that they are BSC users. In contrast, firms with only one or two of the three BSC attributes may misconceive that they are genuine BSC users as some BSC initiatives have been launched within their organizations. As such, they opt for a stage of BSC usage in the questionnaire, the phenomenon which invariably affects the correct classification of BSC application and thus distorts the research results. To mitigate the issues of misinterpretation and misclassification, it is advisable that researchers require respondents to characterize their firms' performance measurement systems (PMS).

The practice would offer some insights into the BSC attributes implemented in each participating firm and thereby properly identify the stages of BSC implementation. Generally, the characteristics of a firm's PMS mirror the BSC attributes embedded in the PMS of that firm. Researchers are thus able to recognize the BSC attributes implemented in each firm and then properly identify the stage of BSC implementation. To date, only a handful of research studies, e.g. Soderberg et al., 2011; Shutibhinyo, 2012, have classified the BSC application taking into consideration the characteristics of firm-level PMS. Specifically, classification of firms as either BSC or non-BSC users is entirely based on the structure and use of PMS in lieu of the self-responses given by the participating firms. Soderberg et al. (2011), for instance, used the criteria in Table 4 for the stage classification.

Table 4: Soderberg Et Al.'S (2011) Classification Framework

Classification	BSC Level	Attribute	Criteria
Non-BSC users			None of the criteria is met.
BSC users	1	Derived from strategy	(1) Business unit strategy is well defined. (2) Performance measures are derived from such a strategy.
	2a	Strategy + Balance	BSC level 1 with the additional criteria (1) PMS contains financial and nonfinancial measures. (2) PMS contains driver (leading) and outcome (lagging) measures.
	2b	Strategy + Causal links	BSC level 1 with the additional criteria (1) PMS has measures that are linked through driver-outcome relationships (2) Business units understand the potential driver-outcome relationship among individual measures
	3	Strategy+ Balance +Causal links	Level 2a with Causal links, or Level 2b with Balance
	4a	Double Loop Learning	Level 3 with (1) Deviation from expected /planned results causing the business unit's management to question the unit's business strategy.
	4b	Tied to Compensation	Level 3 with (1) Business unit using the PMS to compensate/reward some or all of unit's employees.

Classification	BSC Level	Attribute	Criteria
	5		Level 4a with Tied to Compensation, or Level 4b with Double Loop Learning

Based on the key feature of BSC, business units at levels 3, 4a, 4b and 5 are categorized as BSC users, whereas those at levels 1, 2a and 2b are assigned to those at the non-implementation stage.

In line with Soderberg et al. (2011), Shutibhinyo (2012) developed the framework for classifying the stages of BSC application as presented in Table 5.

Table 5: Shutibhinyo's (2012) Classification Framework

BSC Stages	Conditions
Non-Adoption	None of the criteria is met.
Adoption	Adoption firm = Firm with all following: (1) Financial and non-financial measures (2) Grouped into perspectives
Implementation	Implementation firm = Adoption firm with the additional sub-attributes to satisfy <i>Attribute 1: Translating strategy into operational terms</i> (1) Well-defined strategy (2) Strategic objectives or measures (3) Cause-and-effect relationship Firms at this stage are classified as BSC firms, which can further be sub-classified as: Partial BSC firms that have applied some of the following attributes: <i>Attribute 2: Aligning the organizational units to the strategy</i> <i>Attribute 3: Communicating strategy to employees</i> <i>Attribute 4: Providing feedback and learning</i> Full BSC firms that have applied all of the above.

The BSC application stages include Non-Adoption, Adoption, and Implementation. Firms that have met the first two criteria (i.e. firms with financial and nonfinancial measures grouped into multiple dimensions) are classified as BSC-adoption firms; otherwise, they are Non-adoption ones. Moreover, if BSC adoption firms have (1) Well-defined strategy, (2) Strategic objectives or measures, and (3) Cause-and-effect relationships, they are categorized as BSC-implementation firms. BSC-Implementation firms are those with all three characteristics of the translating strategy into operational terms attribute. Specifically, the first characteristic (Multiple perspectives) indicates the extent that financial and nonfinancial measures are grouped into multiple dimensions, while the second one (Measures derived from strategy) exhibits how well-defined the firms' strategy as well as strategic objectives or measures are. The last one (Cause-and-effect relationships among the strategic objectives or measures) is concerned with the cause-and-effect relationships. Evidently, Attribute 1 of translating strategy into operational terms is a key to classification of the BSC application stages.

This current research study has modified the existing framework developed by Shutibhinyo (2012) by taking into account BSC attributes to identify the stage of BSC application as presented in Table 6.

Table 6: The Classification Framework to Identify BSC Stages of This Research Work

BSC Stages	Conditions
Non-Implementation	None of all criteria are met.

**Implementation**

Implementation firm = Firm with all of the following attributes to satisfy  
*Translating strategy into operational terms*  
 (1) **Multiple perspectives**  
 1.1 Financial and non-financial measures  
 1.2 Grouped into perspectives  
 (2) **Strategy-linked measures**  
 2.1 Well-defined strategy  
 2.2 Objectives or measures derived from strategy  
 (3) **Cause-and-effect relationship**

*In this study, there exist two stages of BSC application: Non-implementation and Implementation. With the availability of the data pertaining to the self-assessed responses and the researcher-identified stages, the comparisons are made with regard to the application rate and determinant study.*

**Influencing Factors of BSC Application**

According to the two related theories of the organizational innovation and the contingency theory, the key determinants of accounting innovations implementation are external factor, structural factor and executional factor. Environment uncertainty is the critical external environment for any contingency-based research (Chenhall, 2003). Previous studies revealed that firms in high environment uncertainty tend to rely more on both financial and nonfinancial measures (e.g., Gosselin, 2005) and BSC (Hendricks, Menor & Wiedman, 2004). Since BSC is an accounting tool providing strategic financial and nonfinancial measures as well as useful information for decision makers, it is anticipated that environment uncertainty would be positively correlated with BSC implementation. It is thus hypothesized that:

H1: Environment uncertainty is positively associated with firm's attaining the BSC implementation stage.

Participation is one of the structural factors mirroring a firm's characteristics and could influence innovation application (Damanpour, 1991; Roger, 2003) and refers to the degree of participation by organizational members in decision-making and the extent of delegation of decision-making authority throughout an organization (Aiken and Hage, 1968). Prior studies reported that the higher degree of participation is a significant predictor of innovation application (Damanpour, 1991; Chenhall, 2003). Although Braam and Nijssen (2008) found insignificant relation between decentralization and BSC application, Gosselin (2005) reported that decentralized firms tend to use both financial and non-financial measures, the practice of which is part of the "Multiple perspectives." This leads to the following hypothesis:

H2: Participation is positively associated with firm's attaining the BSC implementation stage.

Top management support is one of the executional factors which reflect mechanisms that support or drive the implementation process and is regarded as the most crucial variable in implementing any innovations (Damanpour, 1991; Roger, 2003; Chenhall, 2003) since top management has a dominant position in the organization. Kaplan and Norton also emphasized the significance of this factor as top management helps generate organizational support, both time and resources, for implementing BSC. Although Chen et al. (2006) reported negative effects of top management support on BSC application, many other studies have nonetheless reaffirmed the significance of this driver (e.g. Braam and Nijssen, 2008). This leads to the following hypothesis:

H3: Top management support is positively associated with firm's attaining the BSC implementation stage.

**RESEARCH METHODOLOGY**

### Survey Instrument

In this cross-sectional survey research, the samples were listed companies in the Stock Exchange of Thailand (SET) or the Market for Alternative Investment (MAI). A survey package, i.e. one questionnaire together with a cover letter and a postage-paid, self-addressed envelope, was posted to the chief financial officers (CFO) of the listed firms during the months of May – June 2011. The questionnaire consists of three parts. In the first part, the respondents are asked to answer a series of YES/NO questions concerning the characteristics of PMS and management processes of their organizations. Their responses help identify the following BSC attributes embedded in the PMS of their organizations: (1) using the financial and non-financial measures, (2) grouping the measures into multiple perspectives, (3) having the well-defined strategy, (4) linking the measures to the strategy, and (5) possessing the cause-and-effect relationships. Items (1) and (2) are indicative of the “Multiple perspective” attribute while items (3) and (4) are representative of the existence of “Strategy-linked measure” attribute. Item (5) suggests the “Cause-and-effect relationship” attribute. Firms are considered to possess a particular BSC attribute in their PMS if the response to the corresponding attribute is YES. In addition, firms with all three BSC attributes, i.e. multiple perspective, strategy-linked measure and cause-and-effect relationship, are regarded as firms at Implementation stage, whereas those with one or two BSC attributes are firms at Non-implementation stage.

In the second part of the questionnaire concerns the self-assessment of BSC application. This makes possible the comparison of the outcomes with respect to the stages of BSC application according to the self-responses and those based on the BSC framework proposed in this study. The last part of the questionnaire contains the questions pertaining to determinants in this study, i.e. environment uncertainty, participation and top management support. As for the environment uncertainty and top management support determinants, respondents are required to give their responses in percent (from 0 – 100%) on the questions adapted from prior literature. In addition, the respondents are asked to specify the levels of participation in their respective organizations.

### Model Specifications and Variable Measurements For Determinant Study

Once the BSC application stages are identified according to the self-assessed responses and/or the researcher (i.e. researcher-identified stages), the hypotheses of determinant study are tested with the binary logistic regression model. The binary logistic analysis is used to allow for comparison of two groups of firms, i.e. firms that implement BSC (Implementation) and those that do not (Non-Implementation). The model employed to test the hypotheses is as follows:

$$\ln \left[ \frac{\text{Prob}(Y = 1)}{1 - \text{Prob}(Y = 1)} \right] = \beta_0 + \beta_1 X_i + \text{Control}_i + \varepsilon_i$$

where Y = 1 for implementation firm; 0 for otherwise  
 X is independent variable tested for each hypothesis.  
 Controls are control variables.

Note that Prob(Y=1) is the probability of attaining the Implementation stage.

The dependent variable (Y) is the stage of BSC application, consisting of Non-Implementation and Implementation stages. The measurement of environment uncertainty is adapted from

Gosselin's (2005) while that of participation is adapted from Pholnaruksa's (2007). The top management support variable is based on prior works (e.g., Chen et al., 2006). Environment uncertainty and top management support are measured and presented in average percent (0-100%) for each firm, while participation is determined by the level of participation adapted from prior studies. In line with prior studies, three variables are controlled, i.e. size (the total revenue in Year 2010), industry-finance/insurance (where 1 for finance/insurance firm and 0 for otherwise) and industry-manufacturing (where 1 for manufacturing firm and 0 for otherwise)).

## RESULTS

### The BSC Application Results

Of the 81 returned questionnaires, eight showed missing data and one was an outlier for determinant study. The remaining 72 responded questionnaires were appropriate for both BSC application study and determinant study. Table 7 presents the BSC application stages according to the self-assessed responses vis-à-vis the stages by the selected BSC attributes (i.e. researcher-identified stages).

Table 7: BSC Application Stages by Self-Assessed Responses Vs Researcher-Identified Stages

Stages of BSC application	Self-assessed responses		Researcher-identified stages	
	Number of firms	Proportion	Number of firms	Proportion
Non-Implementation	40	56%	26	36%
Implementation	<u>32</u>	<u>44%</u>	<u>46</u>	<u>64%</u>
Firms with complete data	<u>72</u>	<u>100%</u>	<u>72</u>	<u>100%</u>

*This table presents the BSC application based on self-assessed responses and on researcher-identified stages*

The results are differing in that the BSC application rates according to self-assessed responses and to researcher-identified stages are respectively 44% and 64%. The finding is however not surprising as academics have expressed their concerns about the understanding issue with regard to the BSC concept (e.g. Kaplan, 2010). In the case of self-assessed responses, 32 firms have perceived that they are at the stage of BSC implementation whereas 40 firms have perceived otherwise. In the case of researcher-identified stages, the PMS of 46 firms meet all three BSC attributes. These firms have a collection of financial and nonfinancial measures that are grouped into perspectives and their strategies are well-defined. In addition, the measures are derived from the strategies and exhibit a causal chain of the value-creation process. These attributes are key features of BSC in translating the strategy into operational terms. Thus, these 46 firms (out of 72) are BSC-implementation firms while the remaining 26 firms are non-implementation firms as not all conditions are met. The differing BSC application rates derived from the self-assessed responses and researcher-identified stages cast doubt on the reliability of self-assessed responses with respect to the actual implementation of BSC. This evidence indicates that relying solely on the self-assessed responses could lead to biased research results as respondents could incorrectly interpret the BSC concept and thus misclassify their firms' BSC application stage.

Table 8: The Analysis of Responses (N= 72)

Stages of BSC application		Researcher-identified stages		
		Non-Implementation	Implementation	Total
Self-assessed responses	Non-Implementation	19	21	40
	Implementation	<u>7</u>	<u>25</u>	<u>32</u>
	Total	<u>26</u>	<u>46</u>	<u>72</u>

*This table presents the evidence of misclassification.*

Out of 40 Non-Implementation firms based on self-assessments, the researcher has identified 19 firms as Non-Implementation and 21 firms as Implementation firms. These 21 Implementation firms have unknowingly implemented BSC. In addition, out of 32 Non-Implementation firms based on self-assessments, the researcher has identified 7 firms as Non-Implementation and 25 firms as Implementation firms, the former of whom have just launched the BSC projects or display only some BSC attributes. Accordingly, 28 firms (i.e. 21+7) have misclassified themselves, thus leading to the misclassification rate of 39% (28 out of 72 firms). Although almost two-thirds (61%) of the responding firms are able to correctly classify themselves, the misclassification should be reduced. Incorrect classification of BSC application can misrepresent the research results and thereby lead to wrong research implications. As previously stated, relying solely on the self-assessed responses could bias the research results and therefore it is of paramount importance that classification of BSC application be accurate from the outset and prior to the determinant and the consequence studies.

### The Determinant Study Results

Table 9: Variables For Determinant Study (N=72)

variables		average	min	max	cronbach's alpha	percent of variance explained	n of questions
<b>dependent variables</b>							
implementation specified by self-assessed responses	i_self	0.44	0.00	1.00	n.a.	n.a.	1
implementation specified by researcher-identified stages	i_res	0.64	0.00	1.00	n.a.	n.a.	n.a.
<b>independent variables</b>							
environment uncertainty	env	63.51	6.67	97.50	0.836	55.96	6
participation	part	7.38	0.00	10.00	n.a.	n.a.	1
top management support	top	75.79	14.00	100.00	0.960	86.35	5
<b>control variables</b>							
firm's size	size	15.21	0.18	147.57	n.a.	n.a.	n.a.
industry - finance/insurance	ind1	0.15	0.00	1.00	n.a.	n.a.	1
industry - manufacturing	ind2	0.39	0.00	1.00	n.a.	n.a.	1

The descriptive statistics are presented in this table.

Table 10: the Results of Determinant Study (N = 72)

	Panel A: Self-assessed responses			Panel B: Researcher-identified stages		
	ENV	PART	TOP	ENV	PART	TOP
<b>Expected sign +</b>	<b>0.015</b>	<b>0.183</b>	<b>0.019</b>	<b>0.020</b>	<b>0.283</b> ***	<b>0.036</b> **
Control Variables						
SIZE	0.009	0.006	0.008	0.018	0.010	0.015
IND1	-0.453	-0.535	-0.300	1.067	0.889	1.327
IND2	0.108	0.173	0.231	0.079	0.215	0.321
Intercept	-1.295	-1.671	-1.830	-1.080	-1.782 **	-2.630 *
<b>ModelFittingInformation</b>						
Chi-Square	3.263	5.391	3.495	7.192	12.522	10.104
p-value	0.515	0.249	0.479	0.126	0.014 **	0.039 **
AIC	105.65	103.531	105.427	96.992	91.662	94.097
Cox&Snell R <sup>2</sup>	0.044	0.072	0.047	0.095	0.160	0.131
	<i>H1 is not supported</i>	<i>H2 is not supported</i>	<i>H3 is not supported</i>	<i>H1 is not supported</i>	<i>H2 is supported</i>	<i>H3 is supported</i>

\*\*\*, \*\*, \* indicate significance at 0.01, 0.05 and 0.10 levels, respectively.

As seen in Table 10, the self-assessed responses and researcher-identified stages give differing determinant study results. In the case of self-assessed responses, p-values of the likelihood Ratio

Chi-Square test are greater than the level of significance;  $\alpha$  equals 0.10, leading to the conclusion that all regression coefficients in the models equal zero. The variable of interest in each model is not related to reaching the BSC implementation stage. Therefore, all hypotheses are not supported.

On the other hand, in the case of researcher-identified stages, only the model with respect to the environment uncertainty is insignificant as no variable in this model is associated with attaining the BSC implementation stage. In other words, H1 is not supported. As for the models pertaining to participation and top management support, p-values of the likelihood Ratio Chi-Square test are less than the level of significance, leading to the conclusion that at least one of regression coefficients in the models is not zero. The variables of interest, i.e. participation and top management support, are positively associated with reaching the BSC implementation stage at 0.01 and 0.05 significance levels, respectively. Thus, H2 and H3 are supported. In short, Tables 7, 8 and 10 emphasize the fact that self-assessed responses could influence the research outcomes with regard to the BSC application and the determinant study. With the self-assessed responses as a dependent variable, all determinants exhibit no influence on firms' reaching a stage of BSC implementation. However, with the researcher-identified stages, participation and top management support are found to be significantly positive at the conventional significance levels whereas environment uncertainty is found to be insignificant. The findings offer the conflicting evidence as to key determinants that could propel firms to higher stages of BSC application and thus cast doubt on the results of prior studies that relied solely on the self-assessed responses.

## CONCLUSIONS AND DISCUSSIONS

This paper presents the evidence of influence the self-assessed responses has on research results, particularly the BSC application rate and the determinant study, in the context of BSC implementation. The BSC application rates according to self-assessed responses and to researcher-identified stages are enormously wide at 44% and 64% respectively, equivalent to the misclassification rate of 39%. Moreover, in the case of self-assessed responses, all determinants are not associated with reaching the BSC implementation stage. Nevertheless, when the researcher-identified stages are employed, participation and top management excluding environment uncertainty are found to be positively associated with reaching the BSC implementation stage. The difference in application rates support the notion that firms differently interpret the BSC concept (e.g., Kaplan, 2010), causing the erroneous categorization. Some firms perceive that they are BSC users even though they are not. On the contrary, several other firms believe that they are non-BSC users despite the fact that they are. Misclassification consequently biases the results of determinant study. Misclassification is perhaps one of the reasons for mixed evidence in prior studies and could distort the results of future research using self-assessed responses. Hence, this research study emphasizes the importance of accurately categorizing the stages of BSC application prior to performing any determinant or consequence analysis. Accordingly, in conducting innovation application research researchers should rely less on self-assessed responses but attempt to identify the stage of application by examining the attributes of innovation of interest. Doing so would help address the issue of differing understanding or at least control the factors of interest in the research. Moreover, this research study offers a systematic framework for the classification of BSC application by taking into consideration the key BSC attributes with the aim to solve the problem of differing interpretations with regard to the BSC concept. The proposed framework should be applied to future research to produce more reliable research outcomes. In addition, this research paper confirms the findings that Participation and Top management support are key determinants of BSC implementation.

According to the implications for practice, a survey of SET and MAI listed Thai companies indicates that 64% of the responding firms have implemented BSC either intentionally or unintentionally. This research work complements the existing studies which were conducted mostly in large U.S. or European corporations in specific industries. Although appropriate for a large sample size at a relatively low cost, the post mail survey often encounters a low response rate and self-response bias. Moreover, the responses are usually given by one single person and thereby could not completely represent the actual behavior with regard to BSC of the entire organization. Since there is no way to determine how these data truly represent the firm's behavior (Roger, 2003), this limitation could be overcome by collecting the data from the most knowledgeable person, i.e. CFO. Furthermore, some received questionnaires did not specify the percentage scores but selected the ranges of percentage scores; hence, following Pholnaruksa (2007), the midpoint of interval range has been assigned to each corresponding selected interval.

The proposed BSC framework can also be employed as a starting point prior to testing the determinants or consequences of BSC application. Thus, prior BSC studies can be re-performed by employing this framework to verify the stages of BSC application. In addition, this research study can be replicated in the context of other management accounting innovations. Notwithstanding, researchers are advised to examine key attributes of the management accounting innovation and then develop the appropriate classification framework to properly identify the stage of application.

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## CREDIT RATINGS AND BANK'S LEVERAGE: SOLICITED VERSUS UNSOLICITED

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### ABSTRACT

*This paper isolated the effects of solicited and unsolicited credit ratings changes (upgrade or downgrade) on bank's leverage in ex-ante and ex-post. We found that banks near a credit rating changes issue less debt relative to equity than banks not near a change in rating, but mainly for unsolicited credit rating banks. Especially, these findings are most prominent around the change from investment-grade to speculative-grade status. In addition, the subsequent leverage decisions of unsolicited (solicited) credit rating banks would less (more) issue debt relative to equity when they were downgraded (upgraded) in previous year. Therefore, we conclude that the solicited or unsolicited credit ratings have significant different impact on bank's leverage.*

**KEYWORDS:** Bank Leverage Levels, Unsolicited Ratings, Bank Ratings

**JEL CLASSIFICATION:** G20, G21, G24

Managers appear to take credit ratings into account when marking capital structure. That is to say, if issuers care about maintaining better ratings, they will not only alter capital structure to avoid down-grades and obtain upgrades. (Friedman's publication in New York Times is characteristic by claiming "There are two superpowers in the world today in his opinion. There's the United States and there's Moody's Bond Rating Service. The United States can destroy you by dropping bombs, and Moody's can destroy you by downgrading your bonds.") Kisgen (2006, 2009) show how non-financial firm's ex-ante and ex-post capital structure decisions are affected by rating considerations. However, banks are often mentioned as the most opaque firms due to their complex asset and liability structures (Hirtle, 2006 and Morgan, 2002). Not only analyzing credit rating level differences seems to be of particular interest for the case of financial institutions, but also banks are more rely to issue financial bond recently (The U.S. nonfinancial corporate sector issued almost 90% of outstanding debt in the 1950s. The financial sector played a minor role, and its outstanding debt as a fraction of total debt was only about 1%. But, by the 1990s, debt issued by the U.S. nonfinancial corporate sector declined to only about 44%; the financial sector debt now exceeds the debt from the nonfinancial corporate sector (Frank and Goyal, 2008) ) Especially, the new international capital framework for banks, also known as Basel III, insists an additional risk-independent capital requirement that is proportional to the size of bank's asset, a so-called a leverage ratio restrictio. The one purpose of this paper trying to complements Kisgen (2006) and Kisgen (2009) by examing the influence of credit rating on bank's leverage decision in ex-ante and ex-post.

Despite the expansion of services and seemingly growing importance of ratings, some disquiet is now being expressed about the activities of rating agencies. However, after the outbreak of the crisis there have been many studies and scientific analyses that deplore the role of CRAs in global financial credit crisis (e.g., Pagano and Volpin, 2010). The failure to predict corporate collapses have put rating agencies under fierce public scrutiny and has brought renewed attention to conflicts of interest in CRAs (Bolton, Freixas and Shapiro, 2012 and Stolper, 2009). The heavy dependence on client fee therefore raises questions about the independence of the agencies in assigning grades (Baker and Mansi, 2002). Recently, Jiang, Stanford and Xie (2012) find that the issuer-pay model would lead to high bond ratings and increase the conflicts of interest. Based on

above mention, we offer “Conflict of Interest arguments” that issuer-pay model leads to higher ratings in order to maintain their market share and client fee income.

For solicited credit ratings (SCRs), borrowers request ratings provide private information, and pay for the ratings. Rating agencies adding unsolicited credit rating (UCRs) without the consent of the issuers and therefore are not paid for these assessments. Thus, UCRs provide incomplete private information to CRAs. They are systematically lower than SCRs and possible reasons for this are controversial (Poon, 2003; Poon and Firth, 2005; Poon, Lee and Gup, 2009). To sum up, previously researches contends that UCRs are lower than SCRs because UCRs are based on publicly available information rather than private information that is provided to the rating agency during a solicited rating process. (Golin (2001) argue that CRA invariably spends a lot of time in detailed discussions with the firm’s managers talking about the business plan, risk, funding plans and so on). Consequently, we offer “ Information Disclosure arguments” that UCRs are lower because they are based solely on public information and, as a result, tend to be more conservative than SCRs. Therefore, the other purpose of this paper argues that whether bank’s leverage decisions in ex-ante and ex-post are affected by credit rating which follows SCRs or UCRs concerns.

At first, we follow Kisgen (2006) to construct two distinct measured that distinguish between banks close to having their debt downgraded or upgraded versus those not close to a downgrade or upgrade. Controlling for bank-specific variables, in overall samples, we find that concerns for the benefits of upgrades and cost of downgrades directly affect bank’s leverage decision, although statically insignificant, which is consistent with Kisgen (2006)’s findings.

Secondly, for UCRs banks, the results are both statistically and economically significant, with banks near a change in credit rating issuing annually approximately 1.0% less net debt relative to net equity as a percentage of total assets than banks not near a change in rating, while we do not find the same significant results in SCRs banks. These interesting findings can be explained by the Conflict of Interest and Information Disclosure arguments. UCRs would more concern their finance cost in the ex-ante because they not only give limited information to the CRAs but also feel unfairly treated by the CRAs. On the other hand, SCRs have confidence with their financial profiles under the full information and CRA highly dependence on their client fee, so they would not afraid near to rating changes in the ex-ante.

Finally, we based on Kisgen (2009) method to examine the effect of the bank’s leverage behavior following SCRs or UCRs changes, respectively. For overall samples, bank increase leverage after upgrades, as they have lower distress costs, but responding little to downgrades. This finding is inconsistent with Kisgen (2009) that he only consider non-financial firms. Besides, our ex-post results also indicate that bank react asymmetrically following SCRs or UCRs different rating changes. UCRs group would reduce their issue less debt relative to equity after they were downgraded and SCRs group would increase their issue less debt relative to equity after upgrades. These findings could also be explained by Conflict of Interest and Information Disclosure arguments.

This paper contributes to a number of related literatures. Our primary contribution to capital structure literature is to show that the payment relationship between CRAs and issuers significantly affects the bank’s leverage decisions. To our knowledge, our study is the first attempt to investigate the relationship between SCRs and UCRs and bank’s ex-ante and ex-post leverage decisions. Second, our paper complements Kisgen (2006) and Kisgen (2009) by examining the influence of credit rating on bank’s leverage decision in ex-ante and ex-post. Third, our papers add to the bank’s leverage literature (e.g. Blum, 2008; Dell’Ariccia, Laeven, and

Marquez, 2013) by showing that credit rating of payment relationship between CRAs and issuers are an important determinant of bank's leverage.

Finally, according to Basel II Accord from 2006 the financial institutions should comply with requirements that they use credit ratings in assigning assets to risk classes, but the accord do not require whether credit ratings should be solicited or unsolicited (Dale and Thomas, 2000). Our paper might provide some evidences for bank regulators and supervisors worldwide in relation to the calculation of the minimum capital requirements of Basel II (Behr and Güttler, 2008). In conclusion, our paper strengthens the financial industry evidences for Kisgen (2006) and Kisgen (2009) which are only including the nonfinancial firms. We hope that the research results presented here will support financial supervision of government and CRAs the information that they can adjust solutions about the conflict of interest. On November 23, 2009, the SEC adopted the following amendments: Rule 17g-2 and Rule 17g-5, that involve reporting format and additional disclosure and conflict of interest requirements on Nationally Recognized Statistical Rating Organizations.

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# **BARRIERS TO YOUTH ENTREPRENEURSHIP IN RURAL AREAS OF GHANA: A CASE STUDY OF KOMENDA- EDINA-EGUAFO-ABIREM (KEEA) IN THE CENTRAL REGION OF GHANA**

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### **ABSTRACT**

*The study examined the barriers to youth entrepreneurship in rural areas of Ghana specifically the challenges encountered by youths who want to set-up their own businesses. The study collected both primary and secondary data using semi-structured questionnaires, interviews and review of empirical and theoretical literatures. Youths in Komenda, Edina, Eguafo, Abirem Municipal Assembly was the target population. Purposive sampling technique was applied to select 240 respondents. Descriptive statistics which involves simple percentage, graphical charts and illustrations was purposefully applied in data presentations and analysis. The findings of the study reveal youths perceive lack of capital, lack of skill, lack of support, lack of market opportunities and risk as the main obstacles to entrepreneurial intention. It is recommended that Ghanaian youths be equipped with entrepreneurial skills to move them to the next level of development.*

**JEL:015**

**KEY WORDS:** Entrepreneurship, Barriers, Youth, Resources, Solutions, KEEA District

### **INTRODUCTION**

The Ghanaian economy suffered its worst growth performance for about a decade in 2009 when real GDP growth slumped to 4.0 per cent. The fiscal and monetary positions deteriorated in response to poor domestic policies and external constraints. The rate of inflation rose sharply from 12.81% in January 2008, generating annual inflation rate of 19.3% in 2009, the cost of borrowing rocketed and the Ghana cedi also depreciated against the US dollar by 50 per cent from January 2008 to June 2009. These economic challenges worsened around year 2009 which was evidenced by high inflation, dramatic fall in-gross domestic product, low productive capacity, loss of jobs through downsizing, restructuring, massive work scarcities. The overall economy continues to suffer from significant Ghana cedi depreciation, as a result of the combined political uncertainty, a growing external imbalance, accumulation of large public expenditure float from 2011, and delayed response from the central bank to mop excess liquidity in the economy as a result of the macro imbalance, the risk free interest rate rose from 10.9% in January to 23.1% in September 2012 causing commercial banks rush for government financial instruments instead of lending to the private sector coupled with the fact that business environment is engulfed with bureaucratic procedures, corruption and inefficiency makes job creation a mirage, thus fuelling youth unemployment especially among students exiting secondary and tertiary education (Amankrah, 2012).

Youth unemployment can be seen as a form of deprivation robbing youth of the benefits of work and represents a dark era in their personal and social development (Chimucheka, 2012). This makes entrepreneurship indispensable in Ghana, especially when one considers the socio-economic challenges this nation has faced over the last two decades. Entrepreneurship including youth entrepreneurship improves the general standard of society as a whole, which leads to political stability and national security (Dei-Tumi, 2011; Shukla et al, 2001; UNDP, 2000). Taking this into account, developing the micro and small enterprise sector can be regarded as the seedbed for the development of large companies, and probably the life blood of commerce and industry (Kantis et al., 2002). Of the tools used to create employment micro and small enterprises (MSEs) has become the most popular in recent times across developing countries as a whole. The importance of small businesses, as the driver of sustainable job and wealth creation, has been confirmed by Abor et al., (2010) and Midfred, (2010). Mkhize (2010) adds that entrepreneurship, as a possible solution to the growing problem of youth joblessness, is necessary to ensure the success of small and micro enterprises (SMEs).

Youth entrepreneurship reduces crime, poverty, drug addiction, and income inequality. This indirectly induces an environment for national and regional economic growth and development (Mutezo 2005; Curtain, 2004). Muchini et al (2011) argue that although various age and social groups have been hit in varying scales and degrees by the economic crisis in the sub-region including Ghana, the unemployed youths are the most affected. Considering the dwindling fortunes in the employment capacity of enterprises operating in Ghana, it can be accepted that youth entrepreneurship can play a vital role in reducing joblessness levels and contributing to economic growth (Kanyenze et al, 2000). An investigation of the possible barriers to youth entrepreneurship is very vital. This study focuses on the youths in the rural areas of Ghana. An analysis of studies on entrepreneurship in Ghana revealed that few studies have been made in the past to identify the barriers to youth entrepreneurship with a focus on rural areas of Ghana. The primary objective of this study is to examine the barriers to youth entrepreneurship in rural areas of Ghana.

## LITERATURE REVIEW

### Definition of Youth and Ghana's Youth Profile

For purposes of this study, a definition by Ministry of Youth and Sports (MOYS, 2010) as espoused in National Youth Policy was adopted. The policy defines "youth" as "persons who are within the age bracket of fifteen (15) and thirty-five (35)".

### Unemployment and Underemployment Among Ghanaian Youth

It is an indisputable fact that Ghana is one of the Sub-Saharan African countries with high levels of youth unemployment and underemployment. According to Mensah (2009), the problem of youth unemployment and under-employment in Africa poses complex political, socio-economic and moral policy issues. The author opines that supporting entrepreneurship through promoting the development of the micro and small enterprises (MSE) sector can be a solution to reducing unemployment levels in most Sub-African countries. Given that the majority of the Sub-Saharan African population is composed of the youth, this population group can be a potential resource for growth (NPC, 2006). Uneca and Ecowas (2010) argued that young people are a potential resource for growth and social development if gainfully and productively engaged. This implies that Ghana can boast of this if there is ability and capacity to productively engage the youths. One

form of engagement would be the encouragement and support for youths to start own enterprises. The fact that youth unemployment is high in Ghana is incontestable hence the debate must be on the best approach to combat the problem. This study proposes youth entrepreneurship as a solution to the challenge of unemployment, underemployment and vulnerable employment. It is apparent that entrepreneurial activity is beneficial for Ghana both at a micro level - in terms of creating stable and sustainable employment for individuals - and at a macro level - where it significantly increases a nation's GDP. This would go a long way in tapping into the potential of the young population. Since the majority of African youths live in the rural areas, it is reasonable to argue that the youth programs be concentrated also in rural areas.

#### Causes of Youth Unemployment in Ghana

According to the Ministry of Employment and Labour Relations the causes of youth unemployment in Ghana include the following;

1. the introduction of the Junior High School and Senior High School system without adequate planning for integration into the trades/vocations and job placement;
2. education and training have no link to the needs of the important sectors of the economy;
3. the near collapse of Ghana's industrial base due to ineffective management;
4. the shrinking of public sector employment opportunities coupled with a relatively slow growth of the private sector; and
5. the lack of a coherent national employment policy and comprehensive strategy to deal with the employment problem.

#### Entrepreneurship

Entrepreneurship is considered the economic engine by many countries in the world (Carree et al, 2002). This is due to the fact that it involves the creation of new ventures that provide goods and services to people, creates jobs as well as enhancing the economic growth and development of any country. Involving youth in the formal sector through entrepreneurship is a way of gainfully engaging this population group. Furthermore, entrepreneurship help strengthen social networks, giving a sense of belonging and opportunity to add value to the local community and economy. Successful youth entrepreneurship is possible if the youths possess the characteristics of entrepreneurs. These characteristics include a desire to start own enterprise, readiness to undertake any venture and activity of which the outcome and result is shrouded in a state of uncertainty, vision, single-mindedness, perseverance, high need for achievement, initiative and responsibility (Zimmerer et al., 2008; Garfield, 1986).

#### Resources Needed to Support the Youths Who Want to Start Businesses

Every business needs resources to function and operate successfully. Abor et al (2006), and Aryeetey et al (1994), identified financial resources, physical assets, human resources and technological resources as some of the resources necessary for any business start-up and growth. Financial resources are needed for day to day operations of the business. These resources are needed to finance all other types of resources like physical resources, human resources and technological resources. Sutton et al (2007) point out that many businesses fail because of inadequate financial resources and failure to manage these resources. This implies that there is need to raise the finances and to properly manage business funds. Physical resources that are needed by businesses or by prospective entrepreneurs include buildings, equipment, raw materials and land (Aryeetey et al, 1994). These resources are essential for production. Human resources

speak to the nature of people who are there to support in the running of the business. Their expertise, know-how and experience are very vital and can be developed through education and training.

Technological resources include intellectual property (copyrights, trademarks and patents) and these can be a source of competitive advantage (Chimucheka, 2012). Goodwill can also be a crucial resource. Goodwill as a resource has more to do with the overall reputation of the business. It can also enhance brand loyalty and good name of a business venture. When looking at the barriers of youth entrepreneurship, it is very important to also look at the support structures that are set to promote youth entrepreneurship in Ghana.

### Support Structures That Promote Youth Entrepreneurship

The government of Ghana has identified entrepreneurship as a major policy thrust to achieve economic growth ([www.ndpc.gov.gh](http://www.ndpc.gov.gh)). Although there are some support structures that promote entrepreneurship in Ghana, there is still need to assess the extent to which their contribution can lead to sustainable entrepreneurship which generates jobs for the active population. This is evidenced by a number of institutions such as rural enterprise programs that have been established by the government to provide funding and improve operational efficiency in the micro and small enterprises sector ([www.home.moti.gov.gh](http://www.home.moti.gov.gh)). The current structures that promote youth entrepreneurship in Ghana include the Ministry of Trade and Industry, Ministry of Youth and Sports, National Youth Authority, Ghana Youth Employment and Entrepreneurial Development Agency (GYEEDA), National Board for Small Scale Industries (NBSSI), vocational and technical training centres; and microfinance schemes such as Micro and Small Loans Centre (MASLOC). These agencies have reported some recent developments in funding, training and mentorship programs targeting youth in enterprises or those interested in starting their own enterprises. There are also other structures at regional and Metropolitan, Municipal and District Assembly (MMDA) levels.

## **DATA AND METHODOLOGY**

### Study Area

The Central Region has thirteen (13) districts, three (3) municipalities and one (1) metropolis. Komenda, Edina Eguafo Abirem (KEEA) municipality is one of the municipalities in the region. It is bordered on the west by Mpohor-Wassa East district; on the north by Twifo-Hema-Lower Denkyira; on the east by the Cape Coast Metropolitan Assembly and on the south by the Gulf of Guinea. The municipality covers about 396 km<sup>2</sup>. KEEA which has Elmina as the capital has a population of 144,705 constituting 6.6% of the total population in the region (Ghana Statistical Service, 2012). The sex distribution of the municipality shows that 69,665 are males whereas 75,040 are females with sex ratio of 69:75. The rural-urban proportion is almost 64.28-35.72 in the municipality. The 2010 population and housing census show that 64.28% of the population of 144,705 dwells in the rural areas whereas 35.72% are urban dwellers. There is therefore significant difference between rural-urban settlements in KEEA Municipality. The urban settlement has 64.28% females and 35.72% males whereas the rural settlement has 51.86% females and 48.14% males.

### Data Collection

Primary data was obtained using a semi-structured questionnaire that was interviewer-administered and interviews which was also conducted with the youths to obtain additional but necessary qualitative data. Secondary data was through review of the theoretical and empirical literatures sourced from books and scholarly journals, Internet and conference papers among others. The population of the study consisted of youths in the rural areas of the KEEA municipality. It was difficult to find an up to date database with all the youths in KEEA that could be used as a sampling frame. Purposive sampling technique was applied to select 240 respondents from the target population. The reasons for the purposive sampling was to enable the researchers choose participants randomly for their unique characteristics or their experiences, attitudes or perceptions. In this study, the researchers only selected sample elements that showed the desire and passion for entrepreneurship and those that started, or have tried to start their own enterprise. Respondents also had to be in the youth category as defined by National Youth Policy of Ghana.

The return rate of completed questionnaire was 85 percent as we were able to get back 204 out of 240 questionnaires given to our respondents. Thus, only 204 questionnaires were used for final analysis in this study. In an effort of making the presentation of information clearer and easy to understand, tables, frequency counts and percentages were used.

## RESULTS AND DISCUSSION

Table 1: Distribution of Respondents by Gender

SEX	FREQUENCY	PERCENTAGE (%)
Male	149	73.04
Female	55	26.96
<b>TOTAL</b>	<b>204</b>	<b>100</b>

*This table shows the gender of the respondents. The researchers sought to know gender of respondents, since sex is a determining factor in many economic decision making consideration.*

From the analysis, it was found that 149 (73.04%) were males whilst 55 (26.96%) are females. This was attributed to ethnic specialisation, willingness of females to engage in menial jobs and strength of respondents' 'informal social network'.

Table 2: Impact of Unemployment on the Youth

RESPONDENTS	FREQUENCY	PERCENTAGE (%)
Yes	198	97.05
No	6	2.95
<b>TOTAL</b>	<b>204</b>	<b>100</b>

*This table displays results of respondents directly affected by unemployment. The researchers sought information from respondents as to whether unemployment was a real challenge confronting youth in both urban and rural areas.*

Table 2, reveals 198 (97.05%) responded 'YES' while 6 (2.95%) of respondents responded 'NO'. Those affected directly by unemployment claimed the ignominy of relying on blood relatives for sustenance has forced a lot of them to lodge with friends because they can no longer contain family demands.

Table 3: Unemployment a Challenge For Both Urban and Rural Youth

RESPONDENTS	FREQUENCY	PERCENTAGE (%)
Yes	204	100

*This table shows results of unemployment as a real challenge to both rural and urban youth.*

As can be seen in table 3, all the respondents agreed that unemployment was a real challenge confronting both rural and urban youth.

Table 4: Requisite Knowledge and Skills to Operate Own Business

RESPONDENTS	FREQUENCY	PERCENTAGE (%)
Yes	142	69.61
No	62	30.39
<b>TOTAL</b>	<b>204</b>	<b>100</b>

*The table displays results of respondents' possession of skills, knowledge and attitude. The researcher sought information from respondents as to whether they believed they have the necessary knowledge, attitude and skills to start and manage their own businesses.*

From table 4, 62 of the respondents (30.39%), believed that they had the necessary knowledge, skills etc to run their own businesses, while 142 of the respondents (69.61%) said they did not have all the necessary skills, knowledge to start and run their own businesses.

Table 5: Challenges Faced by Ghanaian Youths Seeking Employment

RESPONSE	PERCENTAGE (%)
Lack of experience	90
Corruption	76
Nepotism	60
Lack of training	70
Lack of relevant skills needed in the job market	60
Family needs and expectations	60

*This table displays summary of respondents' perceived challenges faced by Ghanaian youths seeking employment. The findings on this table are based on the question, "What are the challenges faced by Ghanaian youths seeking employment?"*

More than 90% of the interviewed youths that are seeking employment mentioned that they lacked experience for the jobs that they were seeking. They believed that they could not also establish their own businesses without experience in any industry. 76% of the respondents mentioned corruption as a challenge. This corruption is mainly by individuals serving in hiring organisations that have the tendency of accepting bribes from less qualified individuals. 60% of respondents cited nepotism also as a challenge. Nepotism involved hiring friends and relatives for positions that other youths are better qualified to occupy. Close to 70% of the respondents indicated that lack of training was also a challenge. These individuals mentioned that they lacked knowledge and skills that are needed for most of the advertised job vacancies. Most of these respondents either dropped out of school, or failed to obtain the required grades to enroll at any tertiary institution. This leaves them in a position where they can be exploited to work long hours yet they are underpaid. 60% indicated lack of relevant skills needed in the job market can also lead to youths failing to meet their personal and family needs and expectations. This in most cases force people into desperation, where they can accept any job offer allowing employers to take advantage of them.

Table 6: Impediments to Youth Entrepreneurship in Ghana

RESPONSE	PERCENTAGE (%)
Corruption by local authorities	79.41
Lack of capital	100
Unstable and Unpredictable economic environment	50
Insufficient and unreliable government support	57
Poor location	63
Insufficient demand for the products and services	48
Others	

*The table shows respondents perceived barriers to youth entrepreneurship in Ghana. The findings on the table are based on the question, "What are the impediments to youth entrepreneurship in Ghana."*

Corruption by local authorities was mentioned by 79.41% of the respondents. This was said to be affecting access to resources, especially those provided by the state to promote youth entrepreneurship. All respondents mentioned lack of capital as the main impediment to youth entrepreneurship in rural areas of Ghana. This is mainly because most youths in rural areas lack proper skills to be employed in order to save for capital. Although there are banks offering loans in Ghana, bank finance is not easily accessible to youths in rural areas for they, in most cases lack the required collateral needed to obtain a bank loan (Sowa *et al.*, 1992; Aryeetey *et al.*, 1994; Bigsten *et al.*, 2000; Buatsi, 2002). Inaccessibility of financial resources by youths in rural areas of Ghana is also because of lack of connections, lack of the needed financial deposit and lack of knowledge pertaining to the sources of financing available.

The unstable and unpredictable economic environment in Ghana was mentioned by close to 50% of the respondents as another factor discouraging youths to start and grow their own businesses. Insufficient and unreliable government support is said to be another impediment to youth entrepreneurship. Close to 57% of the respondents indicated that the government does not really support entrepreneurship as a career opportunity for youths as compared to other programs such as indigenization and black empowerment. 63% of respondents in business but operating in the rural areas indicated that poor location was a great challenge for it affected the sales and the performance of their businesses. 48% of respondents mentioned insufficient demand for the products and services offered on the market by most youths together with high production costs as an impediment to youth entrepreneurship. Other challenges that were mentioned and explained by the respondents as the impediments to successful youth entrepreneurship in the rural areas include lack of information technology. High transport costs, unattractive business environment, lack of relevant experience, lack of and inaccessibility to skilled labour, high registration costs, high costs to obtain licences to operate formally, poor roads, unreliable electricity, unreliable communication services and lack of networking opportunities were also stated as the impediments to youth entrepreneurship. This concurs with findings by Fjose *et al* (2010) that electricity and access to finance is considered by far the most important hindrance by MSEs in Sub-Saharan African.

#### Benefits of Entrepreneurship to Youths in Ghana

Entrepreneurship development, especially in the form of MSEs can ameliorate the problem of high youth unemployment, eradicate poverty and increase national propensity. This can be possible because MSEs usually have low start-up costs, low risk and can help exploit untapped knowledge and creativity (Mfaume *et al*, 2004). In short the benefits include:

1. Creating employment
2. Providing local goods and services to the community, thereby revitalizing it
3. Raising the degree of competition in the market, ultimately creating better goods and services for the consumer
4. Promoting innovation and resilience through experience-based learning
5. Promoting a strong social and cultural identity
6. Continuously creating and growing diverse employment opportunities different from the traditional fields available in a particular community.

#### The Role of Government in Promoting Entrepreneurship Among Youths in Ghana

The Government of Ghana still have a long way to go in supporting youth entrepreneurship. The following were suggested by the respondents as the roles of the government in promoting youth entrepreneurship in the rural areas of Ghana:

1. Enhancing access to finance for start-ups, growth enterprises, technology enterprises and micro entrepreneurs.
2. Entrepreneurial training should be provided to the youths through entrepreneurship support structures that were established by the government. Entrepreneurial training can help improve the entrepreneurship competencies of the youth and possibly the desire to start own businesses.
3. Promoting an eco-system for accelerating entrepreneurship, enhancing the flow of information on procedures and formalities to set up an enterprise by creating and strengthening one-stop-shop i.e. single-window system; and, ensuring ease of 'entry and exit'.
4. The government should also foster 'Social Entrepreneurship among Ghanaian youths. This may help in increasing information sharing, especially on opportunities available.

## RESULTS AND DISCUSSION

This study identified and discussed barriers to youth entrepreneurship in Ghana. The results reveal that the challenges faced by entrepreneurs in Ghana can be compared to those faced by entrepreneurs in Nigeria and South Africa, which are considered the economic engines of Africa. These challenges are not peculiar to Ghana only. A study conducted in South Africa by Odeyemi and Fatoki (2010) concluded that the problem of access and availability of finance to entrepreneurs in South Africa was ranked second after lack of entrepreneurial and management competencies in most aspiring and existing entrepreneurs (in the MSMEs sector) in South Africa. This is also supported by Atieno (2001), Yon et al. (2011) and Tadesse (2009) who also conducted their studies in Kenya, Ghana and Sub-Saharan Africa respectively. Quartey et al (2000) also found similar challenges as hampering entrepreneurial activity in Ghana and Malawi. These results also concur with the findings of Association of Ghana Industries (2010) which identified lack of collateral security resulting in inaccessibility to credit facilities, lack of managerial skills and challenges in business registration as some of the difficulties faced by both women and youths in business in Ghana. According to Bindu et al. (2011) availability and accessibility to finance and skills development are crucial for entrepreneurial success.

## CONCLUSION AND RECOMMENDATIONS

This study concludes that entrepreneurship can be a solution to the challenges that are faced by the youth, particularly in rural areas of Ghana. Various stakeholders need to play various roles if youth entrepreneurship is to be a panacea to youth unemployment in rural areas of Ghana. Based on the findings, the following recommendations are suggested. The Government of Ghana should set up a National Commission on Entrepreneurship which will guide entrepreneurship crusade in the country, unleashing entrepreneurship and youth power in pursuit of wealth creation, employment generation and productivity improvement, by judiciously harnessing technology and resources.

Also, entrepreneurship should be introduced into the national education system to orient and prepare students for an entrepreneurship career by imparting skills, knowledge and aptitude for entrepreneurship. This is because most of the respondents indicated they lacked the necessary

skills and knowledge to set-up/start a business. The role of education in shaping the mind-set and thought process of youth can hardly be overstressed. Further, Local authorities should work with government agencies and ministries that support youth entrepreneurship in a way that will benefit the youths in their respective districts. They should work with the youths to come up with real solutions to the challenges faced by youths.

Furthermore, the government should create district, regional and national level “Entrepreneurship Ambassadors” from amongst successful entrepreneurs to recognize their success and achievements. This can be modelled along the lines of National Farmers Award as pertains in Ghana. If entrepreneurship is treasured, it incentivizes the youth to consider entrepreneurship as a preferred career. There is a need to create role models at district, regional and national levels to inspire and attract entrepreneurial talent.

In addition the study recommends implementation of entrepreneurship surveys and research and sharing findings to inform policy formulation and implementation. For without proper research and authentic data, policies passed may create unintended negative consequences according to Curtain (2004).

Again, the government should strive to undertake mass campaign to promote entrepreneurship/self-employment among the rural dwellers by enlisting support of opinion leaders of such communities to encourage youth to look up to entrepreneurship and self-employment rather than seek employment or be dependent on government. They need to seek the necessary skills that are needed for the establishment and growth of their profitable businesses. The government should invest in specific micro enterprise development programmes for youth to build their capacities in terms of knowledge, skills and aptitude so that they are able to negotiate with the market forces successfully.

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# NO KENYAN LEFT BEHIND: THE CASE OF FINANCIAL INCLUSION THROUGH MOBILE BANKING

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## ABSTRACT

*The importance of widespread access to suitable financial services for the populace in fostering economic vitality is well recognized. Regrettably, much of the developing world experiences a relative scarcity of crucial financial services in rural and semi-urban areas. With estimated mobile device ownership at over 700 million in Africa, innovative banking solutions such as mobile banking offer potential channels to advance the access frontier in the banking industry. This study examines Kenya's highly successful money transfer model, M-pesa, in an effort to explore the nature and role of financial inclusiveness in stimulating economic activity. M-pesa allows ordinary Kenyans to send money across the country cheaply and reliably using mobile devices. As such, the stage appears set for a mass adoption by similarly situated countries in the region that are keen to enhance their financial services. Understanding the nature and role of economic dynamism dispensed through financial inclusiveness can be useful for policy prescription and future studies, among other things. To this end, we borrow from a combination of the ideas of velocity circulation of money and a simple diffusion model to develop a framework that can be usefully applied to appropriate data.*

**JEL:** G00, G20, E41, E42

**KEYWORDS:** Mobile banking, Branchless banking, Financial inclusion, Money velocity

## INTRODUCTION

In much of the developing world, there is a relative scarcity of crucial financial services in rural and semi-urban areas. Ensuring availability of suitable financial services to as much of the population as possible is a requirement for economic vitality in these regions. The African Development Bank's (AfDB) 2010 estimate of over 500 million people owning mobile phones in Africa appears to favor widespread adoption of Kenya's money transfer model, M-pesa by countries keen to enhance access to financial services. M-pesa is a money transfer service, initially developed and deployed in Kenya by Vodafone, a European telecommunications giant in partnership with Safaricom, the leading Kenyan mobile operator. It allows ordinary Kenyans to send money across the country cheaply and reliably, using their mobile phones. "M-pesa" is a loose translation for "mobile money" in Kenya's national language, Swahili. M-pesa is estimated to have at least some seven million registered customers, who are transferring an average of \$2 million a day between themselves (OECD). Reports released by the Communications Commission of Kenya in the first quarter of 2012 show that Kenya's mobile penetration is at 77.2 per cent with a market share of 30.4 million mobile subscribers as of September 2012. Given the above indications, a deduction can be made to the effect that new solutions will offer channels to advance the access frontier in the banking industry as more Kenyans are brought into banking solutions.

At this point, a working definition of the meaning of mobile banking is appropriate: Generally if a bank is not directly involved in the instrumental gratification of a service offered, it is usually

called a “mobile payment” (Cruz, Pedro, et al, 2010). Financial services that may be delivered through the mobile channel, are in some respects not different from those delivered through conventional banking channels, and can therefore be viewed as a form of branchless banking. Its popularity with customers and retailers alike in both developing and emerging markets is well documented. The case of Kenya, which has caught the attention of other mobile phone operators on the African continent, is of particular interest. Many view it as the model to be replicated throughout the continent as more countries seek to boost access to financial services among citizens. This study explores the nature and role of economic dynamism dispensed through branchless banking innovations in Kenya with the aim of shedding more light and developing a useful model framework for empirical investigation among other things. The rest of the paper follows a literature review, a methodology development, discussion of future research and potential policy interest areas.

## LITERATURE REVIEW

### Examining Suitability of Branchless Banking Innovations

The experience of Kenya with M-pesa can serve to illustrate mobile banking’s potential for generating efficiencies in the financial economy. Low cost, money security, speed and user-friendliness are among such efficiencies. Generally, mobile banking costs to the customer are hardly more than the transaction fee. The usual added charges and other cumbersome details associated with conventional banking scarcely exist, or are absent altogether. Soon after the launching of Kenya’s M-pesa, the then Safaricom CEO Michael Joseph was quoted by *Business Daily* stating: “M-pesa is the first product in the world that allows the unbanked, with no banking details, no registration, no bank account, no credit card, to do banking.” We can therefore appreciate how Kenya’s M-pesa has steadily gained competitiveness in the money transfer market against customary channels, and is leading to enormous changes in the organization of economic activity, family relations, risk management and mitigation, among other things (Mbiti and Weil, 2011).

For the purposes of this study, the case of Kenya is particularly meaningful because it represents the experience of many underdeveloped regions, particularly those in sub-Saharan Africa where significant sections of the population rely on informal finance solutions which are often highly inconvenient, invariably unsafe, and largely disconnected from the rest of the world. According to Paul Makin of the OECD, the United Nations Department of Economic and Social Affairs (Undesa) estimates that in Africa alone, there are 300 million (approximately the entire U.S. population) reachable adults with no current access to formal financial services. Ignacio Mass, (2009) asserts that financial markets are quite simply failing to meet the needs of majority of the society in such regions, who are typically poor and live in rural areas. He suggests that any viable mitigating solution must prioritize keeping fixed costs per customer extremely small and reducing unit transaction costs.

In effect, Kenya’s experimentation with M-pesa has taken banking transactions out of bank branches and into retail stores in more neighborhoods and villages. The product concept is simple, but nonetheless powerful. Users can transfer money from their mobile phones quickly, safely, and across great distances to other mobile phone users. A bank account is not necessary. Users only need to register with Safaricom for an “M-pesa account.” However, recipients need not have an M-pesa account. Ignacio (2009) identified key elements that constitute the platform for branchless banking: (i) a retail network, composed of a collection of retail outlets where transactions are originated, (ii) the payment network, which aggregates the transactions from the

collection of retail outlets and routes them to the appropriate issuer, and (iii) the account platform which manages the service logic by authorizing individual transactions and maintaining the value accounts. These elements are all evident in the M-pesa model, and present key tradeoffs that providers need to face. Ignacio (2009) adds that an understanding of the economic drivers helps establish roles of the value chain and types of partnerships that improve the likelihood of achieving the necessary scale, and ensuring that the service can be delivered at an end-to-end transaction cost that is affordable to poor customers. Evidence suggests that each market evolves slightly differently based on distinct customer needs and other unique considerations, even though service delivery is generally enabled by the core set of elements described above. Yet it is worth noting that branchless banking models follow the same underlying functionality to move funds conveniently for users (Mroueh, 2013). For example, in developing nations such as Kenya, branchless banking is mostly tailored to facilitate person-to-person payments. In more advanced economies, branchless banking is generally richer and largely convenience situated; often includes checking and maintaining account balances or making purchases electronically.

#### Linking Financial Innovation Solutions to Economic Activity

It can be taken for granted that economic competitiveness and growth are compromised in markets where information is poor, scarce, and inefficiently communicated (Geertz, 1978). Consider the importance of timely access to knowledge of commodity prices. This can be hard to obtain in remote villages with limited telephone connections. The effect is a restricted market access for traders (Lars-Hendrik and Waverman, 2001). Mobile services can effectively relieve such restrictions by replacing physical transportation or specific transactions. Also, increased flow of information is aided by mobile phone technology and can result in efficient commodity prices. Mbiti and Weil (2011) cite studies by Jensen (2007) and Aker (2010) which found that the introduction of mobile phones reduced price dispersion in fish markets in India and grain markets in Niger respectively. Transacting with mobile services can also generate a personal record that can act as a basis for assessing creditworthiness and accessing micro-loans or other financial services that are critical for a widespread vibrant economic activity. Pioneering projects in India, the Philippines or Kenya, focusing on domestic and international remittances, have shown the way (Comminos *et al.* 2008).

Farmers in Kenya continue to enjoy benefits accorded by mobile banking since the adoption of M-pesa. According to a 2011 IRIS Report by Nagarajan and Haas, improvements in food security emerged as one of the four major effects of M-pesa. The connection between food security and the economic implications is understood. Given the unpromising report by USAID (2010) on Kenya's food security situation in which recurrent seasons of failed or poor rains, sustained high food prices, environmental degradation, outbreaks of disease, and flooding are cited as causes, one can readily appreciate the significance of M-pesa's role towards improving food security and the resultant economic implications. Though the link is not as straightforward as that of other M-pesa's economic effects (which will be discussed shortly), it nonetheless helps create an environment conducive to vibrant economic activity via aiding time-sensitive farming activities. The effects on Kenya's food security are noticed in improved food production, and in access to, and consumption of diversified foods among the households that receive remittances through M-pesa (USAID 2010).

The other M-pesa effects with a more direct impact on economic activity revolve around money circulation, transaction ease, and security of money (Nagarajan and Haas, 2011). M-pesa account holders can convert cash into "e-money" through a Safaricom dealer, and then follow a simple menu of instructions on their mobile phones to make payments through their accounts. Users can

withdraw or deposit funds at anyone of more than 20,000 outlets of a strong agent network. A 2011 *Business Today* report estimates the network to be 20 times the number of existing bank branches in Kenya. Thus, M-pesa is more than simply a money transfer mode. Its pseudo checking account separates it from many similar products. In a country where an estimated 60 percent of the adult population does not use formal banking services, the implications on the velocity of transactions could be profound. By some accounts, a quarter of Kenya's GDP is processed on M-pesa. A 2010 AfDB Report linked M-pesa to increases in transactions. The bank believes that the efficiency and near universality of M-pesa has greatly increased the speed with which money moves through the Kenyan economy. The report's findings suggest that M-pesa-induced transactions velocity may have risen by up to four times higher than the transactions velocity of other components of money. In turn, this velocity has impacted supply and demand patterns. It can be argued that because Kenyans now have an easier and convenient way to transfer and spend money, more transfers and purchases are occurring.

Together, as a vehicle for financial inclusiveness, the economic dynamisms dispensed by M-pesa are considerable. Given that the volume of money supply and its speed of circulation link money to economic activity (Akinlo, 2012), in the case of Kenya, we can roughly infer that increases in money supply and its speed of circulation in the post M-pesa era is linked to changes economic activity that can be linked to liquid money settlements. Obviously, there are several other factors that typically impact money supply and its velocity. By and large, monetary policy is central. For instance, it is known that the velocity of money and interest rates have a positive correlation (Mankiw, 2000). It is also advisable to be mindful that monetary policy and its transmission mechanisms are subject to the influence of external factors such as, currency exchange rate considerations, existing liquidity rules (Mihaljek 2011), prevailing economic conditions, and arrangement of financial institutions among several others. To the extent that innovations in payment methods are one of such factors, we should be alert to the mitigating potential of monetary policy. However, as a starting point, this study confines itself with the assumption that changes in in the rate of transaction occurrences following the adoption of M-pesa largely explain changes in economic activity that can be linked to settlements with liquid money.

## METHODOLOGY

If we assume that the frequency of use of M-pesa stimulates and disperses economic activity, via a velocity mechanism, we can then develop a thought process that can help us investigate the nature and role of vitality dispensed in the economy. To this end, we associate the ideas of the velocity of money concept rooted Fisher's (1911) in the Quantity Theory of Money, which supposes a direct relationship between price (P) and money supply (M). Under this supposition, increase in the amount of money in circulation result in higher prices for goods and services. The theory builds up on the following simplified definitional relationship, generally referred to as the equation of exchange. (See appendix 1 for additional notes)

$$M \cdot V_T = P_T \cdot T \quad (1)$$

Where

$M$  = total amount of money in circulation during a period

$V_T$  = transactions velocity of money (This reflects availability of financial institutions, economic variables, and choices made as to how fast people turn over their money)

$P_T$  = price level associated with transactions for the economy during the period

$T$  = index of the real value of aggregate transactions.

Therefore, we can rearrange equation (1) to express transactions velocity of money as follows,

$$V_T = P_T \cdot T/M \quad (2)$$

Given that the quantity variable under investigation assume some form of flow process, (for example money circulation and economic dynamism are expressions of some type of flow) we can adopt our thinking to employ a series of scalar quantity equations into which we will incorporate equation (2) as one of the variables.

$$\text{Disp.} = (m_{\text{-pesa}} + \Delta m_{\text{-pesa}})M \quad (3)$$

Where,

$\text{Disp.}$  = measure of diffusion of M-pesa into the economy

$m_{\text{-pesa}}$  = number of existing registered users of M-pesa

$\Delta m_{\text{-pesa}}$  = changes in number of M-pesa users over time

$M$  = level of money supply in the economy

If we introduce a ( The multiplier is a composition known changes in M-pesa accounts registered over time and a multiplicative factor) composite multiplier  $\emptyset$ , which is estimated to measure the multiplicative effect of changes in number of M-pesa accounts, we can re-write equation (3) as follows,

$$(m_{\text{-pesa}} + \emptyset t)M \quad (4)$$

Where,

$t$  = time, say number of years

We now incorporate equation (2) into the process by taking it for granted that velocity of money describes the level of economic dynamism. We can then postulate the interactions between M-pesa adoptions over time under a given monetary regime, and economic activity using the equation below.

$$V_T = \int_{t_1}^{t_2} dEconV = \int_0^{t=i} (m - \emptyset t)M dt \quad (5)$$

Where,

$V_T$  = estimate of level of economic dynamism

$t$  = period of time

$m$  = number of M-pesa users over time

$\emptyset$  = composite multiplier

$M$  = Money supply in the economy

$EconV$  = speed economic activity

## CONCLUSION

### Discussion of Future Research and Potential Policy Implications

This study focused on exploring a useful framework that can be used to estimate how financial inclusion in Kenya through mobile banking has impacted economic dynamism. The ideas presented are an innovative exploration that blends economic thinking and with aspects of natural science with the aim of developing a framework that can be applied to appropriate data. The study should be viewed as a broadening a conversation that is already taking place among scholars across diverse fields. We envision that a using blended thought process in our approach will add richness to our model by combining the complementary features that emerge across natural and social science perspectives. Future research will focus on improving the integrity of the model and identifying and collecting appropriate data to apply.

The subject of financial inclusion through mobile banking can be explored in several contexts. Some considerations include money laundering (De Koker, 2013 and Olatunde, 2012), consumer behavior (Laukkanen et al, 2007), financial integration (Acharya and Bisin, 2005) and legal issues (Rolf and Darbellay, 2013) to name a few. One aspect that is common in each case is the flexibility demand this new form of technology application requires of policy makers. For example, in the case of M-pesa, with increasing velocity of transactions in Kenya, and the increasing assumption of banking services by mobile service providers, the monetary authorities are back to the drawing board to recalibrate rules on money supply and banking services respectively. In 2008, regulatory authorities in Kenya were tasked to conduct a risk assessment on M-peas to determine how it fits into the existing framework (AFI, 2010). It is our expectation that following an empirical study, emerging policy considerations will largely angle towards building flexibility under existing policy. We can accept that technology changes are here to stay, along with the attendant cycles of creative disruptions.

### **APPENNDIX**

In its modern form, the quantity theory builds upon the following relationship.

$$M \cdot V_T = \sum_i (p_i \cdot q_i) = \mathbf{P}^T \mathbf{q}$$

Where

$M$  = the total amount of money in circulation during the period

$V_T$  = transactions velocity of money

$p_i$  and  $q_i$  = the price and quantity of the i-th transaction.

$\mathbf{P}$  = column vector of the  $p_i$ , and the superscript T is the transpose operator.

$\mathbf{q}$  = column vector of the  $q_i$ .

The equation of exchange is a simplified variation accepted in economics.

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# AN EXPLORATION OF POTENTIALS TO GREEN BUILDING ADOPTION IN KENYA AND INDUSTRIAL IMPLICATIONS

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## ABSTRACT

*Natural resources play an important role in economic development and sustainability. Several studies have demonstrated the connections between human economies and natural ecosystems. In fact, contemplated benefits from widespread adoption of renewable energies continue to energize the transition towards more efficient energy systems worldwide. Understanding the interactions between natural and economic systems can yield extensive applications that find use in industry. This study employs a transdisciplinary approach to explore the potential for adoption of energy efficient buildings and the industrial implications that are attendant. We select Kenya as a study case because of its combined geographic and economic suitability. Kenya is a leading economic hub in a region that is endowed with an abundance of natural resources, some of which could constitute renewable energy sources. Our exploration is based on a recent study that utilized select attributes of existing green building standards as a model to explore the potential of developing green building guidelines for the context of Kenya. Among other findings, this study identified green building attributes that have the highest potential for adoption in Kenya. This study is timely in providing a preliminary platform for developing green building guidelines and best practices that would be meaningful to the Kenyan building industry. As of the time of this study, there was no green building standard in Kenya.*

## JEL:

**KEYWORDS:** Kenya, Green Building, Construction Industry, Potential, Adoption

## INTRODUCTION

In this paper, we explore and identify salient green building attributes that could be adopted as a platform for developing a meaningful green building rating system for the context of Kenya without necessarily reinventing the wheel of other green building rating systems. Essentially, the identified green building attributes are the ‘low-hanging fruits’ that would be adopted to frame green building guidelines for Kenya. Beyond Kenya’s boundaries, this study provides a template that could be used to create green building standards and best practices in countries where economic, environmental and social geographies are similar to those in Kenya. Additionally, the tenets of this study provide guidance for future research efforts dedicated to inquiry on similar subjects. In arguing that the construction industry has not done enough to reduce its environmental footprint, Horvath (1999) asserts that concerted national and international research and educational efforts are therefore needed to change the situation. As green building concept continues to permeate the construction industry globally, preliminary findings of this study revealed that there were no green building guidelines in Kenya as of that time. However, there was an apparent interest in green building practices among the stakeholders. The theme of this paper is, therefore, timely in attempting to address this problem.

## LITERATURE REVIEW AND RESEARCH DEVELOPMENT

The increasing adoption of green building practices is primarily driven by global efforts to build resilience to the negative impacts of the built environment on economic, environmental and social systems. Liu (2011) proclaims that the built environment has huge impact on the natural and social environment, resource consumption, indoor environmental quality, human health associated with it, and land use. Kozlowski (2003) defines a green building as one “that uses a careful integrated design strategy that minimizes energy use, maximizes daylight, has a high degree of indoor air quality and thermal comfort, conserves water, reuses materials and uses materials with recycled content, minimizes site disruptions, and generally provides a high degree of occupant comfort.”

Since the detrimental effects of the construction practices on the natural environment were highlighted, the performance of the buildings has become a major concern for occupants and built environment professionals (Cooper, 1999; Crawley & Aho, 1999; Kohler, 1999; Ding, 2008). The overarching implication is that the construction industry needs to pay heed to the triple bottom concept of sustainability – economic, environmental, and social. For example, the quest for green building can be seen as a contributing factor to the significant research that has recently been conducted to determine the financial benefit of adopting green building technologies (Fuerst, 2009; Miller, Spivey, & Florence, 2008; Wiley, Benefield, & Johnson, 2010). A study conducted by Kats (2003) found that the financial benefits of green buildings are ten times their initial cost premium.

In response to growing trend toward embracing green building, various green building rating tools, or systems/standards, have been introduced into the marketplace to provide a systematic approach, or guidelines, to achieving sustainability in the built environment (Bebbington, & Gray, 2001); Hemphill, McGreal, & Berry, 2002; Wyatt, Sobotka, & Rogalska, 2000). These tools provide a way of showing that a building has been successful in meeting an expected level of performance in various declared criteria (Cole, 2005). This study was developed upon a solid premise of an extensive review of literature related to the theme of research. This included examination of green building standards that have been adopted for other countries, especially the U.S. Leadership in Energy and Environmental Design (LEED) system. In particular, the attributes of LEED standard were found to be a key baseline since the standard has been adopted as a template for developing green building standards in other countries, such as Canada, China, and India. Overall, the essence of the literature reviewed in this study was to provide a baseline understanding that is imperative for developing a green building standard and best practices that are relevant to Kenyan construction industry.

## DATA AND METHODOLOGY

In an attempt to encompass as much of Kenyan construction industry as possible, all survey participants for this study were members of the Board of Registration of Architects and Quantity Surveyors of Kenya (BORAQS). This is Kenya’s nationally accredited body for building professionals and consists of industry stakeholders that are deemed likely to play an early and key role toward embracing green building concept in the country. As a way of conforming to appropriate research ethics, permission was obtained from BORAQS before contacting the participants. The study was in two phases of survey – a pilot and main survey. The pilot survey

was guided by the research question, “What green building attributes are applicable to the construction industry in Kenya?” To pursue this objective, we utilized a combination of focus groups and personal interviews to generate and validate a list of green building attributes that would make sense to industry context in Kenya. The pilot findings revealed 26 green building attributes that were identified as having the potential to be adopted for the context of Kenyan construction industry. These attributes belong to 5 broad categories of green building: sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality (Table 1). Sample participants in the pilot survey consisted of 12 building professionals with international experience who were actively involved in managing construction projects in Kenya.

Table 1: Green Building Rating Attributes That Are Applicable to Kenyan Building Industry

Category	Green Building Rating Attribute
Sustainable Sites	Prevent construction activity from causing site and air pollution.
	Protect or restore the natural state of the building site in terms of ecosystem, agriculture, plants and animal habitat.
	Build/construct on a previously developed site.
	Preferably locate the project site in a location with higher population density.
	Build/construct on a contaminated site such as brownfield.
	Preferably build/construct near to existing transport and utilities infrastructure.
	Provide secure bicycle storage space for building occupants/users.
	Encourage building occupants to use vehicles that are fuel-efficient and emit lesser pollutants.
	Minimize the number of car parking spaces on the building premises/site.
	Maximize open space on the building/site.
Water Efficiency	Control the quantity of storm water runoff from the building/site.
	Control the quality of storm water runoff from the building/site.
	Preferably use roof and non-roof materials with higher heat reflection.
	Implement strategies to minimize the amount of water used in the building.
Energy and Atmosphere	Treat and re-use waste water in the building.
	Collect rainwater for use in the building.
Materials and Resources	Implement strategies to minimize the amount of energy used in the building.
	Preferably use renewable energy that is generated on the building site (e.g., solar and wind).
	Implement strategies to measure and verify energy use in the building.
Indoor Environmental Quality	Preferably re-use an existing building structure instead of constructing a new one.
	Preferably use recycled or salvaged building materials.
	Preferably use materials that are available close to the building/site.
	Preferably use building materials that are rapidly-renewable or replenishable.
	Prohibit smoking indoors.
	Provide walk-off mats, grills, or grates at building entries.
	Implement strategies to achieve maximum daylight entering the building.

The list of attributes was then used to develop a comprehensive and meaningful questionnaire research instrument for the main survey, which targeted all construction professionals listed on BORAQS list. However, convenience sampling technique was employed to limit the sample size to only 608 professionals that had an active email on their registration profiles. As a result, only 347 responses were received and analyzed for the purpose of the study. In order to ensure unbiased geographic representation across Kenya, and desire to be as environmentally friendly as possible, data for this phase of the study was only collected by means of an electronic survey. Also, all subjects that had participated in the pilot survey were not allowed to participate in the main survey.

The main survey was guided by the question: ‘What is the likelihood of adopting certain green building rating attributes and what is their level of importance, as perceived by Kenyan building professionals?’ In attempting to answer this question, the participants were asked to rank each attribute based on perceived level of importance. A five point Likert scale ranging from 1 to 5 was employed; 1 being lowest and 5 being the highest score respectively. Responses garnered from the main survey were computed for results by means of using descriptive statistical tools for mean ratings of each attribute according to its level of importance, as perceived by industry stakeholders in Kenya. The mean ratings were then ranked according to their weighted

importance, followed by a comparative analysis of the results, as displayed in Appendix 1. Each green building rating attribute corresponding to the survey items was identified with one of the following categories: ‘sustainable sites,’ ‘water efficiency,’ ‘energy and atmosphere,’ ‘materials and resources,’ and ‘indoor environmental quality.’ The following formula was then used to calculate and rank the importance of each attribute and corresponding category:

$$\text{Mean rating} = \frac{\sum_{i=1}^5 W * F_i}{n}, \text{ where,}$$

$W$  = weight assigned or scale value of respondent’s response for the specified survey item (variable):  $W=1, 2, 3, 4$  and  $5$ ;

$F_i$  = frequency of the  $i^{\text{th}}$  response;

$n$  = total number of respondents to the survey item (variable); and

$i$  = response scale value = 1,2,3,4 and 5 for no opinion/do not know, disagree, somewhat agree, agree, and strongly agree, respectively. For the purpose of this analysis, responses with variable means below 2.5 were considered low/not important; those between 2.5 and 3.0 were considered moderate; those between 3.0 and 4.0 were considered moderately high; while those above 4.0 were considered high. The results of data analysis for each green building rating attribute and its corresponding category is are tabulated in Appendix 2. For ease of data interpretation, each green building attribute was assigned a unique code (e.g. Q\*\*). Also, there were variations in response counts due to skipping of some questions by respondents.

## RESULTS

The results of descriptive analysis in Appendix 1 reveal that all the 26 green building rating attributes identified and tested in this study were perceived to be important. This is because, according to the scale of importance that was employed in this study, their mean rating scores ranged from moderate, to moderately high, to high. In essence, this affirms that the green building rating attributes and corresponding categories identified in this research, and displayed in Table 1 and Appendix 1, have potential for adoption in Kenyan building industry.

Analytically, all the three green building attributes that belong to the category of ‘energy and atmosphere’ were ranked by respondents as having top-most importance. Q17 (minimize the amount of energy used in the building) was ranked the most important overall with a mean rating of 4.88; Q18 (use renewable energy that is generated on the building site) had a mean rating of 4.63 was ranked 4<sup>th</sup> overall; while Q19 (measure and verify energy use in the building) was ranked 7<sup>th</sup> overall. Besides the ‘energy and atmosphere’ category, the ‘water efficiency’ green building attributes were also rated as highly important. Q14 (collect rainwater for use in the building) took 3<sup>rd</sup> place overall with a mean rating of 4.66; Q15 (treat and re-use waste water in the building) was 5<sup>th</sup> overall with a mean rating of 4.55; while Q16 (minimize the amount of water used in the building) was ranked 6<sup>th</sup> overall with a mean rating of 4.40.

Out of the three ‘indoor environmental quality’ green building attributes, only one was rated as being highly important. This was Q24 (use strategies to achieve maximum daylight entering the building), and had a mean rating of 4.68. Second in this category was Q25 (prohibit smoking inside the building) which was rated moderately high in importance with a mean value of 3.71. Q26 (provide walk-off mats, grills, or grates at building entries) was rated as being moderately important and had a mean rating of 3.20. Among ‘materials and resources’ green building

attributes, only Q20 (use materials that are closely available to the building/site) was rated as highly important, and had a mean value of 4.13. Both Q25 (build/construct using recycled or salvaged building materials) and Q22 (use building materials that can be renewed or replenished rapidly) were rated as being of moderately high importance with a mean value of 3.85. However, Q25 (re-use an existing building structure instead of constructing a new one) was rated as having moderate importance and received a mean rating of 3.15.

Out of the thirteen green building attributes in the category of ‘sustainable sites,’ four were rated as being highly important. These were: Q1 (protect or restore the natural state of the building site in terms of ecosystem, agriculture, plants and animal habitat) which had a mean rating of 4.37 and was ranked 8<sup>th</sup> overall; Q2 (control the quality of storm water runoff from the building/site) which had a mean rating of 4.25 and was ranked 9<sup>th</sup> overall; Q3 (control the quantity of storm water runoff from the building/site) which had a mean rating of 4.22 and was ranked 10<sup>th</sup> overall; and Q4 (prevent construction activity from causing site and air pollution) which had a mean rating of 4.13 and was ranked 11<sup>th</sup> overall.

Seven of the green building attributes in the category of ‘sustainable sites’ were rated as having moderately high importance. These were: Q5 (maximize open space at the building/site) which had a mean rating of 3.98 and was ranked 13<sup>th</sup> overall; Q6 (use roof and non-roof materials with higher heat reflection) which had a mean rating of 3.85 and was ranked 14<sup>th</sup> overall; Q7 (build/construct near to existing transport and utilities infrastructure) which had a mean rating of 3.76 and was ranked 17<sup>th</sup> overall; Q8 (encourage building occupants to use vehicles that are fuel-efficient and emit lesser pollutants) which had a mean rating of 3.68 and was ranked 19<sup>th</sup> overall; and Q9 (provide secure bicycle storage space for building occupants) which had a mean rating of 3.61 and was ranked 20<sup>th</sup> overall; Q10 (build/construct on a contaminated site (e.g., industrial site or brownfield)) which had a mean rating of 3.34 and was ranked 21<sup>st</sup> overall; and Q11 (build/construct on a previously developed site) which had a mean rating of 3.03 and was ranked 24<sup>th</sup> overall.

Out of the entire list of twenty six green building attributes investigated, only two were determined to be of moderate importance to the context of building practices in Kenya. Both belonged to the category of ‘sustainable sites.’ They were: Q12 (minimize the number of car parking spaces at the building premises/site) which had a mean rating of 2.85 and was ranked 25<sup>th</sup> overall; and Q13 (build/construct in a densely populated neighborhood) which had a mean rating of 2.74 and was ranked 26<sup>th</sup> overall.

## CONCLUSION

It would not be an overstatement to articulate that this research is one of the pioneer studies that attempts to create a platform for adoption and uptake of green building practices and green building rating system in Kenya. However, this paper unveils at least 26 green building rating attributes that can be potentially adopted for Kenyan construction industry. Essentially, the identified and validated green building rating attributes can – without modification – be used to frame a green building standard that would be meaningful to the country’s context. Additionally, this paper ranks the green building rating attributes according to the order of their importance, as perceived by Kenyan building professionals (Appendix 1). The rank-order revealed that the attributes which belong to ‘energy and atmosphere’ are generally rated highest in regard to likelihood, or potential, for adoption in Kenya. This means that, among other green building attributes, Kenyan building professionals perceive ‘energy and atmosphere’ green building attributes to be of topmost importance. ‘Water efficiency’ attributes were ranked second while

‘indoor environmental quality’ were ranked third overall. In fourth place were ‘materials and resources’ while ‘sustainable sites’ attributes were ranked fifth. This rank order of potential green building attributes in order of their perceived importance is an invaluable foundation, or baseline, for framing a green building rating standard that is contextual to Kenya.

### Discussion of Industrial Implications

Industrialized nations, particularly in Europe incur enormous replacement costs of existing energy grids and related production infrastructure; developing nations like Kenya can learn and avoid a similar experience in the future as they build their economies today. The costs of replacing or updating obsolete and inefficient energies can be burdensome, especially for developing nations. Besides, sustainable energy production has an important role in achieving the Millennium Development Goals targeted by Kyoto ( The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change, which commits its parties by setting internationally binding emission reduction targets. The protocol was adopted in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005.) From an industrial perspective, better access to sustainable energy is necessary at macro and micro levels, to foster economic growth and stimulate income-generating activities respectively (KAS, 2007). Our study has attempted to lay the foundation for future investigation by assessing the case of Kenya and arguing for the option of seizing the opportunity presented by the moment.

Kenya’s 2030 vision projects a long-term development blue-print to create a globally competitive and prosperous nation on economy as one of its pillars. A part of the action plans for the vision involve major infrastructure projects such as the *Dongo Kundu Freeport*. It is possible that as the envisioned substantial growth unfolds, so can growth in energy inefficiencies and even pollution. It is a known fact that the rapid pace of industrialization in developing nations has also seen increases in the usage of unsustainable energy forms. Our findings seem to suggest the existence of potential for Kenya to adopt a more sustainable pathway to industrialization.

Further details from a previously cited 2003 report to California’s Sustainable Building Task Force by Greg Kats estimates that minimal increases in upfront costs of about 2% to support green design would, on average result in life cycle savings of up to 20% of total construction costs, which is more than ten times the initial investment. Cost implications are further amplified with the incorporation of externalities. Anthony Owen (2006) argues that incorporating associated externalities would likely serve to hasten the transition process to green alternatives. Generally, it is accepted that green design adoptions are bound to have financial and externality impact, with implications to resource allocation patterns in industry. In this study, we have attempted to lay a background for more complete study to this end. The study has shown the potential and attributes of such adoptions as is specific to Kenya. It is our recommendation that future studies focus on linking green design adoptions to financial costs, resource allocation patterns, and externalities.

## APPENDIX

### Appendix 1: Comparative Ranking For Green Building Attributes in Order of Importance

Survey Code	Green Building Attribute	Category*	Mean Rating	Rank
Q17	Minimize the amount of energy used in the building	EA	4.88	1
Q24	Use strategies to achieve maximum daylight entering the building	IQ	4.68	2
Q14	Collect rainwater for use in the building	WE	4.66	3
Q18	Use renewable energy that is generated on the building site	EA	4.63	4
Q15	Treat and re-use waste water in the building	WE	4.55	5

Survey Code	Green Building Attribute	Category*	Mean Rating	Rank
Q16	Minimize the amount of water used in the building	WE	4.40	6
Q19	Measure and verify energy use in the building	EA	4.39	7
Q1	Protect or restore the natural state of the building site in terms of ecosystem, agriculture, plants and animal habitat	SS	4.37	8
Q2	Control the quality of storm water runoff from the building/site	SS	4.25	9
Q3	Control the quantity of storm water runoff from the building/site	SS	4.22	10
Q4	Prevent construction activity from causing site and air pollution	SS	4.20	11
Q20	Use materials that are closely available to the building/site	MR	4.13	12
Q5	Maximize open space at the building/site	SS	3.98	13
Q25	Build/construct using recycled or salvaged building materials	MR	3.85	14
Q6	Use roof and non-roof materials with higher heat reflection	SS	3.85	14
Q22	Use building materials that can be renewed or replenished rapidly	MR	3.85	14
Q7	Build/construct near to existing transport and utilities infrastructure	SS	3.76	17
Q25	Prohibit smoking inside the building	IQ	3.71	18
Q8	Encourage building occupants to use vehicles that are fuel-efficient and emit lesser pollutants	SS	3.68	19
Q9	Provide secure bicycle storage space for building occupants	SS	3.61	20
Q10	Build/construct on a contaminated site (e.g., industrial site or brownfield)	SS	3.34	21
Q26	Provide walk-off mats, grills, or grates at building entries	IQ	3.20	22
Q25	Re-use an existing building structure instead of constructing a new one	MR	3.15	23
Q11	Build/construct on a previously developed site	SS	3.03	24
Q12	Minimize the number of car parking spaces at the building premises/site	SS	2.85	25
Q13	Build/construct in a densely populated neighborhood	SS	2.74	26

\* Categories of green building attributes include Sustainable Sites (SS), Water Efficiency (WE), Energy and Atmosphere (EA), Materials and Resources (MR), and Indoor Environmental Quality (IQ).

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# VALUE AND COST OF MULTINATIONALITY: COMPARING INTERNATIONAL DIVERSIFICATION AND REAL OPTIONS EFFECTS

Sangcheol Song, Saint Joseph's Joseph

## ABSTRACT

*Thus far, international geographic diversification literature has addressed the question of why and how multinational companies (MNCs) expand their business scope internationally. The dispersion of operations across different countries (i. e. multinationality) is considered a primary driver of additional value for multinational companies. Existing literature on international geographic diversification suggests that operating in a greater number of countries leads firms to exploit their ability to arbitrage issues involving national differences (Contractor, 2002; Contractor et al., 2003; Rugman, 1982; Santis and Gérard, 2009), to be better able to access low-cost inputs (Annavarjula and Beldona, 2000; Daniel and Bracker, 1989; Rugman and Verbeke, 2005), to cross-fertilize knowledge across subsidiaries (Lu and Beamish, 2004; Tihany, Griffith, and Russel, 2005), to scan for market opportunities (Contractor et al., 2003; Strike, Gao, and Bansal, 2006), and to reduce the risk associated with the expansion of overseas operations across countries (Chung, Lee, Beamish, Southam, and Nam, 2012; Goldberg and Kolstad, 1995; Huchzermeier and Cohen, 1996; Lee and Chung, 2007).*

## INTRODUCTION

Real options perspectives on multinationality also argue for the benefits of international - geographic diversification. Real options logic specifically argues that multinational flexibility value comes from dispersed operation across countries when firms are vulnerable to unanticipated changes in exchange rates, demands, and institutions in foreign countries. Geographic diversification through foreign direct investment (FDI) enables firms to preserve huge upside potentials and limit downside risks by responding flexibly to and providing preferential access to future opportunities (Allen and Pantzalis, 1996; Kogut, 1991; Kogut and Kulatilaka, 1994; Lee and Song, 2012; Tang and Tikoo, 1999).

Even though the international diversification and real options approaches share some common perspectives on the benefits of internationally-diversified operations, they take on divergent focuses and make contradictory assessments of FDI attributes. For example, while a high level of uncertainty is traditionally considered a factor increasing the cost of multinationality from the international diversification perspective, it is considered to enhance firm value jointly with multinationality from the real options perspective (Allen and Pantzalis, 1996; Chung et al., 2010; Huchzermeier and Cohen, 1996; Lee and Makhija, 2009b; Tang and Tikoo, 1999). Additionally, a high level of ownership helps a firm control and coordinate foreign operations and thus enhances the firm's value (Carpenter, Sanders, and Gregersen, 2001; Sambharya, 1995; Makino, Beamish, and Zhao, 2004; Tong and Reuer, 2007), but does not increase growth options value for MNCs (Cuypers and Martin, 2010; Kogut, 1991; Tong, Reuer, and Peng, 2008). In spite of the differences between the international diversification and real options approaches, however, there is a paucity of research on distinguishing real options effects from other diversification effects. Mixing up values and costs based on different theoretical perspectives may lead to over- or undervaluing the impact of multinationality, and thus arriving at inconclusive or mixed results.

In this paper, we attempt to compare real options effects with overall diversification effects by examining which effect is stronger in differing levels of multinationality in consideration of the moderated role of uncertainty and ownership. We predict that higher uncertainty may undermine the value of multinationality from the international diversification perspective, while it may strengthen the positive impact of multinationality from the real options perspective. We also expect that a high level of ownership will help parent firms manage their foreign operations from an international diversification perspective but undermine future growth opportunities embedded in FDI, and cause additional costs to be involved with high levels of multinationality.

We test our predictions regarding this issue in a context involving varying levels of exchange rate uncertainty and network ownership in the FDI portfolios of Korean MNCs. Our sample consists of 2,310 observations of 148 publicly traded MNCs listed on the Korean Stock Exchange (KSE) during 1991-2008.

## RESULTS

Through empirical testing, we find that as hypothesized, values and costs are affected differently by different levels of multinationality. At low levels of multinationality, uncertainty strengthens the negative value of multinationality, while ownership weakens it. Meanwhile, at high levels of multinationality, uncertainty strengthens the positive value of multinationality, while ownership weakens it. The first results indicate the commonality of theoretical predictions made from the international geographic diversification and real options perspectives, while the second results indicate the divergence of predictions made from these two perspectives.

Our results related to multinationality support the findings of recent studies that increasing multinationality does not always enhance value, but instead involves a non-monotonic relationship depending on the different magnitudes of relevant values and costs. This result implies that managers should assess the optimality of their expansion into new countries in terms of the relative magnitudes of the values and costs involved. These findings imply that firms need to balance breadth and depth, as well as international diversification and focused strategy, considering the characteristics of host country environments, including uncertainty levels and types. Firms' international strategies, including global and multi-domestic strategies, need to involve designing international investments to maximize the enhancement of value through multinational flexibility in growth options and switching options.

# CORPORATE SUSTAINABILITY INVESTMENT AND OVER-INVESTMENT OF FREE CASH FLOW

Qi Sun, California State University San Marcos

## ABSTRACT

*This study examines whether corporate sustainability leaders behave differently in internal resource allocation. Specifically, I investigate whether sustainability leaders constrain over-investment of free cash flow, thereby delivering more efficient use of internally generated resources, as compared to firms that do not meet the same corporate social and environmental criteria. Empirical evidence documented in this study test alternative hypotheses regarding why companies expend effort and resources to address social and environmental concerns. If sustainability investment is due to the higher ethical standards adopted by the management, the higher standards will also extend to other aspects of corporate behavior, such as a more responsible use of free cash flow. On the other hand, if corporate sustainability investment is driven by management's pursuit of self-interest, the opportunistic behavior will extend to other discretionary decision making, such as overinvestment of free cash flow.*

**JEL** G30, G34

**KEYWORDS** Corporate Sustainability Investment; Free Cash Flow; Overinvestment

## INTRODUCTION

Corporate sustainability investment is becoming more prevalent as stakeholders and regulators demand corporations to address social and environmental concerns while achieving economic growth. Although the financial impact of corporate sustainability investment is still under debate, prior research has provided theoretical background on why corporations invest in sustainability. Ethical theories suggest that there is a moral imperative for a firm to accept social responsibility, as it is the necessity to contribute to the good of society. Political theories believe that a firm needs to take into account the community where it is operating to get the “social license of operation”. Corporate sustainability investment, as a result, is a form of reputation formation and maintenance. Integrative theories view corporate sustainability investment as a resource that creates competitive advantage, and thus the means to achieve economic objectives. These theories suggest that the management has incentive to adhere to a high standard of behavior and thus are more likely to constrain overinvestment of free cash flow.

Alternatively, corporate sustainability investment can be potentially driven by the pursuit of the management's self interest, such as cover up the impact of corporate misconduct. If managerial opportunism prevails, we would observe that it also extends to management's other discretionary decisions, such as overinvest of free cash flow. This study contributes to the literature of corporate sustainability investment with empirical evidence on how sustainability leaders use their free cash flow. Results will help test competing hypotheses regarding the motivation of corporate sustainability investment.

## DATA AND METHODOLOGY

Corporate sustainability leaders are identified based on the annual sustainability review reports issued by Sustainable Asset Management Group in collaboration with the Dow Jones Indexes over years 2001 to 2011. Empirical analyses of the use of free cash flow are conducted based on information collected from COMPUSTAT annual database. All cash flow variables are normalized by the book value of total assets. To minimize the influence of outliers, I winsor the measure of growth opportunity, book-to-market ratio, by recoding observations less (greater) than the 1<sup>st</sup> (99<sup>th</sup>) percentile to the 1<sup>st</sup> (99<sup>th</sup>) percentile. Based on literatures that have examined firm level investment decisions (e.g. Barro (1990), Bates (2005), Hubbard (1998), Lamont (2000)), a firm's expected total investment is measured as the fitted value from the regression of total investment against factors such as growth opportunity, financial leverage, cash level, firm maturity, year and industry indicators:

$$I_{Total,t} = \alpha + \beta_1 BM_{t-1} + \beta_2 Leverage_{t-1} + \beta_3 Cash_{t-1} + \beta_4 Size_{t-1} + \beta_5 Return_{t-1} + \beta_6 I_{Total,t-1} + \sum Year/Industry Indicator$$

Over-investment is measured as the difference between total investment expenditure and expected total investment. A negative difference presents under-investment while a positive difference represents over-investment and squander of capital. Sustainability leaders' use of free cash flow (such as over-investment, distribution back to shareholders and creditors, increase of financial assets, and increase of other investments) is first compared and contrasted to their industry peers. A regression that allows asymmetric relationship between overinvestment and the sign of free cash flow further discloses whether sustainability leaders tend to constrain the opportunistic use of discretionary resources.

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# A COMPARATIVE ANALYSIS OF REVERSE MORTGAGES: EVIDENCE FROM PUERTO RICO AND THE UNITED STATES

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## ABSTRACT

*Reverse mortgages are frequently used by elderly consumers to raise cash during their pre and post-retirement years. This paper examines reverse mortgages originated in Puerto Rico and in the United States. The results are compared with other studies on reverse mortgages in the United States. We use data obtained from the Department of Housing and Urban Development-Puerto Rico Field Office and compare the reverse mortgage loans granted in the United States and Puerto Rico from 2010 to 2012 to examine the continued use of this product by senior citizens as a financial planning tool and determine whether differences exist between both jurisdictions and the possible reasons for the latter. We also use data provided by the Office of the Commissioner of Financial Institutions and from a Puerto Rico mortgage bank for 2010 and 2011 to develop an average profile of a reverse mortgage borrower in Puerto Rico. The next stage of this investigation will include regression and correlation analyses to examine the strength of the relationship between the generation of reverse mortgages and other economic and demographic variables. The investigation intends to develop possible public policy implications of the use of this instrument.*

**KEYWORDS:** Reverse mortgages, Home equity, Elderly consumers, Home Equity Conversion Mortgage

## INTRODUCTION

From 2000 to 2005 there was an increase in housing prices (housing bubble) in the United States (U.S.) and in Puerto Rico (P.R.). The financial markets in the U.S. took advantage of that bubble to aggressively promote a product known as reverse mortgage. Reverse mortgages allow elderly consumers to obtain cash using their dwelling as collateral without having to abandon the property. As a result of the increase in housing values there was a significant increase in the demand for reverse mortgages in the U.S. Although reverse mortgages were initially offered in P.R. in 1993, demand for this type of financing did not increase until 2010. The objective of this investigation is to perform a comparative analysis of reverse mortgages generated in P.R. and the U.S. from 2010 to 2012. This study contributes to the household finance literature by examining the characteristics of the reverse mortgages generated by elderly consumers during their retirement stage. The results are compared with other studies on reverse mortgages originated in the U.S.

## CONCLUSIONS

The demand for reverse mortgages during the first half of the 2000-2010 decade increased in U.S. and P.R. because some retirees required additional sources of cash to absorb their increased cost

of living expenses and mitigate their depleted savings and investments. Using data obtained from different sources we compare the reverse mortgage loans granted in the United States and Puerto Rico from 2010 to 2012. We identify the differences observed and provide possible explanations for them. In addition, we develop an average comparative profile for reverse mortgage borrowers in the United States and Puerto Rico.

The number of reverse mortgages reported in both jurisdictions decreased from 2010 to 2011. Average interest rates differ when comparing U.S. and P.R. rates and the average loan amount differs by almost 25% with U.S. loans having higher amounts. This gap decreases in 2011 to approximately 20%. The most common type of Home Equity Conversion Mortgage Loans (HECM) endorsed in the U.S. and P.R. during 2010 was Line of Credit. However, in 2011 the most frequently used HECM loan in the U.S changed to Lump Sum, whereas in P.R there was no change. The observed change in the U.S. might be due to changes in the required cash flow needs of the mortgagees or the entry of specialized (smaller) financial institutions generating reverse mortgages with limited infrastructure capabilities.

The average age of reverse loan mortgagees decreased both in the U.S. and in P.R. in 2010 and 2011. This reduction seems to be associated with the fact that younger retirees are recurring to the use of reverse mortgages to offset the impact of several factors such as inflation, increased cost of living, depleted savings and investment portfolio accounts. According to the data provided by the local regulatory entity of financial institutions in P.R. (OCIF), there has been a reduction in the number of reverse mortgages closed and the average amount of reverse loans originated in P.R. during 2011 and the first quarter of 2012. At the same time, the number of financial institutions offering this product in P.R. has increased. According to the sample data obtained from a financial institution in P.R. that offers reverse mortgages, the average age of the mortgagees is 70, most of whom are women and unmarried, and approximately 50% of the funds from the approved reverse mortgages represent the net cash paid to the mortgagees for their needs. The reduction in the number of reverses mortgages granted in P.R., the average age of the mortgagee and the distribution of granted funds is consistent with other studies performed in the U.S. (Elmer, 2012, Michelangeli, 2008 and Detwiler, 2008).

The next stage of this investigation will include regression and correlation analyses to examine the strength of the relationship between the generation of reverse mortgages and other economic and demographic variables. The investigation intends to develop possible public policy implications of the use of this instrument. This study has the following limitations. The data obtained from the Department of Housing and Urban Development (HUD) is for fiscal years ended on September 30, 2010 through 2012. The data obtained from OCIF, Consumer Credit Counseling Services of Puerto Rico (CCCS) and a mortgage bank in P.R. was for natural years 2010 and 2011 and for the first quarter of 2012. Another limitation is that we do not have the data related to the number of financial counseling sessions offered by authorized counseling entities in P.R. other than (CCCS). In addition, certain data is defined differently by each institution, for example HUD uses average interest rates while OCIF uses weighted average interest rates. This limits our comparison between the available data sets. Future research may address the benefits and implications of reverse mortgages on the financial health of retirees and the possible costs to society. The absence of a savings culture and the need for financial planning throughout our lifetime may impact our future financial health and quality of life.

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# DETERMINANTS OF BALANCED SCORECARD USAGE: INDIRECT CORRELATION THROUGH ATTITUDINAL FACTORS

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## ABSTRACT

*Successful implementation of Balanced Scorecard (BSC) requires a positive attitude toward BSC. Specifically, BSC should be perceived as simple to use and of great usefulness. This study develops the measurement of BSC usage and examines whether the determinants impact the BSC usage through attitudinal factors. Most existing studies have quantified the BSC usage by identifying the stages of BSC application whereby the discrete step of usage is reflected rather than the degree of usage. This research work thus develops a measurement to reflect the degree of BSC usage by taking into consideration the key characteristics of BSC usage and their theoretical weights. In addition, this study examines the determinant-innovation relation by drawing on the organizational innovation theory and the technology acceptance model. In particular, this research article seeks to determine whether top management support and training are associated with the BSC usage through the attitudinal factors of perceived ease of use and perceived usefulness. Based on 73 complete questionnaires, it is found that top management support and training are indirectly associated with the BSC usage through the perceived ease of use and the perceived usefulness factors. These findings highlight the vital role of the attitudinal factors as the mediating factors.*

**JEL:** M190, M490

**KEYWORDS:** Balanced Scorecard, Attitudinal factors

## INTRODUCTION

Balanced Scorecard (BSC), which was devised in 1992 by Kaplan and Norton, is an important development in strategic performance measurement systems as it offers a balanced view of strategic non-financial and financial measures that can be illustrated in the causal linkage (Kaplan, 2010). Most prior research studies which focused on the BSC application rate, the determinants and the effects of BSC implementation equated the BSC usage with the stages of BSC application. Meanwhile, this research study aims to develop the measurement to better reflect the degree of BSC usage by taking into account the key characteristics of BSC and their theoretical weights. The proposed measurement would allow researchers to further examine the determinant-innovation relationships in the BSC implementation context. This research article is expected to contribute to the existing body of knowledge in the area of BSC with the proposed measurement of BSC usage; and highlights the importance of attitudinal factors as the mediating variables.

## LITERATURE REVIEW

The Balanced Scorecard

Kaplan and Norton initially invented BSC as the multi-dimensional performance measurement system with a collection of financial and nonfinancial measures (Kaplan & Norton, 1992). BSC has since then been transformed into a strategic performance measurement system (Kaplan & Norton, 2001, 2008). Firms have implemented BSC to translate their strategy into the operational terms by which firms are able to properly align the corporate strategy with those of business and supporting units (i.e. Alignment), to effectively communicate the strategy to their employees (i.e. Communication), and to provide feedback and promote learning (Feedback). Based on the conceptual framework of BSC, Shutibhinyo (2012, 2013) summarized four key attributes of BSC as presented in Table 1.

Table 1: The BSC Attributes

BSC Attributes	Explanation
<b>Attribute 1: Strategy</b> Translating a strategy into operational terms	Grouping the strategic financial and nonfinancial measures into multiple and interrelated dimensions. The linkages between/among those measures within and across perspectives illustrate firm's value-creation process.
<b>Attribute 2: Alignment</b> Aligning the organizational units to the strategy	Aligning business units' or support functions' strategies to firm's strategy to create synergy.
<b>Attribute 3: Communication</b> Communicating strategy to employees	Communicating vision and strategy throughout the company in order that employees understand and conduct their works corresponding to the strategy.
<b>Attribute 4: Feedback</b> Providing feedback	Linking strategy to operating plan and budgeting systems and reviewing the strategy.

Attribute 1 (i.e. Strategy) is the key characteristic of BSC as it not only clarifies and thereby builds a consensus among employees about organization's strategy but also serves as a platform for the other three attributes (i.e., Alignment, Communication and Feedback).

### Influencing Factors of BSC Application

Prior studies which were based on the organizational innovation and the technology acceptance model have suggested various factors relating to the BSC application (David, 1989; Damanpour, 1991; Hongratanawong, 2002; Roger, 2003). The factors include top management support, training and attitudinal factors, the third of which refer to the perceived ease of use and the perceived usefulness. The technology acceptance model has also implied that top management support and training may relate to the perceived ease of use and the perceived usefulness. In addition, these attitudinal factors, i.e. the perceived ease of use and the perceived usefulness, tend to be associated with the BSC usage. These suggest the mediating role played by the attitudinal factors and thereby lead to the following hypotheses:

H1: Top management support is positively associated with the usage of BSC through the attitudinal factors.

H2: Training is positively associated with the usage of BSC through the attitudinal factors.

## RESEARCH METHODOLOGY

### Survey Instrument

A survey package consisting of one questionnaire, a cover letter and a postage-paid self-addressed envelope was posted to the chief financial officers (CFO) of the listed firms during May – June of 2011. The questionnaire is comprised of two parts: The first part asks the respondents to assign a percentage value (i.e. 0 – 100%) to a series of questions concerning the

performance measurement systems and management processes of their organizations. Their responses help identify the degree of each BSC attribute embedded in the performance measurement systems of their organizations. The second part of the questionnaire contains questions pertaining to top management support and training.

### Model Specifications and Variable Measurements

A simple regression analysis was employed to test the proposed hypotheses. The model specifications and variables are presented in Table 2.

Table 2: Models and Variables

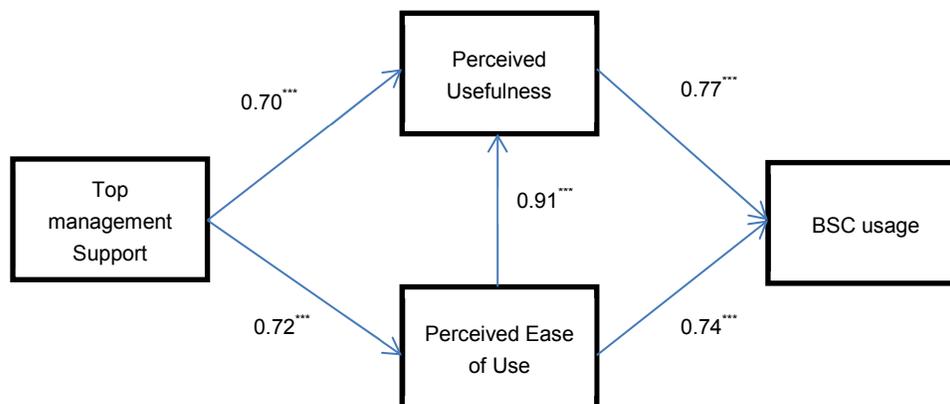
Models for H1:		Models for H2:	
<b>M1.1</b>	$BSC_i = \beta_0 + \beta_1 PU_i + \varepsilon_i$	<b>M2.1</b>	$BSC_i = \beta_0 + \beta_1 PU_i + \varepsilon_i$
<b>M1.2</b>	$BSC_i = \beta_0 + \beta_1 PE_i + \varepsilon_i$	<b>M2.2</b>	$BSC_i = \beta_0 + \beta_1 PE_i + \varepsilon_i$
<b>M1.3</b>	$PU_i = \beta_0 + \beta_1 PE_i + \varepsilon_i$	<b>M2.3</b>	$PU_i = \beta_0 + \beta_1 PE_i + \varepsilon_i$
<b>M1.4</b>	$PU_i = \beta_0 + \beta_1 TOP_i + \varepsilon_i$	<b>M2.4</b>	$PU_i = \beta_0 + \beta_1 TRAIN_i + \varepsilon_i$
<b>M1.5</b>	$PE_i = \beta_0 + \beta_1 TOP_i + \varepsilon_i$	<b>M2.5</b>	$PE_i = \beta_0 + \beta_1 TRAIN_i + \varepsilon_i$
Variables			
$BSC_i$ = BSC usage, $TOP_i$ = Top management support, $TRAIN_i$ = Training, $PE_i$ = Perceived ease of use, $PU_i$ = Perceived usefulness			

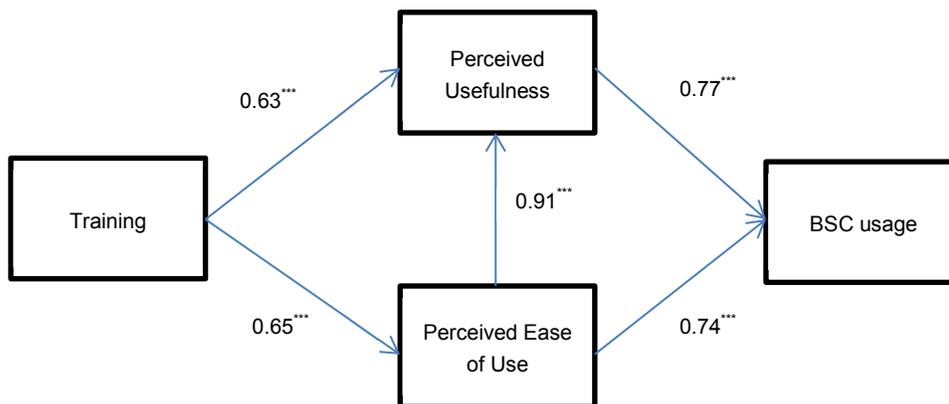
This table shows the regression models and related variables. Models 1.1-1.5 and Models 2.1-2.5 were employed to examine H1 and H2 respectively. BSC usage is the summation of the products of the degree of each BSC attribute and its respective theoretical weight as follows:  $BSC\ usage = (Degree\ of\ Attribute1 \times 40\%) + (Degree\ of\ Attribute2 \times 20\%) + (Degree\ of\ Attribute3 \times 20\%) + (Degree\ of\ Attribute4 \times 20\%)$

## RESULTS

Based on the 73 complete questionnaires, Figure 1 illustrates the indirect relationships through attitudinal factors.

Figure 1: the Indirect Correlation Through Attitudinal Factors





\*\*\* indicate significance at 0.01 level

The results on the determinant-innovation relationships reveal the mediating roles of the attitudinal factors. Both top management support and training factors correlate with the perceived ease of use and the perceived usefulness factors, which are positively associated with the degree of BSC usage. This underlines the importance of attitudinal factors in the context of BSC implementation.

## CONCLUSIONS

This research paper develops the measurement of BSC usage by taking into consideration the key characteristics of BSC and their theoretical weights and presents the evidence of attitudinal factors as the key determinants and the mediating variables in the context of BSC implementation. Specifically, top management support and training factors enhance the BSC usage through attitudinal factors. This research article is believed to highlight the importance of attitudinal factors. In addition, the ratio measurements of BSC implementation, unlike the discrete measurements, enable researchers to further conduct the determinant and the consequence studies. Furthermore, this research work encourages researchers to measure the degree of any particular innovation by considering its key characteristics and theoretical weights.

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# REGULATION AND BANK DEFICIENCY

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## ABSTRACT

### INTRODUCTION

If the role of banks in economic growth is well established, however, their behavior is source of systemic risk. Regulators intervened through many reforms to eliminate or at least reduce this risk. Basel II imposed a minimum level of capital that reflects the risks (the ratio Mc Denough) and is also equipped with two additional pillars: banking supervision and market discipline. However, the "subprime" crisis revealed the failure of almost all control modes (rating agencies, accounting standards and prudential rules). This failure demonstrates a deficiency in the control system and a lack of rigor in the measures taken by regulators. This has raised the interest of researchers to examine the relationship between prudential regulation and banking fragility. Demirguc-Kunt & Detragiache (2010) have found a weakly relationship between BCP compliance and bank soundness proxied by the Z factor. Barth et al. (2001, 2004) used a previous survey of dataset to analyze the impact of a combination of regulation and supervision on bank stability. Using bank level data, Fonseca & Gonzalez (2010) found that regulation, supervision and institutions influence the bank risk.

Studies on the risk failure of European banks remained limited with respect to the empirical literature on the U.S. or emerging market. This finding is mainly due to the low number of bank failures in Europe. Most of these studies focus on the cause of bank distress in Europe (Cihak & Poghsyan (2009) using CAMEL variables) or the impact of regulation on bank risk (Agoraki, Delis & Pasioura (2011)). Our research analyzes the role of regulation on bank failure by including financial and regulatory variables. The bank distress is taken in the large sense to include banks that have experienced serious financial difficulties.

This paper proceeds as follows. Section 2 presents a brief overview of literature. Section 3 presents database and methodology. Section 4 presents results. Section 5 concludes.

### LITERATURE REVIEW

Banks are financial institutions that collect deposits and provide credit. These operations enable them to perform the functions of financing, monitoring borrowers and reducing transaction costs. Given the role played by banks, any failure generates a dysfunction of banking system and of real economy (Laeven & Valencia (2010)). Furthermore, the frequency, the extent of losses and the severity of banking crises highlights the need to detect and prevent the bank failure. Banking instability has become a major polity concern.

The empirical literature has focused on predictive measure to identify bank default risk and avoid systemic risk. These early warning models estimate the probability of bank failure at a given time horizon. These studies use either country-level data (Barth et al., 2004; Beck et al. 2006; Demirguc-Kunt et al. (2008)) or bank-level data (Lanine & Vennet (2006)). The use of individual data provides better estimates and avoids the loss of information that may be important.

We divided predictive methods of bank failure into two types namely: the implicit method and explicit method.

#### The implicit method

Early warning models are used to assess the soundness of individual banks. Among the measures used, we quote Z-scores (Cihak, 2007) or financial strength ratings (Demirguc-Kunt et al. (2008)). Rating is used by some studies, like Gaganis, et al. (2006), Ioannidis et al. (2010), to predict individual bank failures. Based on accounting ratios, rating is considered as an accurate indicator of bank soundness. However, others (Reinhart (2001), Rojas-Suarez (2001)) have highlighted the irrelevance of rating agencies in anticipating emerging markets' crises. First, they have sometimes difficulties to dispose confidential information from banks. Second, the rating agencies are paid by the issuers of securities they rate, which pose a structural conflict of interest and illegal insider trading. Finally, in order to improve the predictive power of this indicator, the accounting data must be supplemented by market data.

Z-score indicator has been gaining popularity as a measure of bank soundness (Demirguc-Kunt, et al. (2008), Cihak & Hesse (2007); Cubillas, et al. (2012)). We can measure insolvency risk with Z-score. Cihak (2007) defined Zscore as the probability that the value of its assets becomes lower than the value of its debts. A higher Zscore implies a lower default probability. Despite its universality and its simplicity, Zscore has been criticized by Cihak (2007) especially since it is based on accounting data. The Zscore is modeled as follow:

$$Zscore = \frac{\lambda + R_A}{\sigma_A} \quad (1)$$

with  $\lambda = \frac{Equity\ capital}{Assets}$ ;  $R_A$  is the return on assets and  $\sigma_A$  is the standard deviation of  $R_A$ .

#### The explicit model

By using the logistic model, Demirguc-Kunt & Detragiache (2010) measured the probability of a systemic crisis. They note ( $P_{it}^*$ ) the probability in country i at time t, modeled as follows :

$$\begin{cases} P_{it} = 1 & \text{si } P_{it}^* > C \\ P_{it} = 0 & \text{si } P_{it}^* \leq C \end{cases} \quad (2)$$

where  $P_{it}^* = \beta'X_{it} + \varepsilon_{it}$ ,  $X_{it}$  is the matrix of independent variables, C is the critical value of the probability of a crisis. The sign of the estimated coefficients of each exogenous variable explains its impact on the probability of crisis.

### **METHODOLOGY AND DATA**

Our methodology is inspired by the article published by Ioannidis, Pasioura & Zopounidis (2010) using financial and regulated data. This study focuses on the role of banking regulation on the probability of default. We use the large definition of bank failure given by Demirguc-Kunt, et al. (2000), which includes the measures of emergency.

#### Sample

The database contains the five major European countries; namely, Germany, France, Italy, Spain and the United Kingdom; and Greece. In addition, selected countries (except Greece) represent 72% of GDP (Eurostat) of the entire European Union. This choice is also motivated by the

financial dominance of these countries compared to other member states. The five countries alone contribute about 80% of the total assets of all European banks (Fitch-IBCA, Bankscope). We extracted distressed banks and accounting data from 'Bureau Van Dijk' Bankscope database. For consistency, we used unconsolidated commercial banks and we excluded banks that do not provide all information on the variables used by the model for six years (2003-2008). We used balance sheets and statements of income expressed in millions of U.S. dollars. To carry out our empirical study, we preferred to use individual rather than aggregated data. Individual data provide better estimators, do not lose information that may be important and provide higher degree of freedom. The final sample is composed of 152 commercial banks from six countries of Europe in activity between 2003 and 2008.

### Variables

There is common agreement among credit agencies, researchers and bank regulators that the CAMEL indicators are useful to classify banks in terms of their financial vulnerability. We follow the same approach by using the five acronyms of CAMEL (Capital, Asset Quality, Management Quality, Earning and Liquidity) model to evaluate bank soundness. We combine these indicators with regulatory variables to study the role of regulatory tools on bank distress. We also use macroeconomic variables to take into account differences between European Union countries; bank size affects; bank soundness in term of diversification (Dietsch & Petey 2004), credit risk and performance. The size of banks varies from one country to another. It is the lowest in Greece (25 billion U.S. dollars) and the highest in the UK (215 billion U.S. dollars). We measure bank size using logarithm of total assets.

### CAMEL indicators

The choice of the level of equity is a very important decision in bank management. In fact, bank equity is considered as a scarce and expensive source of funding. Myers & Majluf, (1984) have shown the reluctance of banks to increase their capital in order to avoid the risk of dilution of shareholders. So, shareholders demand higher yields in return for the risk they have to bear. However, bank regulators found that higher level of capital makes the bank more resilient to shocks and serves to protect depositors, creditors and investors (Le Bras & Andrews (2004)). We follow Cihak & Poghsyan (2009) by using the ratio of total equity to total assets because of practical and conceptual reasons. The practical reason is that Tier1 ratio is not provided for the European banks. The conceptual one concern the weights for risk weighted assets that are not objective. We expect a negative relationship between the ratio of equity and the probability of bank distress.

Empirical studies (Cihak & Poghsyan (2009)) suggest that bad asset quality increase the probability of bank distress. We follow Ioannidis et al. (2009) by using loan loss provisions to net interest revenue ratio as a measure of asset quality. Bad quality assets indicate a greater exposure to credit risk and higher probability of bank failure.

Managerial quality is approximated by efficiency or cost to income ratio. Lower values of costs show bad managerial quality and higher probability of distress.

Performance is closely linked to risk and bank capital. Non-performing banks have an incentive to choose risky projects to increase their profitability while respecting the constraints of capital. We proxy, profitability by return on average equity ratio and we expect that it has a negative effect on the bank insolvency.

Liquidity shocks play a key role in the current crisis. Shin et al. (2005) have defined illiquidity risk as the probability of a default generated by a run. They emphasize that “liquidity buffers may play a role similar to capital buffers”. Therefore, liquidity risk was integrated in the new regulations (Basel III). We measure liquidity by the ratio of liquid assets to deposits and short-term funding. Based on the previous literature, we expect higher liquidity to be correlated with lower probability of bank distress.

Regulatory variables

Banking regulation does not necessarily mean an improvement in bank stability. Most studies use country level data to investigate the influence of prudential regulation of the banking fragility. Barth, al. (2004, 2008); Cihak & Tieman (2008) found that regulation and supervision depend on institutional development of the countries. In addition to the CAMEL variables, we follow Ioannidis, et al. (2010) by including regulatory indicators such as the three pillars, namely capital requirements, supervisory monitoring and market discipline of Basle II and restrictions on bank activities.

Econometric model

The Logit regression shown below is used to examine the link between regulatory policies and the probability of default. This regression uses Risk = [Z-score, Rating, Intervention] as dependent variables. We consider state intervention as an emergency measure and the sign of bank default.

$$\text{RISK}_i = \beta_0 + \sum_{k=1}^K \beta_k X_{k,i,t} + \sum_{k'}^{K'} \beta_{k'} \text{REG}_{i,k'} + \sum_{k''}^{K''} \beta_{k''} C_{k'',i} + \varepsilon_{i,t} \quad (3)$$

Where  $i = (1, 2, \dots, 151)$  banks and  $t = 2003-2008$ .  $X_{k,i,t}$  represent CAMEL variables of the bank  $i$  at time  $t$ . The vector  $\text{REG}_{i,k'}$  presents regulatory variables of the bank  $i$ . we include  $C_i$  as control variables to capture macro economic variables (Inflation and GDP per capita) and the bank size measured by  $\log(\text{Assets})$ . The coefficient  $\beta$  show the direction of correlation between the various measures of default probability with the financial and regulatory policies.  $\varepsilon_{i,t}$  is the random error term.

**EMPIRICAL RESULTS**

The analysis of the descriptive statistics of the CAMEL variables shows a sharp drop in overall performance of European banks except Spain, whose decline is limited. We also see deterioration in asset quality for British and Greek banks. These two countries have experienced the greatest percentage of failed banks. Capital, asset quality, interbank liquidity and profitability are importance variables in bank failure.

Regulatory variables are linked with the number of bankruptcy by country. We note that Spanish banking system has remained immune to failure given a more effective regulatory oversight. This implies that supervision have a significant impact on banking risk failure.

Our results suggest that higher stringent equity requirements reduce banking risk default measured by rating, Z-score and intervention. This result confirms the statements of Barth et al. (2004) and Admati et al. (2010). We also find negative correlation between the level of bank capitalization and the risk of bank distress. Lanine & Vennet (2006), similarly, Berger & Bowman (2010) stated that better capitalized banks have less probability default.

With regard to the second pillar of Basle II, we also found significant evidence in favor of supervision hypothesis. It seems to have a negative effect on the probability of bankruptcy. This is consistent to studies that higher state supervision results in lower risk of insolvency, measured by Z-score (Agoraki et al. 2011). The third pillar of Basle II relative to market discipline measured by subordinated debt, shows a positive and significant correlation with the default

probability. Higher level in subordinated debt is associated with a greater risk-taking. Banks act recklessly when they increase their share of subordinated debt hoping for a higher profitability. This finding can be explained by ‘too big to fail’ approach which influences the measures of market discipline and the probability of bankruptcy of large banks issuing subordinated debt. Bank size is also positively related to default risk (1% significance) when dependent variable is ex-post. This result is explained by the support provided by governments to large banks, which gives banks incentives to take excessive risks generating a higher probability of failure.

Furthermore, stricter restrictions on bank activities increase insolvency risk. This finding is in line with the studies of Barth et al. (2008) and Angkinand (2009). This suggests that allowing banks to provide a large range of activities increase economies of scale and the franchise value of banks. Therefore, Diversification of activities provides banks with hedge against market uncertainties. This is in line with the view that more diversified large banks display a lower default risk

## CONCLUSION

Using a sample of 152 commercial banks from six countries of Europe in activity between 2003 and 2008, we study the role of regulatory policies in reducing vulnerability bank. It was found that the regulation of banks has two implications. First, regulation imposes restrictions on capital adequacy to reduce bank risk taking. Second, regulation implement a monitoring system based on a form of control to allow inspectors to check whether the banks meet regulatory requirements. It is clear that the role of capital adequacy ratio in banking regulation is important to absorb losses against loan default. But the problem of the capital requirement during the subprime crisis is rather in the weighting of assets against the risks. Risk weighting asset calculation is not perfect, with low risk weights for loans to public services. We need a simple capital adequacy ratio that is easy to measure, to control and to understand.

Furthermore, incentives for banks to increase their profitability are greater than those of regulators and result in excessive risk exposures to banking system. Some regulatory measures that aim to reduce banking instability become means to boost bank vulnerability. Our findings show that restrictions on bank activities increase bank distress by introducing subordinated debt in the Tier 2 and do not improve the stability of banks. In fact, subordinated debts play both the role of sensitivity to market risk and an indicator of market discipline. The results show a highly significant relationship between subordinated debts and the risk of failure. In other words, these debts as part of Tier 2 contribute to the increased risk of bank failure. This result demonstrates a significant sensitivity to market risk and market discipline failure. However, as a final remark it should be emphasized that alternative measures, such as rating and Z-score are not very strong. In fact, empirical results have pointed the relevance of ex-post measure.

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# HOW TO IDENTIFY DISRUPTIVE NEW BUSINESSES

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## ABSTRACT

*In almost any industry, the most dramatic stories of growth and success were launched from a platform of disruptive innovation (Christensen et. Al, 2002). The probability of creating a successful, new growth business is 10 times greater if the innovators pursue a disruptive strategy rather than a sustaining one.*

*Genuinely disruptive innovations are the ones that result in the creation of entirely new markets and business models. Few companies have introduced these innovations. Disruptive innovations appeal to customers who are unattractive to the incumbent companies. According to Christensen (2012) companies that want to create new growth businesses should seek disruptive opportunities because industry leaders will not be motivated to pursue them. The successful disruptive innovators always target customers who welcome simple products and affordable. The disruptive business model strategy needs to be sure that it is unattractive to every powerful incumbent. The purpose of this article is presenting the concept of disruption from the perspective of a Social E-Commerce company that is the leader in group buying daily deals in Puerto Rico. In four years, Social Media Group obtained 80% of the market share of the group daily deal companies in the island. It got sales of \$12.5 million in 2011 and \$25 million in 2012. The owners are three brothers of less than 30 years old! The chief of operations is only 26 years old. This is an example of young genius entrepreneurs.*

**JEL CLASSIFICATION:** M13, M19

**KEYWORDS:** disruptive innovations, disruptive new businesses, new businesses models, E commerce

## INTRODUCTION

In almost any industry, the most dramatic stories of growth and success were launched from a platform of disruptive innovation (Christensen Et. Al, 2002). The probability of creating a successful, new growth business is 10 times greater if the innovators pursue a disruptive strategy rather than a sustaining one (Christensen, 1997). Genuinely disruptive innovations are the ones that result in the creation of entirely new markets and business models. Few companies have introduced these innovations. Disruptive innovations appeal to customers who are unattractive to the incumbent companies. According to Christensen (2012) companies that want to create new growth businesses should seek disruptive opportunities because industry leaders will not be motivated to pursue them. The successful disruptive innovators always target customers who welcome simple products and affordable. The disruptive business model strategy needs to be sure that it is unattractive to every powerful incumbent (Dewald and Bowen, 2010). Social E-commerce is growing at five times the rate of traditional retail channels. New avenues of e-commerce, such as daily deals offered by companies like Groupon and LivingSocial, have boosted the sector's momentum since 2010 (Gridley and Company, 2011, p. 6).

The group buying industry has an estimated value of approximately US \$2.7 billion (Kessler, 2011). This translates into roughly 138% growth in 2011 alone (Kessler, 2011). The rapid growth

that both of these companies have experienced in less than five years since their launch dates and the unparalleled pace of adoption and frequency of utilization by consumers, merits an investigation of this emerging business model (Hughes and Beukes, 2012). The purpose of this article is presenting the concept of disruption from the perspective of a Social E- Commerce company that is the leader in group buying daily deals in Puerto Rico. In four years, Social Media Group obtained 80% of the market share of the group daily deal companies in the island. It got sales of \$12.5 million in 2011 and \$31.3 million in 2012. The owners are three brothers of less than 30 years old! The chief of operations is only 26 years old. This is an example of young genius entrepreneurs. The organization of the article is as follows. The first section describes the relevant literature review of disruptive business models, identifying disruptive new businesses and Social E-Commerce. The next section presents Social Media Group. The last section includes concluding comments and recommendations according to Christensen's disruptive theory.

## LITERATURE REVIEW

### Disruptive Business Model

Disruptive business models introduce threats to existing ways, but also opportunities for new sources of competitive advantage (Markides, 2006). Christensen's landmark disruptive theory explains how fringe ideas come to redefine entire markets, not only explains why new businesses emerge and mature companies fall. It actually helps to predict the future success of new ventures more accurately. Raynor (2011) argues that Disruption theory is the only theory which has been statistically proven to be an effective predictive tool. Despite the groaning shelves of books offering advice on innovation, most managers continue to struggle to create the profitable growth their companies need. The reason? The vast majority of management theories base their prescriptions on explanations of the past. When it comes to predicting successful innovation, a willingness to apply the empirical and theoretical rigor of the scientific method to prove what will work in the real world has been notable by its absence (Raynor, 2011). Established companies in industries as diverse as airlines, media and banking are seeing their markets invaded by new and disruptive business models. The success of invaders such as easyJet, Netflix and ING Direct in capturing market share has encouraged established corporations to respond by adopting the new business models alongside their established ones (Markides and Oyon, 2010).

According to Markides and Oyon (2010) the markets that get created by new business models are not necessarily more attractive than existing markets. In addition, the new customers who are attracted to the new business models are not the kinds of customers that established corporations should necessarily pursue. For example, Internet brokerage created a huge market in the United States. Even though this market is big and growing, is it a market that all established brokers ought to go after? Most probably not. According to Markides (2006) researchers examined the theory behind disruptive technological innovation and identified a number of issues that require further and deeper exploration. The business-model innovation is one type of innovation that tends to be disruptive to established competitors. A Business-model innovation is the discovery of a fundamentally different business model in an existing business. Another type of innovation that tends to be disruptive to the established competitors is radical innovation, which creates new-to-the-world products. A radical innovation is disruptive to consumers because it introduces products and value propositions that disturb prevailing consumer habits and behaviors in a major way (Markides and Oyon, 2010). Christensen, Clayton M. (1997) in his original formulation of disruptive theory focused primarily on technological innovation and explored how new technologies came to surpass seemingly superior technologies in a market.

Raynor suggests (2011), that all disruptive innovations stem from technological or business model advantages that can scale as disruptive businesses move upmarket in search of more-demanding customers. These advantages are what enable the extendable core; they differentiate disruption from mere price competition. “A disruptive innovation is an innovation that transforms the complicated, expensive services and products into things that are so simple and affordable that you and I can use them” (Christensen, 2002). According to Christensen, most always at the beginning of an industry, the services or the products that are available are so complicated and expensive that the only people who can participate are people with a lot of money (Richardson, 2010).

Christensen (2012) explains that a disruptive technology is an innovation that transforms a product that historically was so complicated and expensive that only people with a lot of money and a lot of skill had access to owning and using it, into a product or a service that is so much more simple and affordable that a much larger population of people can now own it and use it.” It’s not a breakthrough. The meaning in Christensen’s work is simplicity and affordability.

“A disruptive innovation describes a process by which a product or service initially begins as a simple application and then moves up market, eventually displacing established competitors.” “An innovation that is disruptive allows a whole new group of consumers’ access to a product or service that was originally only accessible to those who could afford it (Christensen, 2002, 2012). The characteristics of disruptive businesses, at least in their initial stages, can include: lower gross margins, smaller target markets, and simpler products and services that may not appear as attractive as existing solutions when compared against traditional performance metrics. Because companies tend to innovate faster than their customers’ lives change, most organizations eventually end up producing products or services that are too good, too expensive, and too inconvenient for many customers. By only pursuing sustaining innovations that perpetuate what historically helped them succeed, companies unwittingly open the door to disruptive innovations (Christensen, 2002, 2012).

#### Identifying Disruptive New Businesses

The disruptive theory developed by Christensen (2002) indicates that most managers understand that significant, new, sustainable growth comes from creating new markets and ways of competing. But few of them make such investments in creating new markets because, first of all, when times are good and core businesses are growing robustly, starting new generations of growth ventures seems unnecessary. Secondly, when times are bad and mature businesses are under attack, investments to create new growth businesses can’t send enough profit to the bottom line quickly enough to satisfy investor pressure for a fast turnaround. The second problem is virtually insurmountable, thus, senior managers must rethink their reluctance to start new ventures in good times. After all, business units that are growing robustly today will become mature, and thus vulnerable, in the future. The only way a corporation can maintain its growth is by launching new growth businesses when the core units are strong. Christensen (2002, 2012) research indicates that “if senior managers pursue this path, and if the growth businesses they start or acquire are truly disruptive, companies will find it less difficult and risky than many have supposed to create wave after wave of new growth.”

According to Christensen’s theory, disruptive innovations appeal to customers who are unattractive to the incumbents. Although they typically involve simple adaptations of known technologies, entrants almost always beat incumbents at this game because established companies

lack the motivation to win. In the day-to-day internal competition for resources and attention within large companies, projects that target large, obvious markets, invariably get priority over disruptive ones. Although every major attractive market that exists today, was at its inception small and poorly defined, just as the major growth markets of tomorrow are small and poorly defined today.

Therefore, companies that want to create new growth businesses should seek disruptive opportunities because industry leaders will not be motivated to pursue them. Christensen indicates that this approach applies to venture-backed startups, cash-rich giants and everything in between. According to Christensen's research, the probability of creating a successful, new growth business is 10 times greater if the innovators pursue a disruptive strategy rather than a sustaining one (Christensen, 1997). Christensen suggests two general strategies for turning ideas into plans for disruptive growth businesses. The first idea requires the creation of a new market that can serve as a base for disruption; the second is based on disruption of the prevailing business model from the low end. The success of each strategy is predicated on managers' ability to shape ideas that conform to a set of litmus tests.

In creating a new market as a base for disruption companies should first search for ways to compete against nonconsumption: people's inability to use available products or services because they are too expensive or too complicated. It's much easier to target potential customers who aren't buying at all than to steal customers from an entrenched competitor. Strategies that disrupt by creating new market applications for entirely new customers should meet the following three litmus tests (Christensen 2002).

Test #1: Does the innovation target customers who in the past haven't been able to "do it themselves" for lack of money or skills? Many of the most successful disruptive growth businesses give people direct access to products or services that had been too expensive or too complex for the mainstream. Test #2: Is the innovation aimed at customers who will welcome a simple product? If the innovation enables a new population of customers to consume for themselves, it can more easily be shaped to pass the second litmus test: The disruptive product must be technologically straightforward, targeted at customers who will be happy with a simple product. Successful disruptive innovators always target customers who welcome simple products.

Test #3: Will the innovation help customers do more easily and effectively what they are already trying to do? It is important that innovators keep in mind one essential fact: At a fundamental level, the things that people want to accomplish in their lives don't change quickly. According to Christensen, if an idea for a new growth business is predicated on customers wanting to do something that hadn't been a priority in the past, because of this stability, it stands little chance of success. To succeed in disrupting the business model from the low end, this second strategy must meet two litmus tests. First, it must target the least-demanding tiers of a market in which prevailing products are so good they "overserve" customers. It means that there must be less demanding customers who would happily buy a good-enough product that is cheaper than those currently available. Second, the product must be made and marketed within a disruptive business model. In other words one that enables the entrant to compete profitably while pricing at deep discounts. According to Christensen, managers who shape a strategy to conform to these litmus tests can successfully create a new growth business within an existing market.

Test #1: Are prevailing products more than good enough? If available products aren't yet good enough, a disruptive innovation whose performance is even lower will not gain any traction in the market. Managers who are shaping a disruptive strategy can determine when a product's performance has overshot what customers can use, by examining rigorously market tier by market

tier and the extent to which customers are willing to pay premium prices for further improvements in the functionality, reliability or convenience of a product or service. According to Christensen, if companies can sustain price increases in a given tier when they introduce an improvement in one of these areas, customers are not yet over served and that tier cannot be disrupted.

Test #2: Can you create a different business model? If the low end of a market is over served and thus, open to disruption, the second test requires managers to craft a new business model. This new business must be able to earn attractive returns at prices that can steal business at the low end. This disruptive business model consists of a cost structure, operating processes and a distribution system in which profit margins are thinner but net asset turns are higher. Thus, it creates the asymmetric motivation needed for disruptive success. Therefore, executives who are shaping a low-end disruptive business model strategy need to be sure it is unattractive to every powerful incumbent.

To make the disruptive strategy work it needs nourishment to survive in the corporate environment. Its resources, processes and values need to be managed carefully. Managers need to determine which resources, processes and values to leverage to help the new business succeed. The counterintuitive point is that managers whom corporate leaders have learned to trust, because of their success in the mainstream business, probably cannot be counted on to lead a radical new venture. It needs a new team of managers with a disruptive thinking mind.

#### Social E Commerce

Web 2.0 is a phenomenon that has transferred internet and the W.W.W. to a social environment, creating platforms where people can interact and create content online (Hajli, 2013). This advancement has also elevated online communities to a level where new business plans can be developed and implemented (Hajli, 2013). The emergence of Web 2.0 applications transferred human approach to the web and interconnectivity among users (Mueller et al., 2011). This interconnectivity among users created a virtual world which enables people to interact on the internet (Mueller et al., 2011). These social interactions, especially in social networking sites (SNSs), created a new stream in e-commerce. This new stream is social commerce. Social commerce is the use of Web 2.0 and social technologies to support interactions in an online context to support consumers' acquisition of services and products on the internet (Liang and Turban, 2011). Marsden (2011) refers to social commerce as “a subset of electronic commerce that involves using social media to assist in online buying and selling of products and services.” Social e-shopping refers to merging shopping and social networking activities through online social media as an application of Web 2.0 in e-commerce (Kang and Johnson, 2013). It is typified as providing online spaces in which consumers collaborate, post product recommendations and reviews, post photos of themselves wearing products, acquire advice from reliable people, seek the right products, make purchases, and form social shopping communities (Kang and Johnson, 2013). Social e-shopping and social commerce are forms of internet-based social media that enable consumers to actively participate in the marketing and selling of products and services in online communities and marketplaces (Stephen and Toubia, 2010).

The convergence of traditional and electronic business models, as well as traditional and new business practices, are changing the face of global business as we know it today. The group buying/local daily deals e-commerce platform represents the collective bargaining power that individuals can leverage to obtain daily deals on local products, services and “experiences” (Hughes and Beukes, 2012). These local discounted deals are distributed via e-mail and the

websites of companies like Groupon and LivingSocial that have established themselves as the sector leaders. In Puerto Rico, the leader in this sector is Gustazos, a subsidiary of Social Media Group. Social E-commerce “is a ‘disruptive’ innovation that is radically changing the traditional way of doing business” (Lee, 2001, p. 349). It has changed the nature of the value propositions that companies now offer to their customers. The convergence of content sites and social networks has resulted in emerging social e-commerce business models (Hughes and Beukes, 2012).

Social E-commerce is growing at five times the rate of traditional retail channels. New avenues of e-commerce, such as daily deals offered by companies like Groupon and LivingSocial, have boosted the sector’s momentum since 2010 (Gridley and Company, 2011, p. 6). The group buying industry has an estimated value of approximately US \$2.7 billion (Kessler, 2011). This translates into roughly 138% growth in 2011 alone (Kessler, 2011). Groupon has taken the established and unquestioned marketing tactic of utilizing discount coupons and brought it swiftly into the 21st century (Hughes and Beukes, 2012). LivingSocial has brought social interaction and life experiences online. In addition, these new technology platforms provide local businesses with access to their closest customers. Customers become co-creators of value. The emergence of daily deal social group buying sites challenges our traditional understanding of what it takes to build a business that is profitable. It is interesting from both a strategy perspective, as well as a development and growth perspective (Hughes and Beukes, 2012).

According to Hughes and Beukes (2012) the term social e-commerce was coined in 2008 when companies, like Facebook, started to receive massive capital injections. Soon, other companies start to emerge when they realized the massive potential buying power of online social groups, thus they focused on capitalizing on this phenomenon. LivingSocial was one of the first companies of this nature to arise. LivingSocial (originally known as Hungry Machine; trading as LivingSocial since 2009) was launched in 2007 as a group buying social commerce site (CrunchBase, 2011). It offers customers “handpicked experiences that can be shared with friends” (LivingSocial.com, 2011).

In December 2010, LivingSocial secured US\$175 million investment from Amazon and an additional US\$8 million investment from Lightspeed Venture Partners (LivingSocial.com, 2012). More than 60 million users and their acquaintances can save as much as 90 percent per day on everything from restaurant meals to hotels and sporting events (CrunchBase, 2011; LivingSocial, 2012; Gridley and Company, 2011). Groupon, the fastest growing and biggest daily deal social group buying site and LivingSocial’s biggest competitor, was launched in November 2008. It features a daily deal on “the best stuff to do, see and buy in more than 500 markets and 44 countries” (Groupon, 2011). Within a year, Groupon had one million adherents and today it has 143 million subscribers around the world (Anonymous, 2011). In the first 18 months it went from zero to US\$500 million in sales.

### Social Media Group

Social Media Group (SMG) is a social media company established in 2009 by the Villares brothers in Puerto Rico. SMG is the parent company of Gustazos, the group daily deals leading company in the island with 80% of the market share in that category and 738,401 Facebook Fans (as of October, 2013). Gustazos, as a group daily deals company sells any kind of discount coupons, from hotels, to Spas, restaurants, adventure tours, etc. The company has 80 employees in Puerto Rico. The organizational environment of Gustazos is open, relaxed and young. The age of its employees fluctuates between 25 and 35 years old. In addition, Gustazos has offices in Jamaica, Tenerife (Canary Islands), Dominican Republic and Canada. According to the Royal

Academy of the Spanish Language Dictionary, “Gustazo” means great pleasure that someone gives himself doing something unusual, or even harmful, thus satisfying an aspiration, his own pride, or a desire for revenge. The basic idea behind Gustazos business is nothing new. The consumers sign up to receive offers from local firms by e-mail each day. The offers range from restaurant meals to dancing lessons, at discounts of up to 90%. What makes Gustazos really stand out, however, are its margins. Gustazos typically charges businesses half of the discounted price of a voucher. This goes a long way towards explaining why the start-up was able to raise \$6 million in 2010, \$12.5 million in 2011, and \$25 million in 2012.

In the group daily deals sector competition is fierce. Almost anyone can set up a daily-deals site. There are hundreds of clones in the United States of America alone, most specializing in certain product categories. To help overwhelmed consumers, there is even a service, The Dealmap, which lists all the daily deals available in a city. Big online firms have begun to enter the fray. In December, 2010, Amazon invested \$175 million in LivingSocial, the market's number two, which is said to be in talks to raise a further \$500 million. In addition, Facebook, the world's biggest social network, will soon start testing local discounts (Anonymous, 2011). Gustazos target market is high end businesses, five star hotels, restaurants, spas, etc. In order to improve its efficiency in the hotel services, Gustazos decided to create Guestserve. This is an independent division that manages everything regarding hotel reservations and payments, once the members buy a hotel coupon.

In addition, Gustazos has SI3D, Search in 3D, a digital engineering division in charge of design. A new division still in development is 360 hang out. This new division records live concerts with special cameras, getting a 360 view of the place. This is going to be a smartphone application. Another microbusiness division is called Merodea.me. This division is dedicated to sell fashion design clothing and accessories from designers of Puerto Rico at great discounts. It works by invitation. Members need to register and get invited to be members, and then they are allowed to buy. JoinaJoin is a vacation rental microbusiness division. Anybody that has a vacation property that wants to rent for short time periods use JoinaJoin services. Hidden and secret places are spotted in JoinaJoin.

All of these divisions even though they work independently, use Gustazos resources and membership. In exchange they share profits with Gustazos according to their contracts. In addition, they take advantage of the dynamic organizational culture of this company. The most valuable asset is the people that work in there. They have passion for what they are doing; all are young and have a sense of responsibility and commitment in their jobs. The company is the leader in this market because the owners know the idiosyncrasy of the Puerto Rican culture. Gustazos is disrupting the market with new ideas. All employees are welcome to bring wildest ideas to break the paradigms of social businesses.

Gustazos' mission statement is “Help and encourage people to experience the best life has to offer.”Gustazos offers to its business clients, “an efficient and cost effective way of obtaining what you've always wanted from publicity: new clients!” (This is the slogan written in their web page). The competitors of Gustazos in Puerto Rico are: Oferta del Día (from El Nuevo Día newspaper), Pero Qué Descuentos, Groupon, Cuponeando, Yupiti, Kiero Kiero, Shop PR and GrooPanda. All these competitors are fighting the 20% market share left by Gustazos.

## CONCLUDING COMMENTS

The purpose of this article is presenting the concept of disruption from the perspective of Social Media Group and its subsidiary Gustazos. A social commerce company that is the leader in group buying daily deals in Puerto Rico. Gustazos strategies of disrupting the market with new divisions, new technology and developing new markets, have made them the leader in group daily deals in Puerto Rico, capturing 80% of the market in only 4 years. Christensen (1997) pointed out that the new markets created by the invading disruptive business model are different from the established market. In the disruptive business theory the most important rule is to adopt a strategy that breaks the rules of the game in that market. This is what Gustazos did. This generalization has been supported by many high-profile examples, including Canon's success in entering the copier market, IKEA's entry in the furniture retail business, Southwest's entry in the airline market and Enterprise's entry in the car rental market (Markides and Oyon, 2010).

Established companies that succeed in entering the new markets do so by developing radically different business models, different from the one that the disrupters are using and different from the one it employs in its established market. They follow the same logic that disrupters used to attack them.

The disrupters companies succeeded in attacking the main market because they used a disruptive business model. If the established corporations want to have the same success, they also need to utilize a disruptive business model to enter the market that the disruptive business model has created. In a sense, they need to "disrupt the disrupter," as Nintendo did in response to Sony and Microsoft in the video games console market. Instead of targeting teenagers and young men as Sony and Microsoft did, Nintendo developed the Wii specifically to target families. Instead of emphasizing functionality, speed and superior graphics (as the PlayStation and Xbox did), the Wii stressed ease of use and simplicity. The limitations of the study are lack of literature on this topic and lack of knowledge regarding other companies with a disruptive business model. There are very few studies of disruptive businesses. In addition, companies are reluctant to give information about their strategies and organizational environment due to competition "copycats." This was the case of Gustazos. Further research could answer questions such as what is the impact of disruptive business models on solving social problems. How many cases like Social Media Group exist in Puerto Rico? What can we learn from them? recommendations according to Christensen's Disruptive Theory In an increasingly volatile world it is imperative to develop a disruption of your own before it's too late to reap the rewards of participation in new, high-growth markets--as Procter & Gamble did with Swiffer, Dow Corning with Xiameter, and Apple with the iPod, iTunes, the iPad, and (most spectacularly) the iPhone (Wessel and Christensen, 2012).

Companies need to create different processes for evaluating and shaping disruptive ideas (Christensen, 2002). The process starts with training. In most companies, the sales, marketing and engineering employees have the great ideas. Employees at all levels should be trained in the language of sustaining and disruptive innovation and understand the litmus tests so that they know what kinds of ideas they should channel into sustaining processes and what kinds they should direct into disruptive channels.

Capturing ideas for new growth businesses from people in direct contact with markets and technologies is far more productive than relying on analyst-laden business-development departments. Front-line employees are also well positioned to scout for small acquisitions with disruptive potential. Christensen recommends, if the price is reasonable, it is often better to acquire a company whose strategy passes the litmus tests than to start from scratch internally.

Creating processes for shaping disruptive business plans ideas with disruptive potential need a destination. Therefore, senior management should create a team at the corporate level that is responsible for collecting disruptive-innovation ideas and molding them into propositions that fit

the litmus tests. The members of this team have to understand the litmus tests at a deep level and use them repeatedly. Such experience will help the team develop a collective intuition about how to shape disruptive business plans (Christensen, 2002). The process for selecting managers needs to employ very different criteria from those used to promote managers within established businesses. The team should coach each new venture's management on techniques like discovery-driven planning that can speed the emergence of a winning strategy (Christensen, 2002). This team must also be the visible and vocal advocate of new growth businesses. (In Gustazos' case management is seriously committed to this principle).

Christensen recommends that twice a year or so, team members should hold refresher training sessions with sales, marketing and engineering personnel in each operating unit, in order to provide updates on how previous ideas had been shaped into plans for high-potential growth businesses, and to describe why other ideas could not pass the litmus tests. Processes are defined only when a group of people does something over and over again. These processes for creating disruptive growth businesses need to be honed in a dedicated group. Christensen proposes that starting successful growth businesses isn't as random and failure-fraught as it has appeared. It is complicated, to be sure, but it only appears random, because managers haven't understood the factors that lead to success or cause failure. Spending too much on the wrong strategy in an attempt to get big fast; putting people with inappropriate experience in charge; violating the litmus tests; and launching growth initiatives in an ad hoc manner when it is already too late; are reasons for failure that can be managed and avoided. The executives who understand the potential pitfalls and work to make the creation of disruptive new businesses a corporate process, an organizational capability that is constantly practiced, can start laying the groundwork for a company future blessed by continuous healthy growth (Christensen, 1997, 2002, 2012).

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## **BIOGRAPHY**

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# THE ANALYSIS OF COMPANY LIQUIDITY USING CCC APPLICATION: EVIDENCE FROM TAIWAN

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## ABSTRACT

*It's extremely important whether or not firms are able to realize the assets within a short period to settle their liabilities when the debts are due. Generally, the most common indicators of measuring liquidity are "current ratio" and "quick ratio". However, the cash conversion cycle period (cash conversion cycle, referred to "CCC"), may be a better approach. This study chooses two Taiwan companies in food industries: a listed company (Uni-president) and a delisted company (Tsin Tsin) to compare the performance of the liquidity indicators. We adopt the financial data of the two companies from 1996 to 2005 (Tsin Tsin was delisted in 2006), to calculate their current ratio, quick ratio and cash conversion cycle respectively. The research results show that CCC indicators indeed better reflect the company's actual short-term debt-paying ability and liquidity.*

**JEL:** G33, G34

**KEYWORDS:** Liquidity, Working Capital, Current Ratio, CCC

## INTRODUCTION

In general, for textbooks related to financial management or financial statements analysis, most people are familiar to the 5-major ratio analysis for financial ratios (Liu and Hsue, 2012; Hsieh, 2013); among which, the first basic and important ratio is the liquidity ratio, which is usually used to measure a company's short-term liquidity. Such application is also known as the "liquidity", and the length of period for realizing a company's assets into cash or settling its liability when the debts are due (Tsao, 2013, 22). A company's liquidity is also related to creditors, investors, securities analysts and accounting auditors. Creditors are usually demanding the borrowing company to maintain a certain level of liquidity. Investors and securities analysts will concern company's ability to acquire cash, and whether or not has sufficient cash to handle the requirement for daily operation. Suppliers will care about company's ability to pay cash to purchase necessary goods. In addition, for external auditors, the evaluation of a company's liquidity is one of important points of auditing accounts.

It is extremely important whether or not a company is able to realize the assets within a short period to settle their liabilities when the debts are due. As an enterprise which is not able to pay off these debts within a short period, then it may cause the conditions of forming bad debts, and encounters the risk of bankruptcy. Generally, the most common indicators of measuring liquidity are "current ratio" and "quick ratio" (also known as "acid-test ratio"). However, different industries may cause big difference in these two ratios, and it is difficult to determine the practical liquidity by directly using the ratio pitch, as well as hard to tell the good or bad according to the ratio description (Cagle et al., 2013). On the other hand, Richards and Laughlin (1980) firstly pointed out that CCC is a better approach than current ratio and quick ratio to evaluate corporate liquidity. It not only measures the outflow and inflow period of working capital, but also considers sales volume (sale scale), thus it is able to correctly evaluate whether a company's working capital management policy is appropriate or not without the scale influence.

A better working capital management policy shall strive for the reduction of CCC (Liu and Hsue, 2012).

This study intends to use practical cases of Taiwan listed companies to show the advantage of CCC approach relative to current ratio and quick ratio, so as to provide general creditors, investors, securities analysts and accounting auditors with deeper understanding of company's liquidity. In addition to this INTRODUCTION, the 2<sup>nd</sup> section is the LITERATURE and METHODOLOGY, in the 3<sup>rd</sup> section it compares the performance of liquidity indicators by focusing on Uni-president and a delisted company (Tsin Tsin), and the last section is the CONCLUSIONS.

## LITERATURE AND METHODOLOGY

In terms of liquidity explorations, some of them stress the relationship between current assets and financing costs, such as Hoshi et al. (1991), John (1993); or the optimal level of current assets or other determinants, such as Schilling (1996), James and Doug (1998), Kim et al. (1998), Chen and Chen (2002), Yang, Ku, and Huang (2007); or the correlation between current assets and company's profitability, such as Jose et al. (1996), Shin and Soenen (1988); or the correlation between financial ratios and corporate governance, such as Yu and Wang (2011), Lin et al. (2012). However, Cagle et al. (2013) pointed out that only using traditional current ratio and quick ratio to measure a company's liquidity and short-term liquidity may mislead the determination of its liquidity, thus they suggested that the CCC is also a useful and auxiliary approach to evaluate a company's liquidity and profitability; but it is usually neglected in accounting-related textbooks in U.S., so does in Taiwan. Therefore, this study follows the approach of Cagle et al. (2013) to choose a company with normal operation and a delisted company due to financial risk and bad operation, and compares their performance of these aforesaid liquidity indicators. This study chooses Tsin Tsin Corporation, a well-known company in foods industry but delisted currently, and Uni-President Enterprises Corporation, a listed company with excellent operation currently, as the research objects of case-control study, and uses the financial data of last decade (1996~2005) before Tsin Tsin's delisting to calculate the current ratio, quick ratio and CCC for these two companies, the detailed calculating equations are as follows:

<b>current ratio= current assets ÷ current liabilities</b>	<b>(1)</b>
quick ratio = (current assets - inventory - prepaid expenses) ÷ current liabilities	(2)
cash conversion cycle (ccc)	
= inventory conversion period + average collection period- payable deferral period	(3)
inventory conversion period (c <sub>1</sub> )= average inventory ÷ (cost of goods sold/365)	(4)
average collection period (c <sub>2</sub> )= average accounts receivable ÷(net sales/365)	(5)
payable deferral period (c <sub>3</sub> )= average accounts payable ÷(cost of goods sold /365)	(6)

Aforesaid (1)~(2), current ratio measure the relative sizes between current assets and current liabilities. Among which, current assets indicate the assets that can be converted into cash in a short period (within one year), including cash and cash equivalents, short-term investments, accounts and notes receivable, other accounts receivable, inventory, prepaid expenses and prepayments, and other current assets; current liabilities are the debts that need to be settled in a short period (within one year), including short-term borrowings, commercial paper payable, accounts and notes payable, expenses payable, advance receipts, other accounts payable, income tax payable, current portion of long-term liabilities and other current liabilities. Due to inventory need to be sold before converting into accounts receivable, and whether inventory is able to be sold or not that cannot be controlled by the company; and prepaid expenses and prepayments (such as prepaid rent or insurance premium) are belonged to the company's current assets, but

mostly will not be converted into cash in the future; therefore, their ranking of liquidity will be low for both these two items. Quick ratio deducts items, including inventory, prepaid expenses and prepayments, with bad liquidity from the current assets, to obtain quick assets, and then calculate the relative number between quick assets and current liabilities.

Theoretically, the main advantage of current ratio and quick ratio is easy to calculate, and covers the effects of all current assets and liabilities; however, its weak point is unable to control the liquidity that is changing with time, and it is difficult to tell whether the higher value of these two ratios are good or bad; for example, higher current ratio and quick ratio, in general, are considered as good, but the ratios are too high to have efficiency in their assets usage. On the contrary, the low current ratio and quick ratio seem to be bad, but such low ratios are probably the result of effective application for working capital (Cagle et al., 2013). Equations (3)~(6) are described as follows:

1. Inventory Conversion Period ( $C_1$ ): it measures an average time needed to turn a company's inventory into sales volume. Generally speaking, the  $C_1$  period is shorter, the company's liquidity is better. If the product handling time from inventory to sales is too long, then it will reflect to the day number of CCC, that is, such company has a bad liquidity. On the other hand, the current ratio is a static equation, which contains inventory and accounts receivable into current assets; thus, it is difficult to see such liquidity level by using current ratio only.
2. Average Collection Period ( $C_2$ ): it measures the time needed to convert a company's accounts receivable into cash. After products sold, if the handling time of converting accounts receivable into cash is too long, then it will reflect to a more day number of CCC, that is, such company has a bad liquidity. On the contrary, it is difficult to see such liquidity level by using current ratio (and quick ratio) only.
3. Payable Deferral Period ( $C_3$ ): it measures the time needing to defer the account payable (without paying interest) for a company. The longer time of this period will be more beneficial to such company's working capital. But the reduction of current ratio (and quick ratio) caused by the deferral accounts payable, may make people feel bad about such company's liquidity instead.

Cash Conversion Cycle (CCC) is the summarization of these three aforesaid periods, which indicates the period of all operating cycle for cash inflow and outflow of a company from purchasing raw materials, settling cash expense resulted from all related production costs, to the product sales, yield of accounts receivable and converting accounts receivable into cash. In theory, the smaller CCC value, the better working capital management, if a company has an excellent working capital management, then its CCC value may even be negative.

### Ratios Analysis

#### Introduction to Tsin Tsin and Uni-President

<Tsin Tsin> Tsin Tsin Corporation founded in 1984 with a capital of NT\$ 600,000. Mr. Wang, Chien-lang is its president. It initiated from a MSG factory at Dehua Street, Taipei City and originally named as Pacific Chemical Industry Co., Ltd. In 1956, it increased a capital of NT\$ 3.5 million and merged Tunghai Chemical Industry Co., Ltd.; in 1959, it increased a capital of NT\$ 5 million, and epoch-making innovated manufacturing method of MSG, and renamed as Tsin Tsin MSG Co., Ltd.; in 1964, it increased a capital of NT\$ 30 million, and launched its stocks in the public market; in 1966, it increased a capital of NT\$ 16 million, and expanded its exporting

business, developed the canned foods market, built canned foods factory in Changhua, integrated the 2<sup>nd</sup> factory in Taipei with the 1<sup>st</sup> factory to implement a consistent operation of producing MSG, and then renamed as Tsin Tsin Food Industrial Corporation. In 1977, it increased a capital of NT\$ 200 million, and expanded its Changhua factory and replaced semi-automatic juice production equipment with fully automatic equipment, as well as added automatic retort pouch packing machine system. In 1978, it increased a capital of NT\$ 150 million, and continuously expanded its production equipment, and newly added the production equipment for ice and dairy products, freezing equipment and cold storage. In 1995, Changhua 1<sup>st</sup> factory obtained the GMP certificate for its asparagus juice product.

Tsin Tsin once listed as the top three foods factories together with Wei Chuan and Ve Wong in Taiwan, and even occupied the top rank of stocks in food industry then. During its blooming, the annual production was more than 100 million cans, and the number of employees was exceeded 1400 personnel. In 1998, it reinvested in Hsieh Tsin construction Co., Ltd., and engaged in the construction of operation of leisure facilities; in 2005, it developed dairy products with launching Green Mountain Ranch Milk Yogurt. However, due to the loss in the reinvestment, in 2005, president Wang, Chien-lang and his younger brother Wang, Chien-hua have been accused to continuously arrange many false trades of real estate during 1997 to 2004 to embezzle about NT\$ 800 million from their family businesses, Tsin Tsin and Union Leather & Printing, and their checks were even bounced on July 22<sup>nd</sup>, 2005, and then Tsin Tsin is delisted in June 2006 (Chen, 2005, Pang, 2011, Yan, 2005).

<Uni-president> Established in 1967, Mr. Wu Hsiu-Chi was the first president of Uni-president, and Mr. Kao, Chin-Yen, the first general manager, who formally led Uni-president Corporation to build flour mill and fodder factory at Yongkang Village, Tainan County. In 1969, it increased a capital of NT\$ 16 million, built foods factory to launch the production of Uni-president instant noodles; in 1974, it invested in Ton Yi Industrial Corp., and increased capital to NT\$ 256 million. GM Mr. Kao, Chin-Yen was awarded the 4<sup>th</sup> Top 10 Entrepreneurs in Taiwan; in 1975, it established the dairy product department, and Uni-president awarded as the 1<sup>st</sup> To 10 Companies in R.O.C.; in 1978, it established HQ factory at Chongli to produce bread, cake and desert; in 1979, it signed contract with Southland Corporation to introduce the operating techniques of 7-ELEVEN, and then opened 14 Uni-president Convenience Stores at the same time island-wide; in 1987, it became a listed company; in 1996, awarded by “Common Wealth” Magazine as the “Most Admired Companies in Taiwan”; in 2012, awarded as the 2<sup>nd</sup> place of “2012 The most attractive company for the new generation- Top 100” by “Cheers” Magazine, “The benchmarking companies of digital service in 2012” by “Business Next” Magazine, and “2012 Most Admired Companies in Taiwan” by “Common Wealth” Magazine. Currently, Mr. Kao, Chin-Yen is its chairman, Mr. Alex C. Lo is its president, and its capital is NT\$ 51.542 billion.

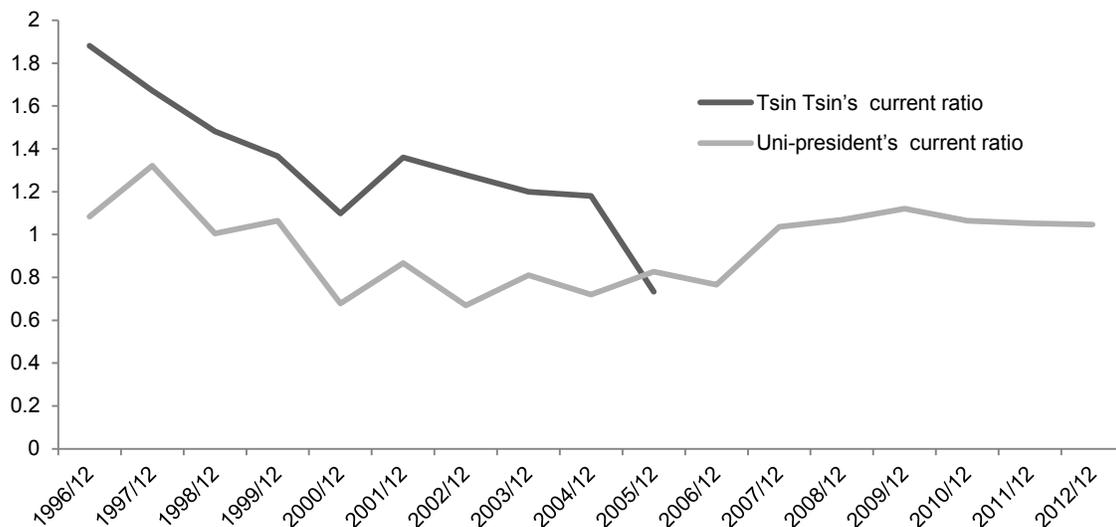
#### Comparison of Liquidity Between Tsin Tsin and Uni-President

We use data from Taiwan Economic Journal Database to compare the data of aforesaid equations (1)~(6) for the financial statements between Uni-president and Tsin Tsin within 10 years (1996~2005) before Tsin Tsin’s delisting (June 2006). First, the data shows that during this period (1996~2005), Tsin Tsin’s average current ratio is 1.32, which is higher than 0.90 of the excellent Uni-president, as well as their quick ratios, such as during this period, Tsin Tsin’s quick ratios are roughly higher than Uni-president’s (both average quick ratios are 0.97 and 0.58, respectively, refer to the following Figure 2 and Table 1); and it seems that Tsin Tsin’s liquidity is better than Uni-president’s. However, at the same period, Uni-president’s cash conversion cycle (CCC) is only 43.8 days, but 107 days for Tsin Tsin, refer to the following Figure 3 and Table 2. If based on the CCC indicators, Uni-president’s liquidity is significantly better than Tsin Tsin’s. Further, to view their subitems: Uni-president’s Inventory Conversion Period ( $C_1$ ) is 27

days shorter than Tsin Tsin's average; Uni-president's Average Collection Period( $C_2$ ) is 71 days shorter than Tsin Tsin's; but Uni-president's Payable Deferral Period( $C_3$ ) is 23 days which is 35 days shorter than Tsin Tsin's 58 days, it may be caused by Uni-president's management policy of accounts receivable (Wei Chuan's same  $C_3$  is 54 days, Ve Wong is 37 days), thus it is worthy to carry out follow-up research. In summary, CCC indicators show that Uni-president's liquidity is significantly better than Tsin Tsin, but for the indicators of current ratio and quick ratio show that Tsin Tsin's liquidity is better than Uni-president's. According to the fact of delisting for Tsin Tsin in 2006 due to its financial issues, thus the CCC indicators can more certainly reflect the actual short-term liquidity and liquidity.

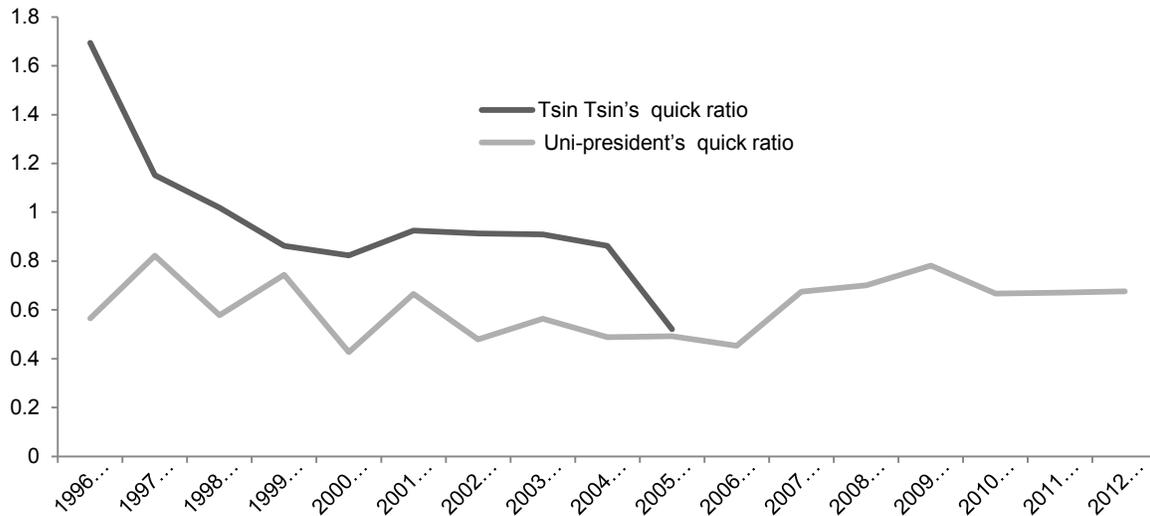
In addition, the data show that during 2006~2012, Uni-president's CCC value is continuously decreased to an average of 31 days, which is mainly the quick decrease of Average Collection Period ( $C_2$ ) with an average decrease of 10 days; thus, it can tell that Uni-president has more effective accounts receivable management. However, the CCC approach also has some limitations, including current liabilities, such as interest, wage and tax that are not considered in CCC, and these issues may cause significant effect on its liquidity. On the contrary, the current ratio indicators have considered all current liabilities. Therefore, it is better to observe the indicators of both current ratio and CCC to evaluate a company's liquidity. Since investors, creditors, suppliers and accounting auditors need to understand a company's working capital management, being familiar to CCC indicators should make important benefit for them to understand a company's liquidity.

Figure 1: The Comparison of Current Ratios Between Tsin Tsin and Uni-President



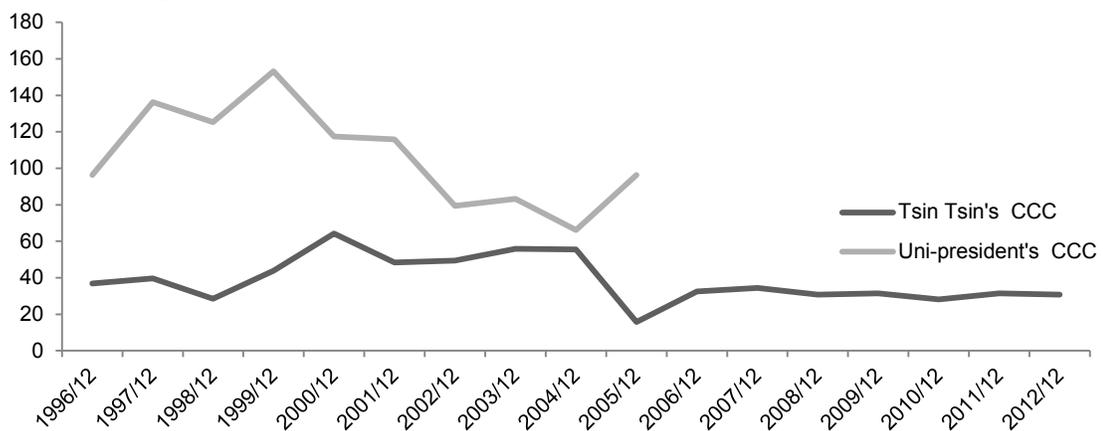
This figure shows the comparison of current ratios between Tsin Tsin and Uni-president Tsin Tsin's current ratio is higher than Uni-president's.

Figure 2 Comparison of Quick Ratios Between Tsin Tsin and Uni-President



This figure shows the comparison of quick ratios between the two companies. Tsin Tsin's quick ratio is higher than Uni-president's.

Figure 3: the Comparison of CCC Between Tsin Tsin and Uni-President



This figure shows the comparison of CCC between the two companies. Tsin Tsin's CCC is longer than Uni-president's.

## CONCLUSIONS

We use Taiwan Economic Journal Database to compare Uni-president's and Tsin Tsin's financial statements within 10 years (1996~2005) before Tsin Tsin delisting in June 2006 for the current ratio, quick ratio and CCC performance. First, the data shows that during this period (1996~2005), Tsin Tsin's average current ratio is 1.32, which is higher than 0.90 of the excellent Uni-president, as well as their quick ratios, such as during this period, Tsin Tsin's quick ratios are roughly higher than Uni-president's (both average quick ratios are 0.97 and 0.58, respectively, refer to Figure 2).

It seems that Tsin Tsin's liquidity is better than Uni-president's. However, at the same period, Uni-president's cash conversion cycle (CCC) is only 43.8 days, but 107 days for Tsin Tsin; thus, the CCC indicators show that Uni-president's liquidity is significantly better than Tsin Tsin's. According to the fact of delisting for Tsin Tsin in 2006 due to its financial issues, thus the CCC indicators can more certainly reflect the actual short-term liquidity and liquidity.

However, the CCC approach also has some limitations, including current liabilities, such as interest, wage and tax that are not considered in CCC, and these issues may cause significant effect on its liquidity. On the contrary, the current ratio indicators have considered all current liabilities. Therefore, it is better to observe the indicators of both current ratio and CCC to evaluate a company's liquidity. Since investors, creditors, suppliers and accounting auditors need to understand a company's working capital management, thus it is important to enhance their understanding of CCC indicators, which should make important benefit for them to understand a company's liquidity.

Table 1: Comparison Between Current Ratio and Quick Ratio For Tsin Tsin and Uni-President

Year/Month	Current Ratio			Quick Ratio		
	Tsin Tsin	Uni-president		Tsin Tsin	Uni-president	
1996/12	1.88	1.08		1.69	0.56	
1997/12	1.67	1.32		1.15	0.82	
1998/12	1.48	1.00		1.02	0.58	
1999/12	1.37	1.06		0.86	0.74	
2000/12	1.10	0.68		0.82	0.43	
2001/12	1.36	0.87		0.92	0.67	
2002/12	1.28	0.67		0.91	0.48	
2003/12	1.20	0.81		0.91	0.56	
2004/12	1.18	0.72		0.86	0.49	
2005/12	0.73	0.83		0.52	0.49	
2006/12	delisted	0.77		delisted	0.45	
2007/12		1.04			0.68	
2008/12		1.07			0.70	
2009/12		1.12			0.78	
2010/12		1.06			0.67	
2011/12		1.05			0.67	
2012/12		1.05			0.68	
1996~2005 average	1.32	0.90		0.97	0.58	
2006~2012 average	-	1.02		-	0.66	

This table shows the comparison of current ratio and quick ratio for Tsin Tsin and Uni-president during 1996–2005. The figures are computed from the database of Taiwan Economic Journal (TEJ).

Table 2: Comparison Between Tsin Tsin's and Uni-President's CCC

Year/Month	Tsin Tsin				Uni-president			
	CCC	Inventory Conversion Period	Average Collection Period	Payable Deferral Period	CCC	Inventory Conversion Period	Average Collection Period	Payable Deferral Period
1996/12	96.28	81.68	81.23	66.63	36.86	39.07	19.94	22.15
1997/12	136.34	98.43	122.54	84.63	39.63	43.84	20.11	24.32
1998/12	125.34	82.64	115.63	72.93	28.47	39.31	16.74	27.58
1999/12	153.19	96.21	122.57	65.59	43.80	46.57	27.24	30.02
2000/12	117.40	67.20	91.85	41.65	64.20	51.31	32.90	20.01
2001/12	115.93	69.56	98.98	52.61	48.36	38.85	28.27	18.75
2002/12	79.35	52.82	76.34	49.81	49.50	38.66	33.90	23.06
2003/12	83.32	49.54	88.45	54.67	55.84	41.92	37.13	23.21
2004/12	66.26	37.75	72.18	43.67	55.45	40.29	34.04	18.88
2005/12	96.35	41.99	101.42	47.06	15.76	27.16	13.65	25.05
2006/12	delisted	delisted	delisted	delisted	32.44	41.45	17.86	26.88
2007/12					34.48	41.31	17.18	24.01
2008/12					30.74	42.06	16.08	27.40
2009/12					31.49	42.86	16.57	27.94
2010/12					28.21	40.13	16.25	28.17
2011/12					31.42	43.06	17.04	28.67
2012/12					30.73	41.68	16.57	27.52
1996~2005 average	106.98	67.78	97.12	57.92	43.79	40.70	26.39	23.30
2006~2012 average	-	-	-	-	31.36	41.79	16.79	27.23

This table shows comparison of CCC for Tsin Tsin and Uni-president during 1996–2005. The figures are computed from the database of Taiwan Economic Journal (TEJ), and the units of the figures are days

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# THE EFFECTS OF FINANCIAL FACTORS ON FOREIGN DIRECT INVESTMENT AND RESEARCH & DEVELOPMENT

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## ABSTRACT

*This study examines the effect of financial factors upon the foreign direct investments (FDI) and research & development (R&D) expenditure of Taiwanese listed companies. The internal financial factors include business performance, equity growth rate, gross margin and financial slack, etc. First, test how the internal factors affect FDI, and further explore the relationship between FDI and R&D. For a firm with more financial resources, higher operating leverage and higher equity growth, the firm will have more foreign direct investment. On the other hand, profitability and short-term financial resources as denoted by quick ratios can positively affect a firm's decision of R&D expenditure. In addition, R&D expense ratios have significantly negative association with foreign direct investment, where long-term financial resources are concerned. That means when a firm's investment in R&D expenditure increases, it may decrease future foreign direct investment. Overall, FDI and R&D are affected by financial factors such as debt ratio, and profitability. FDI's are more affected by potential financial resources while R&D's are also affected by current financial resources.*

**JEL:** F56, G31, M2

**KEYWORDS:** Financial Factors, Foreign Direct Investment, R&D Expenditures, Cash Dividend Ratios, Quick Ratio, Debt Ratio

## INTRODUCTION

This study aims to examine how financial factors affect foreign direct investment (FDI) and research & development (R&D). The literature provides various determinants of FDI and R&D from different perspectives. This study investigates FDI and R&D from the perspective of firm-level financial factors. Due to our previous studies (e.g. Lin, 2011), this study will rely more on resource-based view of the firm (Penrose, 1959), rather than the behavioral theory of the firm (Cyert and March, 1963), to empirically test the data in the Taiwan stock market to study a firm's FDI and R&D behavior and the relationship between FDI and R&D. This is an interesting topic for researchers or practitioners who are concerned about the foreign investment and innovation behaviors of the listed companies in Taiwan with FDIs in China. Conventional FDI theories use strategic or operational variables to explain FDIs. In contrast, Choi and Tsai (2006) shows that financial factors are no less important in explaining the prevailing FDI phenomena than strategic or operational variables. According to Lin (2011) and Chen and Miller (2007), corporate performance and financial slack plays an important role in FDI and R&D decisions. Dunk and Kilgore (2004) also show that an emphasis on financial factors in setting the size of R&D budgets is becoming a competitive necessity. According to the literature, internal financial factors include business performance, equity growth rate and financial slack, etc. This study also focuses on the relationship between FDI and R&D. We explore into the following issues: How financial factors

of firms affect their FDI and R&D expenditure? What kind of financial resources are more likely affect FDI or R&D?

## LITERATURE

The behavioral theory of the firm (Cyert and March, 1963:127) emphasizes the roles of the organizational processes of performance evaluation, search, and decision making. Applying the behavioral theory, some researchers (e.g. Greve, 2003; Chen and Miller, 2007) to examine the behavior of firms. Chen and Miller (2007) finds that in addition to firm-specific R&D investment patterns, R&D intensity also depends on a firm's situations, including performance relative to aspirations, proximity to bankruptcy, and financial slack. In contrast, resource-based view of the firm (Penrose, 1959) suggests that sustainable competitive edge comes from employing the resources belonged to a firm. The firm is either viewed as a assembly of productive resources (Penrose, 1959) or a composition of tangible and intangible resources (Wernerfelt, 1984). In general, organizations with excess resources may tend to have more searches for innovation or investment opportunities. Greve (2003) suggests that organizations with spare resources have greater opportunities for experimentation and also have managerial patience needed to perform searches (Greve, 2003). Search triggered by abundant slack, like financial resources, are called slack search.

With regards to financial factors, Choi and Tsai (2006) adopt the integrated model with both strategic and financial factors and shows that the integrated model is superior to either component model in explaining FDIs. They also indicate financial factors are no less important in explaining FDI phenomena than strategic or operational variables. Lin (2011) and Chen and Miller (2007) shows that corporate performance and financial slack plays an important role in FDI and R&D decisions. Dunk and Kilgore (2004) review the published literature and indicate that an emphasis on financial factors in setting the size of R&D budgets is becoming a necessity for competition. In addition, using a sample of Korean firms in R&D-intensive industries between 1998 and 2003, Kim, Kim, and Lee (2008) find that that financial slack has an inverted U-shaped relationship with R&D. The relationship may vary depending on the presence of different types of owners.

As for the interrelationship between FDI and R&D, Lin and Yeh (2005) suggest that the two are mutually dependent and should be treated as endogenous variables in empirical studies. Their study focuses on the mutual effect of FDI and R&D in Taiwan's electronics industry, and shows that FDI and R&D are positively related and reinforce each other. They also suggest that the difference in R&D expenditures between FDI and non-FDI firms can be further examined. Using 1989-1996 panel data of FDI by Taiwan's SMEs, Li and Hu (2004) find that FDI reinforces the marginal benefit of R&D and that the R&D expenditure of multinational SMEs is far above that for domestic SMEs. On the other hand, Co (2000) suggests that the increase in R&D intensity of multinational firms may be attributed to foreign firms' R&D activities to acclimatize to local conditions. By dividing firms into R&D and non-R&D groups, Chuang and Lin (1999) find that local technology purchase and outward foreign investment are possible substitutes to R&D activity. Their empirical results suggest that the significant effect of industry-wide technology spillovers play an essential role.

### Data

We obtain the data for this study from the database of the Taiwan Economic Journal (TEJ), which collects operational and financial information for all publicly traded companies in Taiwan. This study examines the listed companies since they are requested by the Taiwan government to disclose their investments in China. Since the Taiwan government still prohibited the financial

industry from investing in China during some of the study period, we select manufacturing companies listed in TSE and OTC only. To examine FDI and R&D behavior over time, we use data from 2001 to 2011. We exclude extreme outliers that were more than four standard deviations beyond the yearly medians of the variables. The Regression model is as follows:

$$FDI_{t+1} = a_0 + a_1FDI_t + a_2RD_t + a_3YOY-TE_t + a_4QR_t + a_5L_t + a_6TAT_t + a_7DOL_t + a_8CD_t + a_9GM_t + a_{10}ROA_t + a_{11}ROE_t + \varepsilon_t \quad (1)$$

$$RD_{t+1} = a_0 + a_1RD_t + a_2FDI_t + a_3YOY-TE_t + a_4QR_t + a_5L_t + a_6TAT_t + a_7DOL_t + a_8CD_t + a_9GM_t + a_{10}ROA_t + a_{11}ROE_t + \varepsilon_t \quad (2)$$

where  $FDI_{t+1}$ =future foreign investment,  $FDI_t$ =current foreign direct investment,  $RD_{t+1}$ =future R&D expense ratio,  $RD_t$ =current R&D expense ratio,  $YOY-TE_t$ =current equity growth rate,  $QR_t$ =Quick ratio,  $L_t$ =current debt ratio,  $TAT_t$ =current total asset turnover,  $DOL_t$ =current operating leverage,  $CD_t$ =current cash dividend ratio,  $GM_t$ =current gross margin,  $ROA_t$ =current return on asset (ROA),  $ROE_t$ =current return on equity (ROE)

## EMPIRICAL RESULTS AND ANALYSES

This section analyses how R & D expenditure and financial ratios affects the future foreign direct investment of manufacturing companies listed in TSE, and how foreign direct investment and financial ratios affects future R & D expenditures. We adopt an integrated cross-sectional data and do stepwise regression upon some important financial factors, and the regression results are briefly summarized in this section. According to Table 1, the results show that the coefficient upon the equity growth rate, operating leverage, cash dividend yield and return on assets are significant, while the quick ratio is not significant. Research and development expense ratio (R&D) in Model2, Model3, Model4 are not significant, but after adding debt ratio as a variable, R&D become significant; debt ratio in Model5, Model6, Model7 are significant, but after adding the return on assets (ROA), debt ratio becomes insignificant at the 5% level (still significant at the 10% level). Therefore, the equity growth rate, operating leverage and ROA have significantly positive association with future FDIs, while R&D, debt ratio and cash dividend payout ratio have significantly negative association with future FDIs.

Table 1: Regression of Future Foreign Direct Investment Upon R&D and Financial Factors

variables	model1	model2	model3	model4	model5	model6	model7	model8
$fdi_t$	0.2855*** [0.0094]	0.0986*** [0.0129]	0.0897*** [0.0129]	0.2899*** [0.0129]	0.2880*** [0.0129]	0.2768*** [0.0132]	0.2714*** [0.0134]	0.2686*** [0.0134]
$rd_t$		-0.0001 [0.0001]	-0.0001 [0.0001]	-0.0001 [0.0001]	-0.0001* [0.0001]	-0.0001* [0.0001]	-0.0002** [0.0001]	-0.0002* [0.0001]
$yoyle_t$			0.0000*** [6.6800]	0.0000*** [6.6900]	0.0000*** [6.6900]	0.0001*** [6.6100]	0.0001*** [0.0000]	0.0000*** [0.0000]
$qr_t$				2.7500 [1.5500]	1.4600 [1.6600]	2.5800 [1.8600]	3.1400 [1.8200]	2.7300 [1.8200]
$l_t$					-0.0001* [0.0000]	-0.0001* [0.0000]	-0.0001** [0.0000]	-0.0000 [0.0000]
$dol_t$						0.0000*** [3.8100]	0.0000*** [3.7100]	0.0001*** [3.7000]
$cd_t$							-0.0001*** [0.0001]	-0.0001*** [0.0001]
$roa_t$								0.0002*** [0.0000]
<b>n</b>	4989	4987	4984	4984	4984	4767	4629	4629
<b>f</b>	502.93	266.53	198.23	149.53	120.67	94.53	73.57	67.41
<b>r<sup>2</sup></b>	0.0916	0.0966	0.1067	0.1072	0.1081	0.1065	0.1003	0.1045
<b>adj.r<sup>2</sup></b>	0.0914	0.0963	0.1061	0.1065	0.1072	0.1053	0.0989	0.1030

This table shows the regression of future foreign direct investment upon R&D and financial factors. The regression model is as follows:  $FDI_{t+1} = a_0FDI_t + a_1RD_t + a_2YOY-TE_t + a_3QR_t + a_4L_t + a_5DOL_t + a_6CD_t + a_7ROA_t + \varepsilon_t$ . \* indicates significance at the 5% level \*\* indicates significance at the 1% level \*\*\* denote significance at the 0.1% level. The figures in bracket denote standard errors.

Once the debt ratio, which indicates future borrowing ability or long-term financial capacity, is controlled, R&D shows a competitive relationship with future FDIs. In addition, the fact that the inclusion of ROA changes the significance of debt ratio indicates that ROA, current profitability, seems to be even more important than debt ratio, long-term financial capacity, for the decision of launching future FDI. According to Table 2, the results show the coefficients upon quick ratio, debt ratio and return on equity (ROE) are significant, and those upon foreign direct investment, total asset turnover, cash dividend yield and gross margin are not significant. Therefore, quick ratio and ROE have positive association with future R&D, while debt ratio is negatively associated with future R&D expenditures. Accordingly, we may infer that current or short-term financial resources (indicated by quick ratio), long-term financial capacity (indicated by debt ratio) and current profitability (indicated by ROE) will affect the decision of future R&D.

Table 2: Regression of Future R&D Expenses Upon Foreign Direct Investment and Financial Factors

variables	model1	model2	model3	model4	model5	model6	model7	model8
$rd_t$	0.2531*** [0.0059]	0.8470***	0.8410***	0.8306***	0.8307***	0.8766***	0.8759***	0.8776***
$fdi_t$		-0.5910 [1.2762]	-0.5758 [1.2727]	-1.1944 [1.2698]	-1.1875 [1.2703]	-0.9908 [1.3104]	-0.8268 [1.3161]	-0.9771 [1.3166]
$qr_t$			0.0001*** [0.0001]	0.0003* [0.0016]	0.0003* [0.0001]	0.0003* [0.0001]	0.0003* [0.0001]	0.0003* [0.0001]
$l_t$				-0.0165*** [0.0023]	-0.0168***	-0.0132***	-0.0130***	-0.0115***
$tat_t$					0.0244 [0.0499]	0.0196 [0.0520]	0.0181 [0.0520]	-0.0022 [0.0526]
$cd_t$						-0.0029 [0.0124]	-0.0034 [0.0124]	-0.0094 [0.0126]
$gm_t$							0.0003 [0.0002]	0.0002 [0.0002]
$roe_t$								0.0031** [0.0012]
$n$	7098	5023	5023	5023	5020	4873	4873	4873
$f$	1806.2	6253.3	4201.2	3193.3	2547.3	1969.0	1688.2	1479.7
$r^2$	0.2029	0.7136	0.7152	0.7180	0.7175	0.7083	0.7084	0.7088
$adj.R^2$	0.2028	0.7135	0.7150	0.7177	0.7173	0.7079	0.7080	0.7083

This table shows the regression of future foreign direct investment and financial factors. The regression model is as follows:  $RD_{t+1} = a_0RD_t + a_1FDI_t + a_2QR_t + a_3L_t + a_4TAT_t + a_5CD_t + a_6GM_t + a_7ROE_t$ . \* indicates significance at the 5% level \*\* indicates significance at the 1% level \*\*\* denote significance at the 0.1% level. The figures in bracket denote standard errors.

## CONCLUSION

The empirical result show that financial factors such as equity growth rate, operating leverage, and ROA have significantly positive associations with future foreign direct investments. Therefore, operating leverage and profitability can positively affect the decision of a firm's long-term investment such as FDI. If a company increase its equity in the past few years, the firm may be more likely to launch more FDIs. The reason may well be that such firms have accumulated enough financial resources, making them more confident to make future investment and undertake possible risk. In contrast, R&D expense ratio, debt ratio, and cash dividend ratio have significantly negative association with foreign direct investment. The underlying rationale may be that the more investment in R&D expenses or more payouts in cash dividends, the fewer financial resources can be used for foreign direct investment; while the fewer investments in R&D or fewer payouts in cash dividend, the more investments in FDI firms can have. In addition, lower debt ratio means higher potential financial resources, and may lead to more future foreign direct investment. Among these, the competitive relationship between R&D and FDI occurs when the long-term financial resources, indicated by debt ratio, is concerned.

On the other hand, quick ratio, profit margin and return on equity are positively associated with future R&D expense; whereas, foreign direct investment, debt ratio and cash dividend ratios are

negatively associated with future R&D expense. Among these, only quick ratio, debt ratio, and ROE are significant. This means the decisive factors of R&D may lie in financial resources of a firm. Meanwhile, profitability also positively affects the decision of R&D expenditure. Overall, FDI and R&D are affected by financial factors such as quick ratio, debt ratio, and profitability. FDIs are more affected by potential financial resources while R&Ds are also affected by short-term financial resources.

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# STATISTICAL MODEL PREDICTING FREIGHT TRANSPORT FUEL EFFICIENCY

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## ABSTRACT

Fuel spending is a category of greater impact in the carrier companies' costs structure. In Mexico, this represents up to 32.5% of the operating variable cost per kilometer of these companies. Determination of its spending is controversial, given that the method to establish a standard entails inconsistencies; ordinarily that referred by the vehicle manufacturer is considered, which is not helpful under the actual operation conditions, because of its theoretical determination and under ideal conditions. A view of the relevant literature indicates lines of inquiry generating models considering a maximum of three explicative variables, discriminating others relevant such as: soil contour and slopes, types of trailers and driving techniques. This article offers the design of a statistical model based on a multiple regression to predict standard fuel efficiency, considering the most affected factors and actual operating conditions seen in the Mexican transportation sector.

**KEY WORDS:** Transportation, Fuel Efficiency, Statistical Model, Multiple Regression.

**JEL:** C01, C03, C09

## INTRODUCTION

Transport is a key element in the supply chain, in Mexico constitutes a special window of opportunity, given the competitive edge representing its geographical location and the times of trade in regard to its main commercial partner: the United States of America. The economic relevance of this service sector in Mexico is evident, because it represents 7.0% of the Gross Domestic Product. Likewise, the cargo and passengers transportation jointly represent 76% of the gross value added of the transportation activity (INEGI, 2011).

Against this background, the transportation sector must focus its efforts in an effective management of the moneys allowing it to strength its economic and operating structure, by representing a competitive advantage. One of the most important inputs in this area is the fuel, which represents up to 32.5% of the variable operating cost per kilometer of a freight company, (Jaime, Harald, & Newel, 2012).

Efficiency of the fuel is a controversial topic in the field of transportation, due to the inconsistencies found with regard to the fuel control and measurement methods, let alone for establishing standards. Ordinarily, the standard considered by the decision makers of the freight companies is that referred by the vehicle manufacturers but the conditions for its determination is unknown as well, the standards used for experimental evaluation are specific of the country from which the vehicle comes from, and no frequency for updating has been established (Fuentes J, 2002), therefore it is almost impossible to obtain it because of its full theoretical ground and under ideal conditions.

Considering the aforementioned background, this work reflects the progress in the development of a global statistical model to determine the fuel efficiency, taking into account most of the factors affecting consumption (mechanical characteristics of the unit, road, operator's ability and cargo) under quantitative procedures (Design of Experiments and Analysis of Multiple Regression) which may become a management tool for company's officers of the sector, allowing them to make objective decisions.

## LITERATURE REVIEW

There are multiple factors affecting the fuel consumption which have been separately studied and it has been determined how much fuel is capable to be saved up if parameters of any of these variables are modified to make such expense as effective as possible:

Technical-economic level of competence of the operator to drive the unit. According to an investigation using experiments design, there was shown an improvement of 22.5% of efficiency. (Correa, Codollo, & Salazar, 2010)

Unit's mechanical features. Selection of the power mechanism (engine, transmission, differential, tires and clutch) of the carrier's units directly affects the unit's performance and therefore the fuel economy. (Morales, Cervantes, & Lozano, 2010).

Operation conditions. This category entails, the type of road, size of the freighted cargo, maintenance policies, term of the service cycle, fleet standing. (Rafael, Sánchez, & Guzman, 1995).

Environmental Conditions. Agents such as weather and the road traffic flow affect the fuel efficiency. By way of example, there has been determined that by travelling upwind the fuel consumption increases due to the aerodynamic effects for up to 8% with 18 km/h windflaws, and up to 18% with 36 km/h windflaws on a cab deflector vehicle. A drop of atmospheric temperature of 10 °C increases consumption in about 4% (IDEA, 2005).

Literature regarding investigations focused on fuel consumption forecasts, which is scarce, shows that the models resulting from such researches discard major explanatory variables such as winding travelling paths, slopes, trailers (Pérez, Fuentes, Codollo, & Toledo, 2010), as well as driving procedures and soil contour (Posada, 2012); likewise, there have been found a lot of deviations between the estimations of some models (Highway Development and Management) and the actual results (Altamira, 2003). On the other hand, fuel consumption predictive models arisen from the scientific research only consider one or a maximum of three explanatory variables.

## PROPOSED CONCEPTUAL MODEL

This work is supported in the use of a powerful statistical method for modeling, and subsequently predict behavior of an interesting effect (fuel efficiency) in terms of several significant factors both quantitative and qualitative (weight, type of way, differential step, unit's seniority, coupling mode, etc.): the multiple linear regression [1] (Gutiérrez y De la Vara, 2008).

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k + \varepsilon \quad (1)$$

A multiple linear regression model is feasible to be obtained by means of arranged experiments, observation of non-controlled phenomena or historical records, being the last the application case addressed in this research. Products of the multiple linear regression application involving pretended variables (type of coupling, type of road) are the following:

1. Statistical model (regression equation)
2. Variation analysis
3. Correlation coefficient and multiples determination (R and R<sup>2</sup>)
4. Hypothesis tests in multiple linear regression

## METHODOLOGY

This investigation was developed in a Mexican carrier company rated as the largest of this sector, with a fleet comprised by 176 units.

The historical information of a sample of 500 travels was made by such units within the period of June 1<sup>st</sup>, 2013 and June 31<sup>st</sup>, 2013, to obtain the multiple linear regression models with pretended variables. The activities made for such research were the following:

1. Design and implementation of an instrument to obtain the company's energy performance.
2. Selection of explanatory variables to build the statistical model.
3. Obtaining of historical information of the journeys' sampling, and its validation by means of the company's records consultation such as driving test reports, unit's technical specifications, travels history, maintenance logs, personnel files and engine computer reset sheets, among others.
4. Obtaining of preliminary model.

## RESULTS

There were selected as pretended variables of the fuel efficiency: freighted weight, differential step (power train configuration), coupling mode, type of road, standing and engine brand. Table 1 outlines level or treatment where factors may appear.

Table 1. Detail of explicatory variables used in the linear regression model

Variable	Type	Level 0	Level 1
Net weight freighted (tons)	Quantitative	NA	NA
Coupling mode	Qualitative	Single truck	Double decker truck
Differential step	Quantitative	NA	NA
Type of engine	Qualitative	Caterpillar C-15	Cummins ISX
Type of road	Qualitative	Greater distance mileage with no slope	Greater distance mileage with slope
Standing (years)	Quantitative	NA	NA

*This table describes the variables used in the regression models. Source: Research.*

After historical information of the 500 journeys sample was processed by Minitab, the following multiple linear regression model was obtained:

Efficiency (Y) = 2.63 + 0.0487 road - 0.0213 weight - 0.023 differential step + 0.0344 type of engine - 0.0184 standing. The statistics of the multiple linear regression model, the variance analysis and the hypothesis tests are shown in Tables 2, 3 and 4, respectively.

Table 2: Multiple Linear Regression Statistics

Regression Statistics	
Multiple correlation coefficient	0.69113735
R <sup>2</sup> determination coefficient	0.477670837
Adjusted R <sup>2</sup>	0.403052385
Typical error	0.09654036
Remarks	500

*This table shows the regression model statistics of the fuel efficiency variable. Source: Research.*

Table 3: Analysis of Model Variance

	Degree of Freedom	Sum of Squares	Average of Squares	F	F Critical Value
Regression	5	0.298311727	0.05966235	6.4015109	0.000254886
Residual	35	0.32620144	0.00932004	6	
Total	40	0.624513167			

*This Table shows significance of the fuel efficiency variable regression model. Source: Research.*

Table 4: Hypothesis Tests for Predictive Variables

	Coefficients	Typical error	Statistics t	Probability
Intersection	2.517154825	0.570962436	4.40861722	9.43E-05
Road	0.142055451	0.071065507	1.99893671	0.05342787
Weight	-0.020505304	0.004250382	-4.82434424	2.7242E-05
Differential step	-0.026103204	0.117537134	-0.22208474	0.82553874
Engine	0.029044123	0.04186522	0.69375301	0.4924161
Standing	-0.019153064	0.010807478	-1.77220478	0.08506621

*This Table shows comparable parameters of the hypothesis tests applicable to the model. Source: Research.*

## RESULTS

Taken together, variables only explain 40.30% (R<sup>2</sup> adjusted) of the fuel efficiency and keep a mutual interrelation of 69%.

Notwithstanding that variables were taken to select the sample, for vehicles with a maintenance level completed according to the company's policies and manufacturer's advice, and which were driven by qualified and competent operators of the company, model fails to estimate at least 90% of the fuel efficiency behavior.

It is important to highlight that the model has a statistical significance because the calculated F value is capable to be obtained and compared with the critical F (the latter is less than the calculated).

In relation to the hypothesis test results it can be deduced that the exchange to differential and the type of engine with a confidence level of 90% are not significant variables for this model. This is

because the company assumed as strategy to make the efficiency as effective as possible to request the heavy vehicles provider a vehicles' configuration appropriate to the road and the speed the operational unit will be required to go through; also, path changes between the units were not agreed, keeping running the most of the vehicles in only one type of road. It is important to mention that, the failure in the implementation of such strategies or policies, would be likely very significant for a fuel efficiency estimation.

As next step in this research, experiments design based on such variables will be applied and any others such as operator's competence and maintenance conformance, under controlled conditions allowing that impact affecting any of such variables is determined and distinguish non-representative variables to build a fuel efficiency model entailing a greater explicative and predictive ability.

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# EMPIRICAL ANALYSIS OF RESIDENTIAL MORTGAGE BACKED SECURITIES: A CASE STUDY OF CAGAMAS

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## ABSTRACT

*The objective of the study is to testify that the use of residential mortgage-backed securities by Cagamas to finance government staff housing in Malaysia has the ability to increase its net assets value even during global financial crisis 2007-2009. As a preliminary case study of Cagamas Mortgage-Backed Securities as an issuer the financial performance of its issues of Residential Mortgage Backed Securities is measured by key financial ratios in terms of profitability, capitalization and debt coverage for financial years of 2008-2012, and its key performance indicators as measured by net default and prepayment rates. For leverage effects, the firm shows higher debt coverage and higher earning capacities. Interestingly, its cumulative net default rate and prepayment rate for the percentage of principal balance on the purchase date for both conventional and Islamic securitization show lower than their indicative rates. The findings show that the use of securitization have demonstrated its remarkable ability to roll-over housing loans to the civil servants in Malaysia by securitizing its highly graded Residential Mortgage Backed Securities as long-term Cagamas bonds. The findings support past studies on benefits of asset securitization and interestingly verifying that residential Mortgage Backed Securities provides highly rated long-term investment to bank institutions, insurance companies and fund managers and increases its net assets value of securitization. Therefore, Residential Mortgage Backed Securities meets its principal activity for financing government staff housing loans successfully with its net default and prepayment rates show steady improvements on year to year basis.*

**JEL :** G2, R2, D2

**KEYWORDS:** Cagamas, Sub-Prime Crisis, Residential Mortgage-Backed, Earning, Ratio

## INTRODUCTION

Securitization began in the United States in the 1970s with the initiation of government funding programs for residential mortgages, followed by private financings for mortgages and credit cards. Interestingly, since the beginning of the 1980s, it has become a global financing tool. As one of the fastest growing forms of corporate financing and investment portfolio, securitization is now a feature of most financial markets, including Malaysia. In 2001, the Securities Commission (“SC”) released its *Guidelines on the Offering of ABS*; this had paved the way for a CBO issuance by Prisma Assets Berhad, backed by a pool of ringgit-denominated bonds. Another CBO transaction backed by corporate bonds and a CLO backed by rehabilitated corporate loans followed suit the same year. Since then, an estimated 74 structured transactions have been approved under the SC’s guidelines on private debt securities, ABS and other structured products, encompassing an array of asset classes. By end-2009, the Malaysian market had welcomed RM36.02 billion (rated and issued) of structured securities.

Malaysia has, thus far, been somewhat insulated from the direct consequences of the American sub-prime credit crisis. Understandably, however, investors have become more cautious. In deliberating the future direction of the Malaysian structured finance market, we examine our origins as well as the key milestones achieved since the first securitisation issue here. The asset securitization technique, while complex, has won a secured place in corporate financing and investment portfolios because the consistence better performances of Cagamas from 2003 to 2008 are testimonies that asset securitizations provide lower financing costs and higher investment returns, particularly Islamic bonds (Rosalan, Shafinar and Hariri, 2013) and paradoxically, offer originators a cheaper source of funding and investors a superior return (Giddy, 2000; Ismail et al., 2008). Problem Statement and Significance of Study According to Rating Agency Malaysia (RAM), an established rating agency for debts in Malaysia, securitization is a process whereby homogenous assets are pooled and repackaged into marketable securities to be sold to investors. The process involves the issuance of private debt securities by special-purpose vehicle (SPV), known as the issuer (Ismail and Serguieva, 2009). As a matter of fact, the introduction of its guidelines by Security Commission in 2001 with only RM920 million in 2001 to phenomenal RM26 billion in 2006, for its five years of operations.

Unfortunately, the following years of 2007 through 2010, Malaysian securitization market has been rather subdued. According to Rating Agency of Malaysia (2011), while the performance of the Malaysian securitization has been largely immune from 2008 US mortgage-crisis, nonetheless it has suffered from the spill-over effects that curbed domestic appetite for such structured finance products. On the extreme note, however, the authors believe that the Malaysian securitization loses its momentum due to the severe setbacks in global financial markets with the number of issues less than 10 and value less than RM10 billion per year. However, Islamic finance has got a wide attention as an alternative form of global financing and investment, particularly asset-backed securities. Therefore, the successful launchings of Malaysian Sukuk ABS in 2005 for its global Shariah acceptance will become a strong testimony for big Malaysian companies to issue it as a creative and cheaper debt financing in the near future (Shafinar, Hariri, Rosalan, and Azman, 2013) and which this study attempts to compare its key performance indicators with its conventional papers. On the cautious note, Cagamas which has been mandated by the Malaysian government to acquire its staff housing loans in 2004, has strong ability to manage sub-prime crisis effects in the Malaysian property market, and hence, the underlying theme of this study. More importantly, Cagamas has issued highly rated securities which were the first of its kind in the world bond market backed by a pool of housing government loans. On these premises, the authors are further motivated to measure the financial performance of Cagamas for the past five years in terms of its liquidity, profitability, leverage and net asset value, including the global spill-over effects of 2007-2009 subprime crisis. In fact, its stable outlook of RMBSs reflects that its trends in defaults and losses will continue to fall within rating expectations (RAM, 2012).

## LITERATURE REVIEW

The empirical studies of asset-backed using statistical models, however, are very limited. The first published doctoral study was conducted by Holland (1989) who examined off-balance-sheet activities of the 100 largest U.S. banks. He noted that off-balance-sheet activities are various types of commitments and contingencies that are not recorded on the balance sheet of an organization. He reveals the increased involvement of banking organizations in off-balance-sheet activities and a more competitive economic environment in the banking sector. Likewise, Borgman (1996) documented that the assembly and analysis of a substantial dataset that describes the pricing and characteristics of over 700 ABS issues. His analysis finds that ABS pricing

(absolute and relative yield spreads) is rational and prices reflect premiums for default risk, interest rate and reinvestment risk, and marketability.

Thomas (2002) analyses effects on debt and equity claimants of a set of sales into securitizations. His early result shows that shareholders' returns are increasing in shareholder capitalization. Securitizations with actively traded bonds enjoy substantial and significant shareholder gains, and wealth transfer from bondholders to shareholders occurs in asset-backed securities among sellers with low credit ratings. In addition, Higgins and Mason (2003) use credit card securitization data to show that recourse to securitized debt may benefit short and long term stocks returns and long term operating performance of sponsors. It appears that the asset backed securities market according to him is like the commercial paper market, where a firm's ability to issue is directly correlated with credit quality.

Pelletier (2004) in his study provides an analysis of each step and aspect that is necessary to structure a securitization transaction. Securitization involves a multitude of legal, accounting and tax issues, and concentrates on the most central of such issues and his study concludes with some insight into what the future holds for the securitization market. Interestingly, several recent theories address the usage of securitization financing. Interestingly, Ayotte and Gaon (2005) show how ABS can reduce bankruptcy costs for some firms. These models make predictions regarding the conditions under which asset securitization can lower the firm's overall cost of financing.

However, in the wake of subprime mortgage crisis in the US in 2008, it is interesting to note that Islamic mortgage has received wide attention for its concepts and applications. According to Shahid (2008), moral hazard on the part of mortgage originators also played a part in the crisis, as it encouraged careless lending and allowed originators to get around their reserve capital requirement by increasing their leverage. He notes that credit guarantee in the form Credit Default Swaps proved worthless as the guarantors themselves did not have adequate capital reserve backing their risk exposure, or had reserve in Collateralized Debt Obligation (CDO) whose value deteriorated due to endemic uncertainty

On the above premises and legal Islamic observations, the authors are motivated to testify that Islamic securitizations perform better than their conventional issued by Cagamas MBS. Ultimately, the study attempts to verify that Islamic securitizations have the ability to act as risk sharing as the assets are real with genuine possession and transaction by originator, and hence avoiding any default risk and mortgage crisis, as suggested by Nienhaus (2011) that Islamic structured instruments, notably securitizations, must be able to act as shield against any economic crisis. Objective of the study The initial objective of the study is to measure the financial performance of Cagamas for 2008-2012, for its last five-year period. The Cagamas was chosen because it has complete financial statements at the time it initiated its residential assets' securitizations, which were the first of its kind in the world bond market backed by a pool of housing government loans. In addition, Cagamas is the only originator in Malaysian securitization market that initiated its Real Mortgage-Backed Securities (RMBS) for both conventional and Islamic instruments. Likewise, both of its RMBS have been rated by both Rating Agency of Malaysia (RAM) and Malaysia Rating Corporation as the two local agencies in Malaysia with their highest grades, implying its strong quality of long-term debt securities, and hence unlikely default of regular interest payments and principal repayments. Likewise, the ultimate objective of this study is to testify the ability of Cagamas to perform superbly during global financial crisis as measured by its financial ratios and determine the better key performance indicators between conventional and shariah RMBS.

## DATA AND METHODOLOGY

As a preliminary case study on asset securitizations for both conventional and Islamic in Malaysia, the authors believe that it is justifiable and sufficient to employ significant financial ratios and key performance indicators. In addition, Cagamas as an originator will be used as a case study as it is the first company to issue residential mortgage backed securities (RMBS) since 2004. In fact, as noted earlier, RMSB were the first of its kind in the world bond market backed by a pool of housing government loans. For data collection, audited external annual reports of Cagamas Berhad for years of 2008 to 2012 will be extracted for its financial statements. For data analysis, a complete set of financial statements in terms of Balance Sheets and Income Statements will be used to analyse Cagamas financial performance and key performance indicators. Profile of Cagamas for Financing Housing Loans Cagamas Berhad was incorporated as a company in Malaysia in 1986 with a paid up capital of RM150 million. Until 2009, the RMBS sector had been dominated by Cagamas MBS, an entity incorporated to undertake the securitisation of the Government's portfolios of staff housing loans. To date, Cagamas MBS has issued 5 facilities valued at RM10.2 billion in aggregate. Its issuances account for a third of the value of all domestic structured finance products. The entity's fourth and fifth programmes were issued in 2007. Cagamas MBS' Series 2007-1-i Sukuk *Musharakah*, issued in June 2007, represented the first global offering of an Islamic RMBS. With an outstanding principal balance of RM26.7 billion on the housing loans extended by the Treasury Housing-Loans Division as at end-December 2009, we believe that RMBS still has upside potential, once ABS pricing normalises. RAM's cashflow analysis has taken into consideration the potential cashflow losses as a result of delinquencies and prepayments that commensurate with the AAA rating. Based on the portfolio's performance, our cashflow analysis indicates that it will be able to generate sufficient cash to cover the coupons on a timely basis, as well as the principal redemption by each maturity date.

Table 1: Summary of RMBS Issued by Cagamas MBS

RMBS issued	CMBS 2004-1	CMBS 2005-1-i	CMBS 2005-2	CMBS 2007-1-i	CMBS 2007-2
Issue date	20-Oct-04	8-Aug-05	12-Dec-05	29-May-07	21-Aug-07
Issue amount (RM million)	1,555	2,050	2,060	2,110	2,410
Initial collateralisation	124.5%	138.7%	140.7%	120.3%	125.2%

As for Cagamas, its role is to be an intermediary between primary lenders and investors of long-term funds. Its function is very much similar to unit trust companies but differ as Cagamas will pool debts or mortgages that it securitized for issuance of the unsecured but highly rated debt securities. Interestingly, Cagamas' debt securities are seen to be assigned the highest ratings Rating Agency Malaysia and Malaysian Rating Corporation, the only two local rating agencies in Malaysia that denotes its strong credit quality of property market, and hence, researchers are motivated to study its financial performance and key performance indicators during sub-prime crisis rooted in USA in 2007 and spread all over financial centres, including Kuala Lumpur, till 2009. Based on the empirical result of this study, (Olaniyi & Sc, 2013) it can be concluded that, liquidity motive is the main driving force for bank engagement in securitization in Malaysia. The increasing demand for loan thus makes it necessary for the banks to embark on securitization activities to meet their liquidity requirement.

Housing financing facilities disbursed by BPP formed around 10% of the outstanding housing loans in Malaysia as at end-2012. Outstanding housing financing facilities disbursed by BPP had

expanded 5.7% to RM32.98 billion by the end of last year (end-2011: RM31.21 billion).<sup>1</sup> During the same period, the amount of loans approved by BPP had risen 22.4% to RM8.32 billion (end-2011: RM6.80 billion). As announced through Budget 2013, the GOM plans to outsource civil servants' housing loan and financing schemes to commercial banks to help ease its financial burden. BPP had indicated to RAM that this plan was still in its infancy as of March this year. The outsourcing will involve new financing facilities and will encompass the entire financing process, i.e. from origination to servicing. The GOM will bear the difference between the commercial interest rate or profit rate and the subsidised rate of 4%. A gradual restructuring of functions and a reduction in workforce are expected to follow the outsourcing exercise. That said, we understand that the existing financing facilities originated by BPP will still come under its purview and the servicing of the existing securitised portfolios will remain unchanged.

In Malaysian civil service, with a work-force of 1.4 million, the government is obligated to provide housing loans to its staff with a maturity of up to 30 years. Thus, with a mandate given to CMBS to acquire its government staff housing loans (GSHLs) since 2004, the Malaysian government has better option to roll-over its housing loans which is about RM13 billion to RM26 billion as outstanding balance every year for the past 10 years (2001-2010) as shown in following the Table 1.

Table 2: Outstanding Balance Per Year For Government Staff Housing Loans: 2001-2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<i>Outstanding Bal (RM bil)</i>	13.3	14.5	17.2	19.6	22.7	25.6	20.3	20.5	21.5	26.1

(Source: *Bahagian Pinjaman Perumahan, Perbendaharaan Malaysia, Ministry of Finance, 2011*)

## RESULTS AND DISCUSSION

As a sole mortgage agency in Malaysia, Cagamas is managing superbly its assets and liabilities as documented in the following Table 2.

Table 3 : Assets And Liabilities of Cagamas For 2008-2012

Particular	2008	2009	2010	2011	2012
Conventional Mortgage Assets	9,697.50	11,898.00	11,384.60	10,511.00	9,659.00
Islamic Mortgage Assets	6,178.40	7,814.00	7,696.20	7,435.00	7,124.00
Islamic Financing Debts	5,643.00	4,570.00	6,854.30	6,879.00	8,076.00
Hire Purchase and Leasing Debts	0	30.00	26.10	21.30	16.8
Various Assets	13105.10	8582.20	6169.50	7291.70	6987.20
Total Assets	34,624.00	32,894.20	32,130.70	32,138.00	31,863.00
Unsecured Bearer Bonds and Notes	13,319.40	11,334.90	10,039.50	9,868.00	9,217.00
Islamic Bonds	8,487.20	9,070.00	10,651.30	10,585.00	11,707.00
Conventional Residential Mortgage-Backed Securities	5,220.00	4,880.00	4,135.40	3,842.00	3,195.00
Islamic Residential Mortgage-Backed Securities	3,910.00	3,910.00	3,382.80	3,382.80	2,865.00
Various Liabilities	1065.40	591.80	442.40	569.1	618.00
Total Liabilities	32,002.00	29,846.70	28,651.40	28,246.90	27,602.00
Paid-up Capital	150	150	150	150	150
Reserves	2,472.00	2,897.50	3,329.30	3,741.00	4,111
Shareholders' Funds	2,622.00	3,047.50	3,479.30	3,891.00	4,261.00

From the above table, as an underlying theme of this study is on assets securitization of Cagamas, its mortgage-backed securities show a strong growth from 2008 to 2012 with a steady growth and provide liquidity to the financial sector of RM265.5 billion as at 31 December 2012. Reflecting its quality assets and liabilities, with permanent paid-up capital of RM150 since its incorporation, Cagamas shows very strong reserves and shareholders' funds with a superb growth of 66% and 63%, respectively. Its strong earning capacities and profitability are explained further in the following Table 3.

Table 4: Revenues and Profits For 2008-2012

Revenues and Profits	2008	2009	2010	2011	2012
Gross Revenue	1214.3	1154.3	1119.4	1047.1	1005.2
Net Revenue	620.9	662.8	647.7	628.4	579.4
Profit Before Taxation and Zakat	564.3	559.2	610.5	591.4	551.9
Net Profit	419.7	414.7	455.7	442.1	413.6
Earnings Per Share (RM)	279.8	276.5	303.8	294.74	275.44

From the above table, despite its revenues from interest income kept on falling slightly 17%, it's but the earning before tax and zakat are steady income which is RM552 million consider stable since 2008. In fact, at the peak of sub-prime crisis in 2008-2009, it managed to weather its impacts with increasing net income of RM663 million in 2009 from RM621 million in 2008, unexpected steady rise of 7%. Interestingly, its net profit recorded with only a negligible drop of 1% during global acute financial uncertainties of 2008-2009 periods. Reflecting its strong net profits from 2008-2012, its earnings per share also record good earning RM2.75 per share in 2012.

As a sole mortgage agency in Malaysia, Cagamas has very heavy debt obligations with average of 92% of its debt ratio for 2008 but it shows improvement to 87% in 2012. Despite heavy interest regular payments, it still has steady payment capacities of 1.1 times in 2008 to 1.6 times in 2012. In fact, at the peak of global financial crisis in mid 2008 with capacity of 1.1 times, implying it did not default any contractual interest payment of RM699 million in its financial year of 2008. Interestingly, as an approved financial institution in Malaysia its risk weighted capital ratios were increasing from 21.6% in 2008 to 36.4% in 2012, representing a hefty increase of 71%, indicating it has sufficient capital adequacy ratio as stipulated by central bank of Malaysia. Moving forward favourably, Cagamas has a record of dividend payments to its shareholders for the past five years. Likewise, its returns on investment on shareholders' funds and assets are well-documented in the following Table 4.

Table 5: Debt and Profitability Ratios For 2008-2012

Type of Ratio	2008	2009	2010	2011	2012
Debt Ratio (%)	92.43	90.74	89.17	87.89	86.62
Return on Average Shareholders' Funds (%)	17.1	14.6	14.0	12.0	10.1

Interest Coverage Ratio (Times)	1.1	1.6	1.6	1.6	1.6
Return on Average Total Assets (%)	1.2	1.2	1.4	1.4	1.3
Dividend Per Share (RM)	16.7	22.5	22.5	22.5	45
Risk-Weighted Capital Ratio (%)	21.6	21.6	26.8	35.7	36.4
Net Tangible Asset (RM per share)	17.36	20.21	23.10	25.86	28.35

From the above table, during global financial crisis of 2008-2009, Cagamas even had paid dividends of 17 sen and 23 sen in 2008 and 2009, respectively, a hefty increase of 35%. Following strong financial performances for 2008-2012, its satisfactory returns on investment in funds and assets, its net tangible asset were increasing steadily from RM17.36 to RM28.35, a superb growth of 63%. As such, the net value of Cagamas is growing stronger even during global financial crisis, a strong testimony that Cagamas is a way forward to appeal banking institutions, insurance companies, asset management companies, as well as government funds and public companies to be its primary mortgage lenders. Even though Cagamas was formed on the mortgage American model of Fannie Mae and Freddie Mac that both reported to lose at least US\$10 billion in 2008, Cagamas still remains profitable till 2012 for both conventional and shariah RMBSs.

The ability of RMBSs to have superb performance for both issues is testified by its key performance indicators. According RAM (2012), for cumulative net default rate for the underlying portfolio, conventional RMBS stood at 0.39% which is much below its benchmark rate of 1.69%, or 4.33 times coverage, while shariah stood 0.43% against its benchmark of 2.81%, that is 6.53 times coverage. Therefore, in term of percentage of principal balance on the purchase date, shariah RMBS performs better than conventional with higher coverage of its cumulative net default. For cumulative repayment rate, conventional RMBS recorded at 5.78% that is lower than its indicative rate of 8.35%, or 1.44 times of its coverage, while shariah RMBS posted at 3.85% against its indicative rate of 8.44%, or 2.19 times coverage. Therefore, as a percentage of principal balance on the date of purchase, shariah RMBS also performs better than conventional with a higher rate of coverage of cumulative prepayment rate. With its defaults and losses as well as prepayments of the GSHLs shall continue to fall from year to year, Cagamas is seen capable to provide funding to government staff housing loans (GSHLs) in Malaysia continuously and consistently.

## CONCLUDING COMMENTS

As noted earlier, the establishment of the Cagamas enables the financial institution to secure fixed rate long-term fund to finance its long-term floating rate housing lending activities by collateralizing portfolio mortgage loans in the Malaysian debt market. This means Cagamas will be acquiring mortgage portfolios from the primary mortgage lenders directly with recourse which requires the domestic financial institutions to replace default loans with performing credits. As such, the existence of liquidity facilities of the Cagamas helps the financial institutions to facilitate more loans since can secure source of funds at the competitive cost and at the same time minimizing maturity disparity between mortgage loans and funds origin, and hence, increase liquidity position of lending and borrowing activities in the Malaysian debt market. The fact that Cagamas has been mandated by the Malaysian government to acquire its staff housing loans since 2004, it is seen capable of providing the liquidity of secondary mortgage market in Malaysia. From socio-economic perspective, Cagamas helps the government with a force of 1.4 million people to roll-over its housing loan facilities as it does not have to wait for about 20-30 years from its borrowers to repay their loans. From fund-investment perspective, Cagamas performs relatively excellent as measured by its better financial ratios for the past five years of 2008-2012

and lower net default and prepayment rates. With these positive testimonies, Cagamas is not only be able but seen be able to perform superbly as the sole mortgage agency in Malaysia in issuing highly rated debt securities with unlikely defaults but likely strong earnings and profits. Therefore, Cagamas remains successful in promoting government staff housing loans in Malaysia to own their houses by securitizing residential mortgage-back securities even during global financial crisis in 2008-2010

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# MAKING BUDGET MANAGEMENT WORK: PERCEPTIONS OF UK HIGHER EDUCATION MANAGERS REGARDING THE THEORY AND REALITY OF BUDGET MANAGEMENT EXPERIENCES

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## ABSTRACT

*This paper is located in the arena of management development of budget holders in the UK higher education sector. It is concerned with identifying and exploring participants' perceptions of a) significant aspects associated with effective budget preparation and management, and b) influences impacting negatively or positively upon effective budget preparation and management. A literature review is employed to identify aspects considered relevant to effective budget setting and management. These are explored with twenty four managers from eight UK institutions in the context of the perceived realities of those managers of their experiences in preparing and managing budgets. Semi-structured interviews derived from the findings of the literature review are conducted in focus groups. Data collected are analysed using content analysis utilising rank scores. The analysis generates findings suggesting indicative associations between a lack of budget training in general, understanding of the nature of costs, understanding of the layout of the budget feedback sheet, and awareness of the links between unit planning and institutional planning. Conclusions are drawn for a) management development and b) a further study mining into data to establish typologies of groups of association.*

**JEL:** A

**KEY WORDS:** Accounting Education, Budget Management Training, Management Development

## INTRODUCTION

The broad thrust of this study is concerned with identifying and gaining insights into phenomena perceived by UK higher education institutions (HEIs) managers who are budget holders as influencing their ability to effectively set and manage budgets, and make appropriate associated financial decisions. For the purposes of this paper, budget setting, budget management, and associated decision making are referred to as the *budgetary process*. It draws upon consultations with focus groups exploring inter-relationships between a) the theoretical purposes and advantages of the budgetary process identified by a literature review, b) the perceptions of managers regarding the reality of their positive/negative experiences of the budgetary process, and c) perceptions of managers of the causes of their realities matching the theoretical advantages and purposes associated with a positive experience. This latter aspect facilitates the identification of the phenomena perceived by participants as impacting both positively and, by implication, negatively on the budgetary process experience. Considerations of findings lead to conclusions suggesting matters that higher education institutions may wish to take account of in equipping budget managers with attributes to facilitate good management of the budgetary process, not least through training and development.

The primary data in this study is collected from twenty four managers from eight UK institutions, employing four focus groups, each of six members, assembled randomly. Each manager is a budget holder of at least two years standing in their own institution, with the spread of budget-size on a spectrum of circa £20,000 to £500,000, with experience of working in HEIs from two years to sixteen years.

Regarding ethics, in this study, permission has been gained from all parties but individual institutions were reluctant to be identified. The conduct of this study complies with the BERA Code of Conduct.

In seeking insights, a deductive approach is adopted in the enquiry, allowing ideas and theories to be identified and subsequently tested. The nature of this study builds upon themes reflected within a series of research questions employed as a departure point. The appropriateness of those questions is confirmed/amended by the literature review. The initial research questions are detailed below in Table 1 and are reviewed at the end of the literature review.

Table 1: Research Questions as a Departure Point

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1. What are the elements within the management of the budgetary process perceived by participants as being key components within the experience, and requiring successful engagement with?
  2. What factors relating to their own characteristics and circumstances do participants perceive as providing advantage/disadvantage to them as they endeavour to engage with those elements identified as being key components within the budgetary process experience?
  3. What lessons emerge with regard to improving the budgetary process experience through exposure to appropriate development?
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### **THIS TABLE SHOWS THE RESEARCH QUESTIONS UPON WHICH THIS STUDY IS BASED. LITERATURE REVIEW**

The relevant literature covers a spectrum ranging from established management accounting texts identifying aspects of and issues associated with the effective, or otherwise, management of budgets. In establishing a foundation as a departure point, texts by Atrill and McLaney (2012), Drury (2009), and Proctor (2012) identify a number of purposes and advantages associated with an effective budgetary management process. These are shown in Table 2, summarising Atrill and McLaney, 2012: 196-197).

Table 2: The Purposes and Advantages of Budgets (Annotated From Atrill and McLaney, 2012)

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Budgets tend to promote forward thinking and the possible identification of short-term problems. Managers must plan and the budgeting process tends to force them to do so. In doing so they are likely to encounter potential problems. If the potential problems can be identified early enough, solutions might be easily found.

Budgets can be used to help co-ordination between various sections of the business. It is important that the plans of one area of the business fit in with those of other areas; a lack of co-ordination could have disastrous consequences. Having formal statements of plans for each aspect of the business enables a check to be made that plans are complementary.

Budgets can motivate managers to better performance. It is believed that people are motivated by having a target to aim for. Provided that the inherent goals are achievable, budgets can provide an effective motivational device.

Budgets can provide a basis for a system of control. Having a plan against which actual performance can be measured provides a potentially useful tool of control.

Budgets can provide a system of authorisation. Many managers have 'spending' budgets such as research and development, staff training, and so on. For these people, the size of their budget defines their authority to spend.

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*This table shows an annotation of purposes and advantages of budgets as outlined by Atrill and McLaney (2012).*

The content of Table 2 reflects a more detailed discussion of the relevance of budgeting by Pilkington and Crowther (2007). In that discussion a range of contextual factors are identified, capturing tensions that exist between operational budget managers and institutional imperatives

for new approaches to resource allocation within the arena of approaches to new public management. Ahmad, Sulaiman and Alwi (2003, p723) suggest that operational managers are interested in the logistics of budgeting practices. They divide these logistics into concerns of managers relating to i) budget setting, ii) budget participation, and iii) the use of budgets in performance measurement, and accentuate tensions with the views of senior management. These groupings of logistics concerns by managers echo the findings of Keen and Murphy (1996 p.40) reflecting the concerns of budget managers as being i) participation by budget holders in the budget setting process, ii) an appropriate performance measurement system derived from the provision of timely and accurate budget/actual information, iii) suitable advice, support and training for budget managers, and iv) alignment of financial and management accountabilities. Broad, Goddard and von Alberti (2007) assert that the culture of UK HEIs is driven not by the views of senior management but rather by the interpretation and operation of budget systems by managers. They note that there is not a 'performance' culture, with few financial performance measures (although it is observed that the 'new' universities – the former polytechnics, tend to be more receptive to the idea of harder financial performance measurements). They go further to cite UK HEIs without definable strategic initiatives leading to lack of accountability through effective budget management.

Regarding attributes required by managers to manage budgets effectively, a range of literature identifies those which may contribute to effectiveness. In contrast, Yuen (2004) suggests that managers should display honesty and trustworthiness in the context of not succumbing to the temptation to create budgetary slack. This concurs with assertions by Steele and Albright (2004) who write about the propensity of managers to play budgetary games. Jordan and Hackbart (2005) suggest that poor implementation of effective budgeting is influenced by poor attributes of some managers. Building on the idea of 'beyond budgeting', Libby and Lindsay (2007) debate the need to promote better budgeting rather than 'beyond budgets' and identify the role of managers as being key here. *Beyond budgeting* is the term applied to the idea of annual budgets being discarded and replaced by re-adjustments of budgets using rolling forecasts, often on a quarterly basis. Returning to the inductive approach suggested, this initial review suggests that it would be appropriate to retain the research questions in Table 1 without amendment.

## METHODOLOGY

This study employs a semi-structured interview method, seeking to elicit views from participants regarding pre-determined themes derived from the literature review. Data is generated through the formulation and application of semi-structured interviews, using themes derived from the literature review. Records of interviews are compiled at the time of the interviews, and summaries agreed with participants for accuracy. Records are analysed via content analysis. The methodology thus comprises both quantitative and qualitative elements. The broad themes identified via the literature review provide a framework of themes within an interview schedule. In that context, an interview schedule appropriate for this enquiry is applied. Data collected through interviews requires analysis and the extraction of meaning. Bryman and Bell (2011) suggest this is in itself challenging, because unlike the analysis of quantitative data, there are few well established rules for the analysis of qualitative data. Hussey and Hussey (1997), building upon Miles and Huberman (1994), suggest that the process of capturing meaning is broadly concerned with *content analysis*. In this study the interview schedule contains a range of pre-determined themes derived from a literature review. Responses to themed questions may well themselves contain additional themes. Robson (2011) is of the view that the some form of content analysis is appropriate in such circumstances, at least initially.

### Data Collection, Analyses, and Findings

Data was collected through semi-structured interviews. Data collected was explored through a content analysis based on a primarily quantitative thrust. This provided sets of descriptives, acting as a base for subsequent analysis in a future study, possibly using explanatory analyses based upon aspects of repertory grid analysis, leading to the establishment of typologies, for subsequent discussion (endorsed by Saunders *et al*, 2012). In that context, an interview schedule appropriate for this enquiry is applied. This schedule draws upon the content of Table 2, presenting them as statements. Interviewees are asked to rank (1 = strongly disagree, 7 = strongly agree) a) the theoretical significance of each statement in the context of good budget practice, b) degree to which they agree with the ‘reality’ of each statement made. The theoretical aspect is demoted **A** in tables 2 and 3, and the reality perception demoted **B**. Thereafter, the distance between perceptions of the agreement with the theoretical significance and the reality is calculated. As a final question, participants were asked to rank their own confidence in their budget management skills. Table 3 details the statements, summarises the mean rankings, and shows the spread.

The rankings present interesting associations. Where a positive score – above 3.5/7 for a theoretical significance is shown, in each case the perceived reality is lower. This is the case for statements 1, 2, 4, and 5. For statement 3, the theoretical significance is below 3.75 and the perceived reality even lower. This suggests that budget managers understand the theory underpinning budget co-ordination but perceive that the theory bears little resemblance to reality. This has potential implications for budget integration and cohesion, leading to lack of achievement of goal congruence. (*Goal congruence* is the term used by accountants to denote the lining of individual departmental targets in the context of achieving organisational goals.) For statement 6, the idea of theory vis-à-vis reality is not relevant for a matching of theoretical aspects in contrast to reality.

Table 3: Results of Ranking by Managers Regarding Statements Derived From the Literature

<i>Statement</i>	<i>A Mean score</i>	<i>B Mean score</i>	<i>C Spread</i>
Budgets tend to promote forward thinking and the possible identification of short-term problems. Managers must plan and the budgeting process tends to force them to do so. In doing so they are likely to encounter potential problems. If the potential problems can be identified early enough, solutions might be easily found.	6.1	4.1	2.1
Budgets can be used to help co-ordination between various sections of the business. It is important that the plans of one area of the business fit in with those of other areas; a lack of co-ordination could have disastrous consequences. Having formal statements of plans for each aspect of the business enables a check to be made that plans are complementary	5.9	2.9	3
Budgets can motivate managers to better performance. It is believed that people are motivated by having a target to aim for. Provided that the inherent goals are achievable, budgets can provide an effective motivational device	2.7	1.8	0.9
Budgets can provide a basis for a system of control. Having a plan against which actual performance can be measured provides a potentially useful tool of control.	6.4	4.3	2.1
Budgets can provide a system of authorisation. Many managers have ‘spending’ budgets such as research and development, staff training, and so on. For these people, the size of their budget defines their authority to spend.	5.9	3.8	2.1
<b>I have confidence in my budget management skills.</b>	n/a	1.4	n/a

*This table shows the mean scores of rankings that the managers provided when asked about the degree to which they agree with each statement*

The contents of Table 3 indicate that a) there is not universal agreement with the theoretical significance and b) the reality of the endeavouring to make the theory work is at best adequate (statements 1, 4 and 5), and at worst woeful (statements 2 and 3). Overall, the confidence expressed in budget management (reflected in statement 3) is worryingly low, at 1.8 out of 7. The output of this quantitative analysis is not a surprise in light of the discussions in each of the focus groups. Broad consensus is found with the theoretical significance of all statements apart from number 3 (motivation). Probing elicited views regarding motivation reflecting a view of budgets being more of a restraining/constraining tool rather than a motivational tool. Returning to the literature review, much of the conventional literature emphasises behavioural aspects in general and motivational aspects in particular.. Perhaps of greater concern is the comparison of ‘reality’ scores with ‘theoretical significance’ scores. Each of statements 1, 2, 3, 4 and 5 reflect perceptions which imply budgetary process experiences which for statements 1 and 4 are hardly inspiring, for statement 5 marginally acceptable, and for statements 2 and 3 potentially very worrying.

Further probing, generated suggestions that perceptions of only adequate or poor budget management experiences are located in realities founded in lack of knowledge, understanding and skills. The broad views of managers’ views of the causes of negative experiences are summarised in Table 4. Statement 6 from Table 3 is not included as that perception is the consequence of influences reflected within statements 1-5.

Table 4: Perceptions of Causes of Low Rankings of Assessments of the Reality of Budgetary Process Management Experiences

<i>Statement</i>	<i>Managers’ perceptions as to causes of low ranked experiences</i>
1	Budgets are often imposed even where unit plan proposals are encouraged. The world is changing so rapidly that it is often difficult to anticipate problems. Communication is poor and feedback in particular is often out of date or inaccurate.
2	The theory is sound but the reality is that units hold their own position, being reluctant to give way on their own position for ‘the good of the whole’. The idea often starts well but by about half way through the year co-ordination disappears as pressures to fight local battles materialize.
3	Motivation viewed as being almost laughable. Budgets perceived as being similar to restraining a dog on a leash. Budget cuts promote nothing more than de-motivation. Viewed with some acceptance in theoretical terms.
4	Reality perceived as being hampered by complicated feedback systems and poor layout of feedback forms/spreadsheets. Lack of training in interpreting content of feedback forms perceived to be a major challenge. Lack of training in core concepts of cost and financial terminology impacted very negatively. As with 4, broad agreement with the rationale of the theory.
5	Reality perceived as managers playing games to inflate budgets, then spending money when ‘money left in the pot’. Tensions between views of managers owning resources and views of the institution as to who owns resources. Often not enough cost code categories to cover all necessary expenditure.

*This table shows the assessments of the reality of budgetary process management experiences in relation to each statement.*

It must be noted that not all discussions were of a negative nature. A consensus regarding the best efforts of many unit financial managers, who were willing helpers but had little time to promote training and education other than in the most broad-brush sense. The matter of the overall ranking of 1.8 out of 7 for the overall budgetary process experience reflects a very unsatisfactory position. Participants’ perceptions carried with them a ‘roller-coaster’ effect, it being apparent that the whole is much greater than the sum of the parts. This may be linked potentially to a sense of frustration that emerged in each set of interviews, tinged on occasions with an air of resignation. A final but telling point is that of the cohort of twenty four managers only four (16.7%) had received any form of budgetary process related training.

## CONCLUSIONS AND NEXT DIRECTIONS

This study indicates a mis-match between the theory of an effective budgetary process and the reality of experiences. The initial indications are that better and more training and development are necessary if managers in UK HEIs are to manage the budgetary process effectively. That said, these are merely initial indications. The study requires a broader base of managers and the collection of further data concerning the realities of experiences. A logical next step is the identification of characteristics and attributes required by managers to enable a positive budgetary process experience. These may be identified via a deeper and broader literature review. The views of managers should then be elicited as to which characteristics and attributes they consider significant. The possession or lack of these may be identified and inter-relationships further analysed through a technique such as repertory grid analysis. This may add richness and illumination, facilitating consideration by HEIs and, where appropriate, management development educators.

## BIOGRAPHY

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# STUDENT PERCEPTIONS OF INFLUENCES ON THEIR STUDY EXPERIENCES IN A PART-TIME ACCOUNTING MODULE: IMPLICATIONS FOR EDUCATORS

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## ABSTRACT

*This paper is located in the arena of a part-time accounting module, studied by working managers seeking i) an academic qualification as part of a bachelor's degree in business management, and ii) knowledge and understanding in a vocational context. It identifies and explores students' perceptions of influences upon their study experiences. These are drawn from elements of the module design, characteristics of the students, and their inter-action. Data collection is through semi-structured interviews (n = 36), involving students from two past cohorts. The data are explored using the techniques of content analysis, repertory grid analysis, and laddering. Findings concerning the most significant influences suggest indicative associations between sets of student characteristics and elements of module design and module achievement measured through academic scores. Typologies of groups of students are identified and linked to those scores. Particularly influential are domestic circumstances, nature of work in relation to budget management and financial decision making, and levels of maths and PC skills. Further exploration reveals a gender divide, with females performing less well than males, with domestic circumstances and nature of work being of great significance. The study provides insights into the student experience, with implications for educators and curriculum design.*

**JEL:** A

**KEY WORDS:** Accounting education, curriculum design, academic performance,.

## INTRODUCTION

This study seeks to identify and gain insights into phenomena perceived by part-time students, all working managers, as influencing their study experience when studying a first level accounting module (referred to as *ACC-M*) as part of a Business Management degree. The primary data is collected from thirty six students who have all studied *ACC-M*. They comprise twenty four male (67%) and twelve female (33%) students managers from across the private, public and voluntary sectors, with an overall mean age of twenty nine years (29.67 years), with a mean male age of thirty one, and a female mean of twenty seven years. This is a stratified sample of a body of one hundred and forty four students, a body providing initial data through an on-line questionnaire derived from themes identified in a literature review. In seeking to identify phenomena impacting positively and negatively upon the study experience of managers as students on a part-time accounting module, and assessing the implications for curriculum design, this paper adopts a deductive approach, allowing ideas and theories to be identified and subsequently tested. The appropriateness of those questions is confirmed/amended by the literature review. Those research questions are set out in Table 1.

Table 1: Research Questions as a Departure Point

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1. What are the elements with the module design perceived by students as being key components within the student study experience, and requiring successful engagement with?
  2. What factors relating to their own characteristics and circumstances do students perceive as providing advantage/disadvantage to them as they endeavour to engage with those elements identified as being key components within the study experience?
  3. Are there typologies of characteristics of students which are associated with helping or hindering the study experience and contribute towards higher/lower academic scores?
  4. What lessons emerge with regard to improving the student study experience through amendments to the curriculum design, with a view to more successful academic outcomes as evidenced through module scores?
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## LITERATURE REVIEW

The relevant literature covers a spectrum ranging from established research concerning face to face undergraduate accounting studies, through studies relating to distance learning aspects, to considerations of specific aspects of curriculum design, in the context of determinants of academic performance in accounting modules. Much of that relevant prior research relating to the identification of major determinants upon performance in accounting studies focuses on the USA, South East Asia and the Pacific Rim with relatively little focus on the UK, with relatively little on part-time education undertaken by working managers. In the geographical areas where much research is focused, Accountancy is perceived as a desirable profession to enter, with consequential high demand for relatively few places on Accountancy degrees. This accounts for the focus on undergraduate accounting modules in full-time degrees. In that arena, education researchers have sought to identify what can affect student academic performance and/or what can predict academic success in undergraduate accounting degrees.

Examples, on a non-exclusive list basis, include Dockweiler and Willis (1984) Doran (1991), Gul and Fong (1993), Wong and Chia (1996), Koh and Koh (1999). Relatively little research of substance exists concerning Accountancy modules in which the emphasis is on equipping working managers with the knowledge, understanding and skills to better manage budgets and make financial decisions. Studies such as those detailed above, and others including Eskew and Farley (1988), Doran *et al.* (1991) and Rebele *et al.*, (1991), focus on what might be considered a logical but perhaps somewhat limited range of variables as potential factors impacting upon academic performance. Later studies build on those prior studies, often through replication, and thus continue the focus on that limited range of variables. Lane and Porch (2002) and Lipe (1989) produce conflicting results concerning gender. Furthermore, the research is primarily quantitative, linking factors to academic scores through empirical analyses and lacking the illumination often emerging from interviews and other qualitative investigations. Koh and Koh (1999) provide a summation of major pieces of work in this area.

They note that the majority of work is characterised by a common focus on a limited number of variables, comprising six potential factors: gender, prior accounting knowledge, academic aptitude, mathematics background, previous working experience, age. Bartlett *et al.*, (1993) and Koh and Koh (1999) agree that of the six factors, *previous working experience* and *age* have received the least attention in the literature. These limitations enhance the drivers for the inclusion of these two factors in this study. The results of six factor model-related research are, in the main, relatively inconclusive and, indeed, conflicting, suggesting that more comprehensive

research needs to be conducted, employing more complete models, particularly ones that reflect a more qualitative element. Examples of conflicting findings are to be found in, illustratively, Dockweiller and Willis (1984), Moses (1987), Bartlett *et al.* (1993) Koh and Koh (1999). Little work appears to have been undertaken in the context of mature students returning to study after a period away from study, or indeed in that they have never engaged in post-secondary school study at all. Additionally, some mature students may have greater financial commitments and/or domestic responsibilities, potentially distracting from study time. An earlier study on part-time students/working managers ( $n = 94$ ) by the author (Parkinson 2002), albeit in a distance learning context, identified a number additional influences, facilitating the construction of indicative links between influences and academic scores. The analysis identified strong associations between a range of factors and scores achieved. This study confirmed the value of going beyond the six factors, and using interviews and a combined qualitative/quantitative approach.

## METHODOLOGY, DATA COLLECTION, ANALYSES, FINDINGS AND DISCUSSION

Data was collected through semi-structured interviews, interviews amended slightly following pilots. The tapes ( $n = 36$ ) were transcribed and generated Microsoft Word documents. Data collected was explored through an electronic-based content analysis using, first, a primarily quantitative thrust concerning occurrence of themes, and, second, a deeper exploration through illustrative quotes from the interviews. This provided sets of descriptives, acting as a base for explanatory analyses based using repertory grid analysis. The content analysis involved, within each individual transcript, a sequential order of indexing each paragraph, labelling key words/phrases/terms relating to the themes, and then counting theme references within the whole interview. Accordingly, words sought included: *gender, age, work experience, previous academic attainment, maths ability, financial work experience, face to face sessions, experience of academic study, family/domestic circumstances, PC/spread sheet skills, financial training, e-Learning components, and prior accounting study.*

The analyses identify the elements within the module curriculum which students perceive as being significant within their study of the module. These elements are (with notation for reference): E1: *Time taken to read and study*; E2: *Experience of face-to-face sessions*; E3: *Assignments*; E4: *Exam*; E5: *Overall study experience*. The analyses additionally identify the characteristics and circumstances of students, as perceived by students, which most impact either positively or negatively upon the elements. These perceptions – their constructs - are C1: *Domestic circumstances*; C2: *Length of work experience*; C3: *Degree of financial nature of work*; C4: *Maths Skills*; C5: *PC Skills*; C6: *Design of module*; C7: *e-Learning Materials*; C8: *Motivation to pass exams*; C9: *Motivation to gain financial skills*. The constructs impacting to the greatest extent are C1: *Domestic circumstances*; C2: *Length of work experience*; C3: *Degree of financial nature of work*; C4: *Maths Skills*; C5: *PC Skills*. The participants' perceptions of the significance of the identified themes are shown in Table 2, providing a base for further exploration.

The themes reflect those directly asked about or alluded to during the interview, as reflected in the interview protocol. The *significant/not significant* classifications are derived from specific rankings on a scale of 1-7 made by interviewees, with 1 being *not significant* and 7 being *highly significant*. When mapped against females, these themes impact negatively on module scores, reflecting a reality of the lives of females. When mapped against males, those same constructs have little or no impact in the negative sense. Across both males and females, the analyses indicate that males benefit from length of work experience, financial nature of work, maths and PC skills. They are less affected by domestic circumstances than females. Females suffer from

shorter lengths of work experience, linked to domestic circumstances. As a consequence, they are likely to have fewer financial responsibilities, with lower levels of spread-sheet skills given that lack of financial responsibilities.

A further consequence is less application of maths skills at work. Overall, the findings reflect two common groupings of themes. One captures those elements of the curriculum design viewed by students as being significant within the study experience. The other captures perceptions held by students concerning the degree to which certain characteristics within their profiles are important in the degree of interaction with, and thus impact, upon the identified significant *elements* of the curriculum design. Participant perceptions represent *constructs*: beliefs by participants about aspects of their study experience environment and their interaction with elements of the module they hold to be significant.

Table 2: Participant Perceptions of Significance of Themes

Theme	Number of interviewees saying Theme-related issues are significant n = 36			Number of interviewees saying Theme-related issues are not significant n = 36		
	Total	Male	Female	Total	Male	Female
Gender	18 50%	10 27.8%	8 22.2%	16 44.4%	12 33.3%	4 11.1%
Age	22 61.1%	13 36.1%	9 25%	12 33.3%	8 22.2%	3 8.3%
Nature and length of work experience	22 61.1%	14 38.9%	8 22.2%	12 33.3%	8 22.2%	4 11.1%
Previous academic attainment	14 38.9%	7 19.4%	6 16.7%	20 55.6%	15 41.7%	5 13.9%
Level of maths ability	22 61.1%	13 36.1%	8 22.2%	12 33.3%	8 22.2%	4 11.1%
Nature and length of financially-related work experience	24 66.7%	15 41.7%	9 25%	10 27.8%	7 19.4%	5 13.9%
Attendance at optional face-to-face sessions	22 61.1%	13 36.1%	9 25%	12 33.3%	9 25%	3 8.3%
Prior (or lack of) academic study	8 22.2%	4 11.1%	4 11.1%	6 16.7%	4 11.1%	2 5.6%
Family and domestic circumstances	22 61.1%	11 30.6%	11 30.6%	12 33.3%	11 30.6%	1 2.8%
Level of PC/spread-sheeting ability	20 55.6%	11 30.6%	9 25%	14 38.9%	11 30.6%	3 8.3%
Previous training in/exposure to financial skills/knowledge acquisition, includes prior accounting knowledge category	8 22.2%	4 11.1%	4 11.1%	26 72.2	18 50%	8 22.2%

Typical elements cited included, perhaps, not surprisingly, the exam, along with the coursework assignments, the usefulness of the face to face sessions, and the length of time taken/needed to engage with the study of the text materials. Based on mean scores and selected on the basis of being above 3.5, two lists were derived. One shows the elements scoring above 3.5. Added to this

was the generic element of the overall study experience. These elements are detailed in no particular order of mean score of rank in Table 3. The other list in Table 4 shows the factors identified as providing advantage/disadvantage to them as they engaged with the module. These are shown in no particular order of mean score of rank. The reason for not ordering in terms of mean score is because the significance of ranking via mean scores is embedded not in individual elements and factors but in their inter-relationships within the grid analysis. Such inter-relationships are detailed shortly.

Table 3: Identified significant elements

Elements perceived by participants to be key components of the curriculum design
Time taken to read and study
Experience of face-to-face sessions
Assignments
Exam
Overall Study Experience

Table 4: Identified Key Constructs Expressed as Contrasts

Key constructs perceived by participants to be impacting on the significant elements of the module study experience, expressed on a spectrum
Domestic circumstances did/did not hinder progression via... <i>specific elements</i>
Length of work experience helped a lot/ hindered a lot with... <i>specific elements</i>
Financially-related work experience existed and helped a lot/did not exist and hindered a lot with... <i>specific elements</i>
Maths Skills more than adequate to cope with demands/not adequate enough to cope with demands of... <i>specific elements</i>
PC Skills more than adequate to cope/less than adequate to cope with demands of... <i>specific elements</i>
Design of module helped a lot/hindered a lot... <i>specific elements</i>
e-learning materials helped a lot/did not help a lot with... <i>specific elements</i>
Motivation to pass exams helped a lot/did not help a lot with... <i>specific elements</i>
Motivation to gain financial skills helped a lot/did not help a lot with... <i>specific elements</i>

The repertory grid matrix is used to record scores on a scale of 1 indicating a particular issue/factor has very little negative impact/very positive impact on engaging with a particular element, and 7 indicating a very significant negative impact/no positive impact at all. This provides a picture of the degree of association as perceived by each interviewee. The individual scores are entered on individual spreadsheets, totalled in summary form, divided through by, respectively, the number of male or female participants, and a mean obtained. The relativity of means when compared gives indications of patterns of associations. The overall means for the total of participants are grouped into male and female means, accompanied by the medians. They are presented in light of indications within the initial content analysis of noticeable distinctions between those groupings. Table 5 shows male means and Table 6 the female means.

Table 5: Mean Rating Scores and Medians: Males

Males Scores						Median
	E1	E2	E3	E4	E5	
C1	2.1	1.2	2.2	1.7	2.1	2
C2	2.7	2.6	1.8	5.4	2.5	3
C3	4.1	1.9	2.1	3.9	2.2	2
C4	1.2	2.1	1.9	1.8	2.1	2
C5	1.3	2.2	4.2	1.9	2	2
C6	1.5	2.1	1.9	2.2	1.8	2
C7	2.1	6	2.3	3.1	1.4	2
C8	4.2	5.4	3	2.1	2.4	3
C9	2.1	3.1	4.8	3.8	2.9	3

The key for this table: Elements - E1: Time taken to read and study; E2: Experience of face-to-face sessions; E3: Assignments; E4: Exam; E5: Overall study experience. Constructs - C1: Domestic circumstances; C2: Length of work experience; C3: Degree of

*financial nature of work; C4: Maths Skills; C5: PC Skills; C6: Design of module; C7: e-Learning Materials; C8: Motivation to pass exams; C9: Motivation to gain financial skills*

Table 6: Mean rating scores and medians: females

Females Scores						Median
	E1	E2	E3	E4	E5	
C1	4.3	5.3	5.1	5.3	6.1	5
C2	4.2	4.7	5.2	5.1	5.4	5
C3	5.6	5.3	5.9	5.8	6.1	6
C4	5.2	4.4	5.1	5.3	5.4	5
C5	5.3	4.1	5.6	4.2	5.4	5
C6	3.1	3.8	2.8	2.9	2.7	3
C7	1.8	3.1	2.2	2.8	2.3	2
C8	2.9	2.4	2.8	2.6	2.7	3
C9	2.7	2.9	2.7	5.8	2.9	3

*The key for this table: Elements - E1: Time taken to read and study; E2: Experience of face-to-face sessions; E3: Assignments; E4: Exam; E5: Overall study experience Constructs - C1: Domestic circumstances; C2: Length of work experience; C3: Degree of financial nature of work; C4: Maths Skills; C5: PC Skills; C6: Design of module; C7: e-Learning Materials; C8: Motivation to pass exams; C9: Motivation to gain financial skills*

A visual assessment based on a laddering perspective – identifying locations of higher and lower ratings, in this case the means - reveals a skewing between the male and female students. Additionally, the median scores for C1 – C5 show consistently more support for the propositions from male students with median scores of two and three compared with medians of five and six for the female students. The differences can be summarised with the different responses to the overall learning experience (E5). Scores for C1 to C5 show apparent significant differences. This indicates that in respect of a number of elements of the module study experience, males view the impact of their characteristics as expressed through their constructs as being somewhat different to those of females.

To establish significance regarding the two male/female groups, a t-test was applied to establish treatment as a homogenous group, or as two distinct groups demanding separate consideration. Assuming the hypothesis that the two groups represent the same population the t-test application to the data in Tables 5 and 6 as a whole returns a probability of less than 0.5%, and thus the hypothesis that the male and females represent a homogenous group may be rejected. To delve further, the test was applied to each construct in each of the two tables. These results indicate for constructs C1 to C6 there are strong indications that there is a distinct difference between the two groups but in constructs C7 to C9 there is no evidence of difference. The medians for constructs C1 – C5 inclusive show differences between males and females – and thus disagreement. Derived from their median scores, an analysis captures the relativity of the differentials between male and female medians in the context of individual constructs across all elements, revealing:

- the degree of disagreement between the male and female groups regarding constructs C1 to C6, and
- the degree of agreement between the male and female groups regarding constructs C7 to C9.

The characteristics and circumstances reflected by each individual construct in C1 to C6 are felt by females to have a greater negative impact upon perceived elements of the module experience. Conversely, males do not feel this. As a group, females have greatest concerns over the negative impacts of lack of financial nature work, domestic circumstances, maths skills and PC skills. There are clear indications that there is agreement between males and females regarding the

positive contribution of each individual construct in C7 to C9. It would appear that both groups are in agreement regarding the positive impacts of the e-Learning materials and the drivers of seeking to gain financial skills and pass the module. Further interrogation of the grid suggests, among other matters:

Males have longer work experience than females and usually the nature of their work is of a more financial, and thus they may well have a greater natural empathy with the nature and context of the content of *ACC-M*.

Through more work of a financial nature, males may well have better spread-sheeting skills than females. This may also account for male perceptions that maths skills are less worrying, given their experience of financial work. Most males, even where they are parents, felt that their domestic circumstances did not impact negatively on the identified module elements. In contrast, females felt that they were often torn between family and other commitments and attention to the module. This was particularly so regarding challenges in attending face to face sessions. This has an enhanced negative impact on their module experience as such attendance is seen by both males and females as being a significant component of their module experience.

The analyses immediately preceding have generated discernable patterns. These patterns may be matched against academic scores to ascertain whether or not it is possible to identify groups of typologies. Given the marked differences between males and females revealed by the analyses, it is appropriate to commence with a broad typology based on gender. That is then followed by other sets of typology. The gender-based academic mean scores for assignments and coursework.

Table 7: Gender-Related Mean Scores and Standard Deviations

	Male (N=24)		Female (N=14)	
	Mean	Standard deviation	Mean	Standard deviation
Assignment 01 score	58.1	3.8	55.2	4.3
Assignment 02 score	63.9	6.8	57.2	6.2
Assignment 03 score	70.4	8.1	62.2	8.9
Overall Assignment score (weighted)	65.0	6.0	58.9	5.9
Exam score	62.1	9.3	51.5	11.0
Overall score	63.3	7.3	54.9	8.1

At first glance, males appear to be outperforming females in each of the different assessments. A one-sample Kolmogorov-Smirnov test was used to test for normality in each of the *ACC-M* assessments, and an F-ratio calculated to test for homogeneity of variance. There is one significant result in the Kolmogorov-Smirnov test (Assignment 01: score for males). However, the t-test is robust and will tolerate some non-normality (Black, 1999: 419). Results indicate that gender is a significant factor in *ACC-M* assessment performance. This suggests the distinctions that exist between the study experiences of males and females, and, possibly, a poorer experience produces poorer assessment results. Linking each of the five constructs with gender-related score bands produces clearly discernable patterns. The linking is based on the rankings by students of the degree of perceived impact of each construct on the overall study experience. The original rankings were based on a scale of 1 to 7, with the lower end reflecting more positive/less negative impacts upon the study experience, and the upper end reflecting less positive/more negative impacts upon the study experience. The numbers of people with individual rankings above and below 3.5 for each of the five constructs are matched against the overall score. These indicate that

the less positive/more negative impacts of the constructs analysed appear to have some greater degree of association with lower performance by females.

## CONCLUSIONS

The conclusions here are linked directly to the research questions in Table 1. Regarding Question 1, there are five elements identified by students as being key components within the study experience are E1: Time taken to read and study; E2: Experience of optional face-to-face sessions; E3: Assignments; E4: Exam; and E5: Overall study experience. The implication of such identification is that curriculum designers should take account of these as they set about designing modules. They do not, however, exist in isolation. They are connected to the factors sought by asking Question 2. For that question, the aspects students perceive as being very significant in engaging successfully with the module are, in rank order; C1: Domestic circumstances; C2: Length of work experience; C3: Degree of financial nature of work; C4: Maths Skills; C5: PC Skills. Students believe that they must engage with these. Their views on what helps or hinders such engagement must also be known by designers.

In response to Question 3, this study shows how and to what degree the elements and constructs interact. When groupings are linked to academic scores, typologies may be identified. Females score below males and appear to be impacted by a combination of factors. In general, a combination of demanding domestic circumstances and a shorter length of work experience suggest that females will have a less positive experience than males, evidenced in part by lower academic scores. When a lack of financial experience at work and lower confidence regarding maths skills are also combined, these four aspects suggest a marked impact on the experience and lower scores.

A response to Question 4 emerges from the insights into the student experience, provided by the study. Students are content with the overall quality of the text materials. The e-learning materials are highly thought of. Students value the face to face sessions but some, particularly females, face challenges in attending what are perceived as being important module components. This is linked to a perception that the university does not take into account domestic circumstances in particular. Perhaps a major contribution is to be found in the duality of gender and related domestic circumstances; it is clear from this study that the student experience is shaped significantly by such circumstances. Accordingly, the findings of this study suggest that Gender is an issue of great significance. This study suggests that females are challenged by a number of factors, particularly those concerned with the need to combine domestic roles and parenting with employment responsibilities, all impacting on the time available to study. It is clear that the literature referred to earlier are accurate in that females are challenged by family responsibilities. Additionally, females in this study tended to have less managerial experience and associated budgetary and other financial responsibilities. The study indicates a divide between males and females, providing a platform for further and future work regarding gender issues. These findings may inform the design of improvements to the curriculum.

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# THE EFFECTIVENESS COMPARISON BETWEEN MOBILE BASED LEARNING TECHNOLOGY WITH FACE-TO-FACE AS A TEACHING METHOD OF ACCOUNTING INFORMATION SYSTEM

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## ABSTRACT

The fast developments of information and communication technology (ICT) today not only have an impact on the world of industry, but also in the world of education. In the world of education, the usage of ICT is expected to improve the performance, especially the performance of students with regard to their academic matters. The need to improve the quality of accounting graduates who have personal skills has long been a concern of accounting education. This study aims, first to provide empirical evidence that the approach to learning with mobile learning will improve student performance not only in technical skills but also in personal skills. Second, to prove and test the effectiveness of mobile learning as a means of supporting the learning process in improving the competence of accountants in accordance with the standards established by the Indonesian Institute of Accountants (IAI) and the national education goals. Method of learning with mobile technology is expected to support the learning process of the present method so as to improve the competence of accountants in terms of technical competency skills, personal skills, business knowledge and extensive expertise. And third, to understand the students' motivation and factors that affected the use of mobile technology. This study is an exploratory research to develop a mobile learning application of Accounting Information Systems and tests on the application made by using the quasi-experimental research design. Research results of the pre-test score indicate that before the student use mobile technology, their performance is not as expected.

**JEL:** M49

**KEY WORDS:** Mobile Learning Applications, Quasi-Experimental, Accountants' Competency

## INTRODUCTION

The fast developments of information and communication technology (ICT) today not only have an impact on the world of industry, but also in the world of education. In the world of education, the usage of ICT is expected to improve the performance, especially the performance of students with regard to their academic matters. Basically the development and use of ICT can be grouped into two learning systems, ie the system of e-learning as a form of learning that utilizes electronic devices and digital media and mobile learning (m-learning) as a special form of learning that utilize devices and communication technologies such as mobile phone (smart phone). This new concept will influence the educational learning process transformation from conventional education into digital form. The need to improve the quality of accounting graduates who have personal skills has long been a concern of accounting education. The American Institute of Certified Public Accountants (AICPA) published a framework of core competencies (Core Competency Framework) that must be possessed by students entering the accounting profession, both in the public sector, industry, government, or other service business, which was also adopted by the Indonesian Institute of Accountants / IAI (AICPA, 2004; IAI, 2008). The competency

framework supports the concept of continuous learning that starts from the academic environment and continuing (life-long) through professional education and experience. Learning accounting requires more than knowledge transfer which include the active role of accounting students in their learning process. Quality of learning is not something that can be given away by educators, but need to be developed by the students through the process of interaction between students, educators and other students. In addition to developing technical knowledge and skills of accounting, accounting education programs must be designed to be able to develop computer competency and information systems, communication, interpersonal, intellectual, critical thinking, problem solving, integrity, and othe generic (soft) skills (Holcomb and Michaelsen, 1996 ; Boyce, 1999). Accounting education is also expected to develop a level of expertise that can be applied in a variety of contexts, including skills that enable students to understand and criticize accounting information and its role in economic and social, as well as the role of accountants in creating and re-creating the social reality (Hines, 1988).

Supporting learning methods such as mobile learning appears to be an ideal solution to improve the quality of accounting graduates. One of the benefits of mobile learning is the life-long learning as indicate on the Core Competency Framework (from AICPA) which supports the concept of continuous learning that starts from the academic environment and continuing (life-long) through professional education and experience. Therefore, this study aims to provide empirical evidence that the approach to learning with mobile learning will improve student performance not only in technical skills but also in personal skills. In addition, by adopting mobile learning technology in accounting education, accounting students not only understand the importance of personal skills in the accounting profession, but they also learn to accept and use ICT as part of the accounting profession. In other words, mobile learning that support conventional learning will drive the achievement of the overall competence of accountants: the technical competence, personal competence and a broad business perspective competency. This research also aims to prove and test the effectiveness of mobile learning as a means of supporting the learning process in improving the competence of accountants in accordance with the standards established by the Indonesian Institute of Accountants (IAI) and the national education goals. Method of learning with mobile technology is expected to support the learning process of the present method so as to improve the competence of accountants in terms of technical competency skills, personal skills, business knowledge and extensive expertise.

### The Importance of the Research

Important issue in accounting education is how to have a qualified accounting graduates competencies in line with the expectations and the needs of the community. Indonesian Institute of Accountants (IAI) has adopted the core competencies of accountants based Core Competency Framework issued by the AICPA. IAI also stated that although the curriculum / syllabus of accounting education S1 and Accountants Professional Education (PPA) in terms of skills, values, ethics and professional attitude is subjected to International Education Standard (IES) no. 3 - professionals contents and no skills. 4 - professional values, ethics, and attitudes, but still need to balance the percentage of the knowledge, skills, values, ethics and professional attitude, and assessment of methods and techniques of teaching (IAI, 2008). This study is important for several reasons: first, this study tried to carry out a review of the methods and techniques of teaching by providing a solution that is more sophisticated learning methods in accordance with the advancement of technology, the mobile technology-based learning methods. Second, although mobile technology has developed very rapidly, up to date positive impact of mobile learning is still questionable, considering there are positive and negative impacts of the emerging mobile

technologies. Finally, the application of mobile learning in accounting education and its impact to date, to the author's knowledge has not been done.

## LITERATURE REVIEW

### State of the Art

The education system has been and until now mostly done by traditional face-to-face between educators and students in one classroom. The development of ICT has an important role in changing education method. Teaching and learning processes which was originally dominated by the role of the teacher - the area of teacher, and then the process started much dominated by the role of the teacher and books - the area of teacher and book. Furthermore, this role began to shift with the dominant role of teachers, books, and technology – the area of teacher, books, and technology (Soekartawi, 2003; Haythronthwaite et al., 2011). Thus there is a shift in learning paradigm from conventional learning to sophisticated learning with digital technologies such as mobile learning.

In the world there are more than 5 billion people who bring a very powerful tool in their pocket or bag that is mobile device. Of these people, 500 million people use the internet in 2009. The amount will be doubled within five years in which mobile technology replaces the Personal Computer (PC) as a means to get into the web (Cumavo, 2011). In Indonesia alone, there are 68 million mobile users at the end of 2006, 94.7 million in 2007, and this number will increase to 133 million by 2010. In other words, nearly half the Indonesian population (about 250 million people) will be mobile users (Bahar, 2009). Indonesia is the world's three biggest users after China and India. Guild Research results regarding the adoption of mobile learning in the organization showed that in the world of education 14.5% had used mobile learning, 10.3% started to build a business case based mobile learning, 47.6% began researching how other organizations use mobile learning, and 22 , 1% do not have any plans with mobile learning. Based on these data, although there was an extraordinary development in mobile learning, but research on mobile learning in accounting education in Indonesia is scarce or even not yet done.

Research on learning using information and communication technology (ICT) has been conducted by researchers whose focus is on learning or electronic learning methods are more commonly known as e-learning (Suryaningrum et al, 2009). The research results prove that despite the ease of use of e-learning, but until now the use of e-learning in accounting education is not developed as expected. In accordance with the development of ICT, learning models shift towards the use of mobile technology that can be accessed anywhere and anytime. Ramli (2011), a senior adviser at the Ministry of Communication and Information of the Republic of Indonesia, said that based on market research in 2010 in the Indonesian cellular telecommunications penetration (full mobility) of 84.5% ( $\pm$  203 million), much larger than the penetration of fixed wireless (limited mobility) which only amounted to 13.3% ( $\pm$  8.3 million), and the remaining 9.3% for fixed wirelines and broadband penetration. Ramli further revealed that in the field of education, the government plans to networking with relation (link) to 40 million students. The factors driving the expanding opportunities of the use or application of mobile learning as a new trend in the study are the level of development of mobile devices is very high, the

level of use is relatively easy, and the price of the device is more affordable around \$ 100, compared to personal computers around \$ 500 (Ramli 2011). This has formed a new learning paradigm that can be done anywhere (where ever) and anytime (when ever).

## RESEARCH METHOD

To find out how important the material content in the curriculum / syllabus is taught to accounting students, I conducted preliminary interviews with several professors and students of accounting at the Universitas Pembangunan Nasional "Veteran" Jawa Timur, particularly on the learning materials of Accounting Information Systems (AIS). Preliminary results of this interview suggest that learning AIS especially with regard to capabilities in the areas of technology and information systems are still very weak. There are two reasons why it happened. First, accounting educators are to focus on the material that will improve practice skill competency (or technical skills) with the hope of accounting graduates to be an expert accountant in applying accounting practices. Second is the limited time in learning with face-to-face teaching methods in the classroom. In accordance with the system of semester credit (SKS), accounting courses, which generally have 3 credits given face-to-face teaching time in the classroom (face-to-face) about 2.5 hours (50 minutes x 3 credits = 150 minutes). Face-to-face time in the classroom is generally focused on learning technical skills that do not allow providing or discussing matters relating to ethics, behavior, or technology as learning to improve personal skills.

Supporting learning methods such as mobile learning appears to be an ideal solution to solve that problem. One of the benefits of mobile learning is the life-long learning as indicated in the Core Competency Framework (from AICPA) which supports the concept of continuous learning that starts from the academic environment and continuing (life-long) through professional education and experience. Therefore, this study aimed to provide empirical evidence that learning with mobile learning approach to improving the performance of accounting students. This study is an exploratory research program to develop a mobile learning application of Accounting Information Systems. Once the AIS mobile learning application is completed, tests on the application made by using the quasi-experimental research design. There are two things that will be measured: 1) student learning outcomes in the domain of knowledge (cognitive) knowledge of AIS. Knowledge was measured using MCQs (Multiple Choice Question) conducted in pre-test and post-test. 2) students' attitudes and motivation were measured after students attend one lecture or teaching methods by using a mobile learning. MSLQ (Motivated Strategies for Learning Questionnaire) developed by the National Center for Research University of Michigan to improve postsecondary teaching and learning (Pintrich et al. , 1991; Garcia and Pintrich, 1995; Duncan and McKeachie, 2005) is used in this research.

Research subjects are fifty students of the Faculty of Economics majoring in Accounting who has passed the AIS courses. Students are grouped into two randomized groups. Each group will follow the learning process of AIS with a certain topic of data warehaousing with different methods: 1) face-to-face classes are held at the Laboratory of accounting and 2) mobile learning that can be done by students anytime and anywhere. The pilot study of mobile technology-based learning applications is done at the user level (accounting student who has completed an AIS course). Design research is quasi-experimental control group pre-test and post-test non-equivalent (non-equivalent pre-test and post-test control group design) testing pre-post test, attitude assessment, and student motivation to use mobile learning.

- a) Pre-post test was conducted to measure the impact of behavioral changes in students after the students utilize mobile learning application program with their cell phone. Pre-test conducted before students take advantage of mobile learning applications program, which aims to measure the ability of students before the beginning of the use of technology-based learning mobile applications. Post-test was performed after an application program utilize in the student learning. Students were given for 6 days to try and take advantage of learning applications. Test post-test is intended to measure the ability of students after using the mobile technology-based learning application.
- b) Assessment of attitude and motivation of accounting students is done to seek information from students after the students get a chance to try and make use of mobile technology-based learning application.

## RESEARCH RESULTS

Implementation of the pre-test done at the user level, the accounting students who have completed Accounting Information Systems (AIS) courses. Number of students who are willing to follow the pre-test are as many as 50 students. Pre-test questions are multiple choice questions with topic of data warehouse that consists of 20 questions randomly selected from the 30 available questions. In the pre-test, the students were grouped into 4 grup to distinguish given multiple choice questions. This is done so that each student can not imitate each other answers. The average pre-test score of students is 55 (fifty-five). The pre-test scores will then be compared with the post-test scores, the value after the student got to the topic of AIS data warehouse learning. Comparison of pre-test and post-test was conducted using paired sample t-test. At the post-test activities, students were also asked to complete a questionnaire about the attitude and motivation of the use of mobile technology in learning. The mobile technology for the learning application is currently still in progress and the research will be completed on the first week of December 2013.

## ACKNOWLEDGEMENT

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# INNOVATION AND TECHNOLOGY AS A FACTOR OF COUNTRIES' COMPETITIVENESS: A MULTIDIMENSIONAL AND MULTIVARIATE ANALYSIS

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## ABSTRACT

*Today, innovation and technology are the main sources of competitiveness. This study addresses two research questions: 1. Which economies are competitive in terms of innovation and technology? 2. What are the variables that determine competitiveness in innovation and technology? Analysis Factorial of Correspondences (AFC) through the analysis of principal components methodology is employed in this article. The analysis is divided into five phases as follows: a) reliability testing, b) the calculation of a matrix that expresses the joint variability of the variables, c) extraction of the optimal number of factors, d) the rotation of solutions for the ease of interpretation, e) the estimation of the scores graphically, and f) the determination of the competitiveness index (IMD, 2009).*

**KEYWORDS:** Innovation, Technology, Competitiveness, AFC, Multivariate Analysis

## INTRODUCTION

Innovation and technology are key pieces that define competitiveness strategy. Competitive forces such as intense global competition, fragmented and demanding markets, and diverse and rapidly changing technologies make it vital to define public policies centered on knowledge in order to transform them for the well-being of society. The aim of this work is to measure the impact of different variables that affect innovation and technology, as well as the real economy. The overall goal of this research is to obtain an index for competitiveness of innovation and technology. Specifically, the economies under study were thirty four (34), taking as a parameter the study of principal economies made by the Bank of International Settlements (2007). The economies considered were as follows: Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, China, Cyprus, Korea, Estonia, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, Luxembourg, Malta, Mexico, Netherlands, Norway, Portugal, Singapore, Slovakia, Slovenia, Spain, Switzerland, Sweden, United Kingdom, United States, and the Euro-zone.

The hypothesis for this work is that the competitiveness of countries in innovation and technology is determined by high technology development and innovation, global investment in innovation and development, percentage positioning of investment and development in technology and innovation, and the complementary indicators of technological development. Thirteen indicators were considered in the study: Exports of products of high technology (in dollars to current prices), exports of products of high technology like percentage of exports of manufacture, requests of patents of non residents, requests of residents' patents, expense in research and development as percentage of the Gross Domestic Product (GDP), researchers dedicated to innovation and development (million persons), payments for copyright and licenses, articles in

scientific and technological publications, specialists - technical personnel - in innovation and development, trademark applications by non-residents, trademark applications from residents, conclusion of college education as a percentage of education, and researchers as a percentage of population. These indicators were collected from the World Bank and International Monetary Fund data base for the year 2010.

### Factorial Analysis of Correspondences

Factorial Analysis is a multivariate statistical technique whose main objective is the definition of the underlying structure in a data matrix. Factorial analysis allows one to solve the problem of analyzing the structure of interrelationships (correlations) present in a large number of variables and cases, defining a common number of underlying dimensions called components (Guillermo et al., 2010). Because the hypothesis consists of four variables accounted for thirteen indicators, it is necessary to apply a method to see the dependency between each of the indicators. It is also necessary to observe the weight of each variable regarding the problem to be addressed. An ideal tool for this analysis is the Factorial Analysis of Correspondences. An analysis of attraction-repulsion among types of different attributes (indicators) allows studies of proximity (similarity/dissimilarity) between the modalities of a single indicator; i.e. it allows the evaluations of homogeneity or substitution thereof (Miquel et al., 1997). For this, the projection of the modalities is presented on a metric space which applies the Analysis of Principal Components to aid simple causal interpretation of similarity-attraction behaviors (Kim & Mueller, 1978).

## RESULTS

The Communalities Table shows the degree of extraction that the study represents for each of the indicators or the proportion of the variance that can be explained by factorial analysis (Perez, 2006). The method of principal components assumes that one hundred per cent of the variance can be observed, so that all indicators are based on the extraction level of 1 (Kim & Mueller, 1978). It is important to note that if the indicator does not have a score above 0.500 it cannot be considered in the study because the indicator will not be representative for the analysis. In the study, herein, all the indicators are well represented. The indicator with the highest level of extraction was exports of products of high technology with a value of 0.883, followed by requests of residents' registered trademarks and requests of patents of non residents with 0.875 and 0.854 respectively (see Table 1).

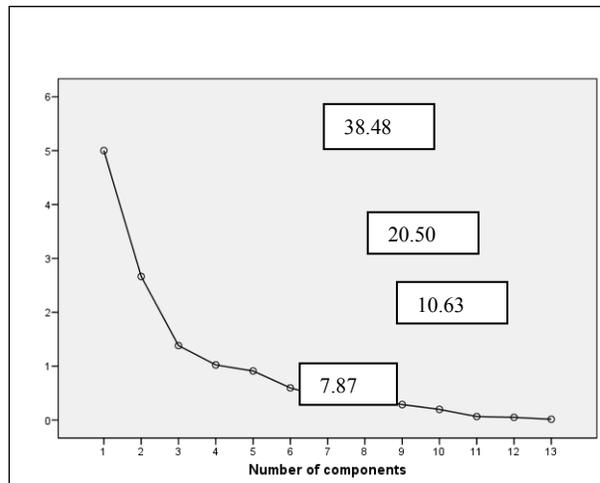
Table 1: Table of Communalities

Indicators	Initial	Extraction
Exports of prod. high technology (US\$)	1.000	<b>.883</b>
Exports of prod. high technology (% of exp. of manufacture)	1.000	.827
Patent applications, non residents	1.000	<b>.854</b>
Patent applications, resident	1.000	.757
Spending on Research & Development R & D (% of the GDP)	1.000	.831
Researchers R & D (million people)	1.000	.840
Royalty payments, copyright and license	1.000	.529
Scientific and technological publications.	1.000	.755
Specialists in R & D (per million people)	1.000	.812
MR applications, non residents	1.000	.782
MR applications, residents	1.000	<b>.875</b>
Conclusion of educ. top level. (% pobl.)	1.000	.730
Researchers (% population)	1.000	.797

*Method of extraction: Analysis of principal components. Source: Authors' calculations based on the results of the Factorial Analysis of Correspondences.*

The scree plot shown in the graph illustrates the percentage of the variance represented by each one of the factors or dimensions (Kruskal, 1981), as well as the overall contained degree of reliability. A total of 77.50 percent of the variance is represented, where the first component shows 38.48 percent, the second component 20.50 percent, the third factor 10.63, and the fourth 7.87 percent (graph 1).

Graph 1: Scree Plot



Source: Authors' calculations based on the results of the Analysis Factorial of Correspondences.

The solution of the Rotated Components Matrix shows each of the indicators **into a single component**. The solution is in a form that demonstrates a clear understanding of the space on which the variables are positioned as the relation between the variables and their correlation (for those that are reproduced in the same component). In the first component, the indicators are exports of products of high technology, patent applications residents and non residents, articles in scientific and technological publications, and trademark applications-residents and non residents. The second set of components are spending on research and development (R & D), R & D researchers, and the top level of education in percentage of the population. The third set of components deal with the exports of products of high technology, such as the percentage of exports of manufacture and researchers as percentage of the population. Finally, the fourth factor involves royalty payments, copyrights and licenses, and technical specialists in R & D.

Table 2: Rotated Components Matrix

Indicators	Components			
	1	2	3	4
Exports of prod. high technology (US\$)	<b>.884</b>	.050	.283	.133
Exports of prod. high technology (% of exp. of manufacture)	.106	.049	<b>.901</b>	-.042
Patent applications, non residents	<b>.857</b>	.306	.072	-.144
Patent applications, resident	<b>.802</b>	.314	.126	.001
Spending on R & D (% of the GDP)	.192	<b>.853</b>	.188	.177
Researchers R & D (million people)	-.036	<b>.885</b>	.128	.197
Royalty payments, copyright and license	.256	.173	.333	<b>.451</b>
Art. in scientific and technological publications.	<b>.794</b>	.346	.000	-.073
Specialists in R & D (per million people)	-.172	.111	-.107	<b>.871</b>
MR applications, non residents	<b>.801</b>	-.212	.057	-.303
MR applications, residents	<b>.908</b>	-.195	.110	-.007
Conclusion of educ. top level. (% pop.)	.119	<b>.821</b>	-.190	-.072

Researchers (% population)	-.201	.058	-.651	.574
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*Extraction Method: Principal Components Analysis. 4 components extracted. Varimax with Kaiser Normalization. The rotation converged in 6 iterations. Source: Authors' calculations based on the results of the Analysis Factorial of Correspondences.*

According to the first results obtained, variables are grouped based on those that are most associated with one another and their degree of the variance. The degree of variance is such that the indicators can be integrated in four dimensions. The first factor contains the variables related to technology and innovation development. These are represented by a 38.48 percent of the variance. The second factor gathers the variables that show global investment in R & D with 20.50 percent. The third factor explains, with a variance of 10.63 percent, the positioning of investment and development in technology and innovation. The fourth factor concentrates the variables that relate to complementary indicators of technological development with 7.87 per cent of the variance (see Table 4).

Table 4: Proportion of the Variance Explained by Each Factor

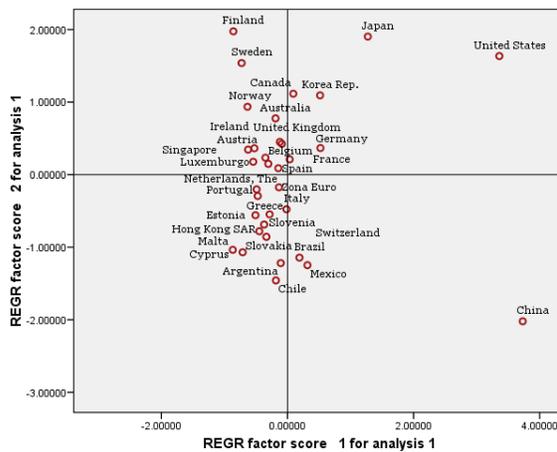
Factor	Sub-dimension	Proportion Variance Explained
Factor 1	High development on technology and innovation	38.48 %
Factor 2	Global investment in R & D	20.50 %
Factor 3	Percentage positioning of the investment and development in technology and innovation	10.63 %
Factor 4	Complementary indicators of the technological development	7.87 %

*Soucer: Author based on the results of the Analysis Factorial of Correspondences.*

Chord to the positioning of the indicators within the multidimensional space of the X-axis represents the degree of current development in technology and innovation of each economy, grouping the variable exports of products of high technology to current prices, patent applications of residents and non residents, articles in scientific and technological publications, and trademark applications of residents and non residents. Because the scores are positive (in the rotated components matrix) among the right, most countries will be better positioned. The best placed countries in respect of this axis are China, The United States, Japan, Germany, France, Korea, Switzerland, Mexico, Brazil and Australia while the worst positioned are Cyprus, Finland, Slovakia, Sweden, Portugal, and Estonia.

The Y axis represents the level of global investment in R & D, this is due to variables such as spending on R & D as percentage of the GDP, researchers dedicated to R & D (a million people), and the top educational levels as percentage of the education. As in the X-axis factors of this axis, the further up economies are located the better located they will be, such as is the case of Finland, Japan, The United States, Sweden, Canada, Korea, Norway, Australia, United Kingdom, Ireland, Germany, France, Belgium, Singapore, Luxembourg, and Spain, in this order. In contrast, Chile, Argentina, Mexico, Cyprus, Brazil, Slovakia and Malta are located further down (see graph 3).

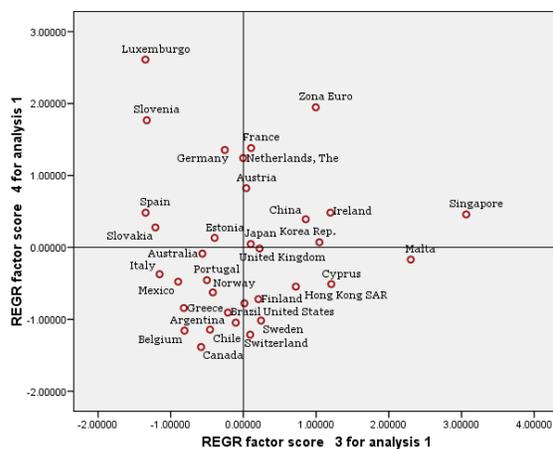
Graph 3: Scores Plot Factors 1 and 2



Source: Authors' calculations based on the results of the Factorial Analysis of Correspondences.

Graph 4 represented in the X-axis (component 3) shows the percentage positioning of investment and development in technology and innovation. It contemplates the exports of products of high technology like percentage of the exports of manufacture and the number of researchers as percentage of the population. The complementary indicators of technological development are located in the Y-axis (component 4). These are royalty payments for copyright and licenses and technical specialists in innovation and development. Because component 3 has negative and positive values, the best placed countries in respect of the X-axis will be those that tend to zero, such as Japan, United Kingdom, United States, Netherlands, Austria, Sweden, and France. The top-ranked countries respect of the Y-axis will be those who are located at the top of this axis, such as Luxembourg, the Euro-zone, Slovenia, France, Germany, Netherlands, Austria, Singapore, Ireland, China, and Spain (see graph 4).

Graph 4: Scores Plot Factors 3 And 4

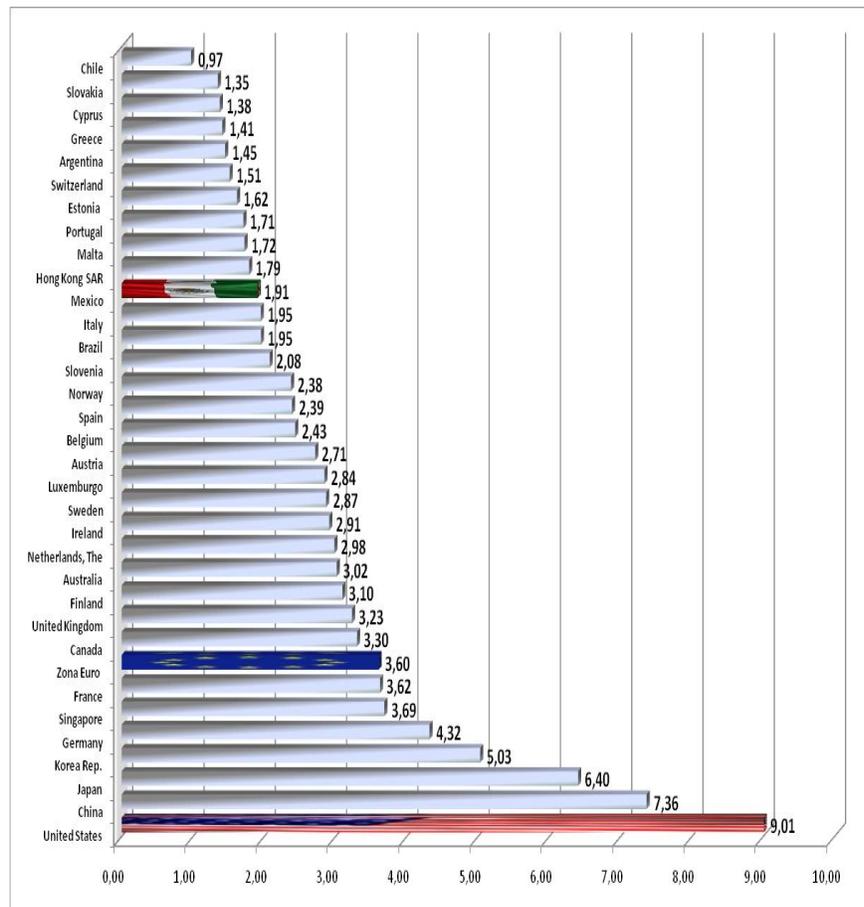


Source: Authors' calculations based on the results of the Factorial Analysis of Correspondences.

The competitiveness index obtained accounts for the position of each one of the countries analyzed to combine the results for each of the dimensions. The index reveals the countries that have better ranking or are more competitive in innovation and technology. The economy with the highest index of competitiveness is the United States followed in descending order by China, Japan, Korea, Germany, Singapore, France, the Euro-zone, Canada and United Kingdom. The

minor indexes find Chile, Slovakia, Cyprus, Greece, Argentina, Sweden, Estonia, Portugal, Malta, Hong Kong, and Mexico; being the sample mean of 2.6 (graph 6).

Graph 6: Competitiveness Index Dimension of Technology



Source: Authors' calculations based on the results of the Factorial Analysis of Correspondences.

## CONCLUSIONS

Though four variables that explain the hypothesis - high development of technology and innovation, global investment in R & D, percentage positioning of investment and development in technology, and innovation and complementary indicators of the technological development - have important roles in determining the competitiveness of innovation and technology, the first two components are the most relevant. By integrating the results of components one and two that explain the degree of development in technology and innovation (X-axis) and the investment in research and development (Y-axis), it is observed that the top-ranked countries are located in the first quadrant, i.e., The United States, Japan, Korea, Germany, France, and United Kingdom. Whereas the countries worse placed are Cyprus, Malta, Argentina, and Chile. The United States is not only the country best placed in terms of development in technology and innovation but also in investment in research and development. China, according to the results of the study, is considered to be the country with a high degree of development in technology and innovation but a low degree of investment in research and development

Among the best positioned economies in an international context, according to the index of competitiveness of innovation and technology, are the United States followed (consecutively) by China, Japan, Korea, Germany, Singapore, France, and the Euro-zone. Mexico locates at position number 13 in terms of competitiveness in innovation and technology with 1.91 points, what places it below the average (2.93). It is important to point out that the indicators which place

Mexico at a lower level are the number of researchers in R & D, articles in scientific and technological publications, and patent applications of residents, where Mexico shows a value far below of the average. Developed countries seek to support links between the development of educational and scientific systems with the ability to innovate in the real sector of their economies. This is still not on the agenda of many developing countries such as Mexico. This study identified elements that can lead to strategies aimed at the promotion of innovation and technological development, emphasizing strategies directed to the formation of researcher-driven innovation and technology, promotion of publications and creation of magazines related to science and technology; strategies that link the academic and business sectors, as well as the use of patents generated in order to boost competitiveness and development in Mexico.

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# PROFESSIONAL JUDGMENT EFFECTIVENESS: A STUDY OF TAX AUDITORS IN THAILAND

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## ABSTRACT

This paper aims to examine the professional judgment effectiveness of tax auditors (TA) in Thailand under circumstances of work commitment and degree of industry and business knowledge. Therefore, this research study examines the relationships between 1) work commitment and professional judgment effectiveness and 2) industry and business knowledge and audit judgment effectiveness. Seventy-seven questionnaires completed by 77 TAs in Thailand were received from a mail survey. The statistical method used to analyze data was ordinary least square (OLS) regression. The results show that work commitment and industry and business knowledge have a strongly significantly positive relationship with professional judgment effectiveness. All of the hypotheses are supported and a thorough discussion is effectively presented as part of this paper. Further implications of theoretical and managerial contributions are explicitly provided. Conclusion, limitations, and suggestions for future research are also highlighted.

**KEYWORDS:** Work commitment, professional judgment effectiveness, ethical culture, tax auditor, Thailand

## INTRODUCTION

Increasingly, professional judgment effectiveness in an auditing context is very important for the tax auditor (TA), who is regarded as a professional in assurance and consulting services. Professional judgment effectiveness is related to a TA's decision making according to perspectives of competitive advantage. The depth of the information process during data gathering of an audit affects professional judgment that TA's commitment to their objective. Thus, professional judgment effectiveness of the TA to support and service their client and to provide conclusive recommendations can be justified (Kerler and Brandon, 2010).

The role of work commitment has a direct effect on the audit decision making process that is expected of the TA to maintain individual and firm reputations and to deliver audit quality services to clients. This study defines work commitment as the degree of professional service behaviors that the TA exerts in consideration of the effort for professional judgment effectiveness (Hilton and Souhgate, 2007). In some cases, the TA will make a preferred judgment, which is likely to put pressure on the client (Kerler and Brandon, 2010). Therefore, the TA must possess the required industry and business knowledge in order to avoid and mitigate associated risks of audit work by having and/or obtaining appropriate and sufficient industry and business knowledge of their client.

Industry and business knowledge are a few of the business process information needed for the auditing process (Neito and Perez-Cano, 2004). The business process can help the TA to make better decisions (Kopp and O'Donnell, 2005) because the TA is the person who possesses more skill in evaluation of their audit approach. Industry and business knowledge enables the TA to achieve professional judgment effectiveness that is relevant information to audit (Sarens et al., 2009). The TA uses industry and business knowledge for interpreting and integrating evidence by

developing and accumulating knowledge (Kaplan et al., 2008) as part of their professional judgment.

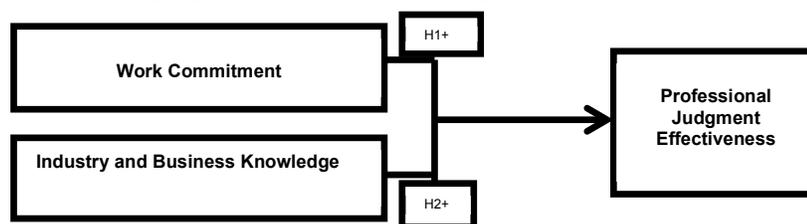
Based on the discussion above, the main research question of this paper addresses how work commitment and industry and business knowledge relate to professional judgment effectiveness. This research builds upon previous research to address in the area of professional judgment effectiveness based upon contingency theory to develop and create the conceptual model of this study. This research involves the collection of data that is analyzed as a quantitative approach. Therefore, the objectives of this research are examine the relationships between work commitment and audit judgment effectiveness as well as that of industry business knowledge and professional judgment effectiveness.

This paper is organized as follows. The first part details a literature review and the theoretical foundations to develop the conceptual framework. The second part deals with the research methodology, including the questionnaire design and measurements of variables. The next section describes the statistical analysis and results. The final part presents the discussion of findings, limitations of the study, future research, and conclusions.

## LITERATURE REVIEW

This section presents the conceptual model and depicts professional judgment effectiveness and its antecedent variables. This paper clarifies how the antecedents of work commitment and industry and business knowledge relate to professional judgment effectiveness of the tax auditor (TA) in Thailand.

Figure 1: Professional judgment and its relationship model



As part of the theoretical development, the contingency theory was applied in this study because the concept of this theory suggests that organizational effectiveness is related to corporate characteristics of contingencies (Chenhall, 2003). In a professional judgment effectiveness context, especially in this paper, the application of contingency theory stems from the fact that certain contingency factors influence professional judgment effectiveness. Therefore, Figure 1 presents the links between the contingent variables and professional judgment, are to be empirically examined (Bernard and Sweeny, 2006).

### Work Commitment

The TA can develop a work commitment to the client's needs during the auditing process (Jeffrey et al., 1996). In this research study, work commitment refers to the degree of professional service behavior that the TA exerts a considerable amount of effort to (Storch and Northcott, 1989), mainly in terms of work compliance, confidentiality, transparency, punctuality, and striving for excellence in the long-term aspirations of the clients (Hilton and Souhgate, 2007). Work commitment is encouraged by personal TAs though professional experience to benefit TA

judgment effectiveness. Previous research of work commitment in an audit context has included work in turnover intentions (Bline et al., 1991), auditor's attitudes (Jeffrey et.,al 1996), ethical orientation (Clikeman et., al 2001), job satisfaction, work stress, and burnout (Lu et., al 2007) Therefore, commitment is a human behavior that reflects compliance and duty to one's professional practice. Hence, this study assumes that work commitment is positively related to professional judgment effectiveness. Moreover, work commitment can indicate a TA's acts in audit service through their beliefs, acceptances, goals, values, efforts, and professionalism towards clients.

As described above, this study assumes that work commitment is positively related to audit judgment effectiveness, which leads to the hypothesis below.

Hypothesis 1: The greater the work commitment is, the more likely that tax auditor will gain greater audit judgment effectiveness.

### Industry and Business Knowledge

At present, every professional TA is required to possess industry and business knowledge in order to avoid and mitigate risks associated with typical audit work (Hart and Banbury, 1994). Audit knowledge, particularly industry and business knowledge, is primary and important information for the audit process (Neito and Perez-Cano, 2004) that the TA relies on for decision-making during audit work. Therefore, industry and business knowledge consist of the TAs' style and his/her philosophy linked with the audit process and the stated objectives in the audit operations (Arena et al., 2010) in order to achieve professional judgment effectiveness. This is due to the TA acquiring industry and business knowledge that is relevant information for auditing (Sarens et al., 2009). TAs use industry and business knowledge for interpreting and integrating information to present evidence from the audit process by developing and accumulating knowledge (Kaplan et al., 2008) as part of their professional judgment effectiveness. Kopp and O'Donell (2005) suggest that the business process can help TAs to make better decisions. In essence, TAs who has more skill in evaluation during their audit approach will help them to achieve professional judgment effectiveness. As described, this study focuses on and expects a positive relationship between industry and business knowledge and audit judgment effectiveness. Thus, it leads to the hypothesis posited below.

Hypothesis 2: The greater the Industry and business knowledge is, the more likely that tax auditor will gain greater audit judgment effectiveness.

## **RESEARCH METHODS**

### Sample Selection and Respondents

The sample selection and respondents for this research were composed of tax auditors (TAs) in Thailand. The total number of questionnaires mailed was 500. Deducting the undeliverables from the original mailing, the valid number of mailed questionnaires was 450, from which 95 responses were received. Of the surveys completed and returned, only 77 were usable. Thus, the effective response rate was approximately 17.11%.

The non-response bias (Armstrong and Overton, 1977) was evaluated after the third week of the initial mailing of questionnaires. So, the pre-notification by postcard was used as a follow-up to respondents. This procedure assumes that late respondents are not different from non-respondents

comparing relatively early and relatively late responses in each mailing by use of a *t*-test of the regression analysis method. The regression results reveal that no significant differences between early and late respondents existed, at  $\alpha=0.05$ . In addition, this study applied a test to compare the demographics of the respondents (e.g. numbers of years of audit experience of the TA). Hence, there is no significant difference between early and late respondents in terms of the numbers of years of audit experience of the TA, and the effect of non-response bias on the results of this study were considered minimal.

## QUESTIONNAIRE DESIGN AND CONSTRUCT MEASUREMENTS

### Questionnaire Design

For this study, the mail questionnaire was developed using a two-stage procedure that included both pretests and the refinement of the scales developed for all variables in the study. The pretest was used to understand the context and the result after pretest was used to assess the internal audit quality-organizational effectiveness relationship. Then the questionnaires were modified and developed to increase the appropriateness and validity of sentences or words used for construct items. The final surveys were administered by a cover letter that included an explanation of the objective of study along with the questionnaire and a prepared envelop.

Questions to the respondents were provided in the Thai language, with five-point Likert-type scales ranging from '1 = strongly disagree' to '5 = strongly agree'. The first part of questionnaires deals with external factor details. The next part of the questionnaire deals with personal information of the respondent, such as in gender, age, education, personal status, internal audit experience, professional, and position. In each part, questions deal with the variables of work commitment, industry and business knowledge, and professional judgment effectiveness. The final part of the questionnaire included open-ended items for respondents to provide any further suggestions and opinions.

Potential respondents received a cover letter to provide the objectives of the research. The conduct of questionnaire survey is complied with the ethics and confidentiality rules to preserve the rights, liberties and safety of the participants. The respondents were informed under the ethical rules that participation was voluntary and they were not being exposed to any risks, i.e. psychological, moral, and legal.

The characteristics of the sample are based on gender; age range, marriage status, education levels, years of experience, years of tenure, and monthly income. The sample includes 60.5% female, who provided the majority of respondents' based on the demographic of gender. Moreover, the majority (78.9%) of the age of respondents was over 40 years. In terms of marital status, 47.4 % were married. As for respondent education level, a majority (56.6%) had bachelor's degree or higher. Sixty-one of the respondents (i.e. 80.3% of the sample) had more than 15 years of experience and 35.4% of the respondents had between 5 to 10 years of experience in their current position. Finally, 86.8% of the sample had more than 30,000 baht monthly income

### Measurement Reliability and Validity

In the survey instrument, all scale items were scored by existing developed scales and underwent a complex task by pretest of the scales from various accounting, auditing, and internal audit and control studies to reduce the mitigation of errors (Morales et al., 2007). The principal component analysis was used to check whether all items belonged to their respective construct. To ensure

scales were reliable and valid, Cronbach's alpha coefficient was obtained to test the reliabilities (higher than 0.7 as satisfactory) (Cronbach, 1951). Therefore, in this research the measurements of the constructs *work commitment* were obtained via four items indicating the extent of the TAs behavior to participate in audit work. *Industry and business knowledge* was measured using four items concerning industry and business environment data such as internal control systems and competitive ranking. Finally, *professional judgment effectiveness* was measured by eight items asking respondents to rate the extent of his/her judgment and decision making.

In this research, reliability is estimated using Cronbach's alpha, the most common method accepted by researchers (Francis, 2001). The Cronbach's alpha coefficient indicates the degree of internal consistency among items in the questionnaire (Nunnally and Bernstein, 1994). In this research, the Cronbach's alpha coefficients are in the range of .740 - .855. To conduct a validity check of the questionnaire items, the construct validities need to be assessed by factor analysis, which was therefore conducted as part of this study. A principal component factor analysis using Varimax rotation was performed for each construct using the 0.40 criterion as a significant item loading. All factor loadings greater than the cut-off value of 0.40 are adopted based on Hair et al. (1992) who interpreted the significance of factor loadings of 0.30, 0.40 as being more significant, and 0.50 as being very significant. Here, the construct factor loadings are in the range from .577 - .869.

As described above, all results of factor loadings and Cronbach's alpha coefficients show the statistics in terms of average scores and the range of key variables and also the overall reliability of all key variables (Francis 2001). Thus, Table 1 shows the results of the factor analysis, with the factor loadings and Cronbach's alpha coefficient of the multi-item measurement scales used in the questionnaire.

Table 1 Results of Factor Loadings and Cronbach's Alpha Coefficients

Variable	Factor Loadings	Cronbach's Alpha
Work Commitment (WCM)	.637-.854	.806
Industry and Business Knowledge (IBK)	.683-.842	.740
Professional Judgment Effectiveness (PJE)	.577-.869	.855

## STATISTICAL ANALYSIS AND RESULTS

In this research, the correlation matrix is used for the initial analysis then ordinary least squares regression (OLS) for supplemented hypotheses tests from the data (Aulakh et al., 2000). The OLS is a linear-regression and responsive to the pooling closer of the categories that permit the parameters in the model so that the researcher can interpret the model parameters when it is not true (Samelson et al., 2006). Thus, we perform an appropriate and statistical analysis of the data collection employing the ordinal regression with two equations as follows:

$$PJE = \beta_{01} + \beta_1 WCM + \varepsilon$$

(1)

$$PJE = \beta_{02} + \beta_2 IBK + \varepsilon$$

(2)

Table 2 Descriptive Statistics and Correlation Matrix

Variables	WCM	IBK	RME
Mean	17.25	15.54	29.96
Standard Deviation	1.84	2.35	3.61
Work Commitment (WCM)			
Industry and Business Knowledge (IBK)	.481**		
Professional Judgment Effectiveness (PJE)	.522**	.517**	

\*\* $P < .05$

Table 2 shows the results of descriptive statistics and correlation matrix. Descriptive statistics are described by the mean and standard deviation of each variable. The correlation matrix shows the relation among all variables and also reveals multicollinearity. The multicollinearity shows the relationships exist among independent variables in the model. In this case, the overall relation between all variables is under .80, meaning multicollinearity problems are not a concern (Neter et al., 1985).

Table 3 Results of Regression Analysis <sup>a</sup>

Independence Variables	Dependence Variable	Adjusted R <sup>2</sup>
	Professional Judgment Effectiveness	
Work Commitment (WCM)	.481*** (.102)	.221
Industry and Business Knowledge (IBK)	.522*** (.099)	.263

\*\*\*  $P < .01$

<sup>a</sup> Beta coefficients with standard errors in parenthesis

Table 3 summarizes the results of the OLS regression analysis for Hypotheses 1 and 2 (Equations 1 and 2) and reveals the relationships between 1) work commitment and professional judgment effectiveness and 2) industry and business knowledge and professional judgment effectiveness. The Equation 1 (Model 1) addresses the relationships between work commitment and professional judgment effectiveness. The results show that work commitment ( $\beta_1 = .481, p < 0.00$ ) has significant positive relationship with professional judgment effectiveness. Therefore, Hypothesis 1 is supported. Model 2, on the other hand, addresses on industry and business knowledge relationship with professional judgment effectiveness. The results reveal a significant positive relationship ( $\beta_2 = .522, p < 0.00$ ). Therefore, Hypothesis 2 is also supported.

## DISCUSSION, LIMITATIONS, AND FUTURE RESEARCH

### Discussion of Findings

This study examines professional judgment effectiveness and its antecedents by developing a model based on theory and a review of relevant literature. The results show that work commitment has a significant strong positive relationship with professional judgment effectiveness. Furthermore, this study found that industry and business knowledge also has a significant strong effect on professional judgment effectiveness. This suggests that if a TA lacks commitment regarding audit engagement, the TA will loosen his/her professionalism and reputation. On the other hand, industry and business knowledge is important to TA decision making in the audit process. This implies that if a TA did not to put much effort to gather relevant information about the industry and the business of their client, decision- and judgment- making will be less efficient and effective. Thus, this study provides some evidences that in the context of

Thailand, work commitment and industry and business knowledge are necessary to enhancing TAs' judgment effectiveness.

### Limitations and Future Research

This research has a limitation that the objectives under professional judgment effectiveness framework may only be suitable for TAs in Thailand. Future research may be amended as necessary to suit specific circumstances due to particular audit activities into their framework. Moreover, future research can verify the objectives pursued here or extend this study to different professional accounting areas, such as those involving the CPA or the CIA. It would be beneficial, particularly to assert the views of clients' acceptance, stakeholders, and third-parties to understand the professional judgment of TAs' and their professionalism. This study provides evidence supporting the importance of a holistic research approach that considers the behavior of TAs within the context of the auditing process. Future research may consider benefits from views of several disciplines and to explore in decision making or judgment effectiveness in other contexts.

### Implications

The objective of this research was to examine professional judgment effectiveness and its relationship to select antecedent factors. The findings can be generalized to a survey of tax auditors in Thailand. The generalizability is assumed by this empirical study under the content of internal audit and control, accounting, and auditing effectiveness. The theoretical development is based on contingency theory used to describe the relationships between the context and the structure of professional judgment effectiveness. This empirical study suggests that TAs who are specialized and higher in assurance services will provide a strong benefit and achieve professional judgment effectiveness analysis and that the audit firm will benefit in terms of organizational effectiveness via professional judgment mechanism efficiency. The overall results found significant support for the hypotheses.

### **CONCLUSION**

The professional judgment effectiveness is important to all kinds of auditors, including managers, internal auditors, stakeholders and all staff members of the firm involved in decision making and controlling firms to achieve organization performance. Therefore, professional judgment effectiveness provides work commitment and information cues of the customer environment such as industry and business knowledge to conduct audit work.

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# COMMUNITY PERSPECTIVES ON ACCOUNTABILITY AND TRANSPARENCY IN THE MANAGEMENT OF LOCAL AUTHORITY TRANSFER FUND IN KENYA: A CASE OF SIAYA MUNICIPAL COUNCIL

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## ABSTRACT

*The Local Authorities Transfer Fund (LATF) is one of the funds that the Kenyan Government has decentralized to local authorities to supplement the financing of service delivery, enhance financial management and accountability, as well as reduce debts accumulated by the authorities. The purpose of this study was to assess and document community perspectives on accountability and transparency in the management of LATF resources. We sourced primary data from 162 community members, including opinion leaders and civil servants. The study found that participants were satisfied with community involvement in the planning and budgeting process (48.8%), enhancing accessibility of external auditor's reports (42.0%) and liability management (34.0%). However, they expressed dissatisfaction with indicators such as transparency in the procurement process (58.0%), management of Council assets (57.4%), publicization of expenditure reports (44.0%), cash flow management (42.0%), budget execution discipline (35.2%), accounting system (30.9%) as well as internal control and audit system (30.2%). The success of LATF largely depends on the Government's enforcement of existing regulations, identifying gaps and formulating additional controls, as well as taking public officers and political leaders through the change process. This will provide necessary safeguards against political interference and corruption in the management of LATF projects.*

**JEL:** 016

**KEYWORDS:** Accountability, Transparency, Local Authority, Service delivery, Decentralization, Fiscal decentralization

## INTRODUCTION

The Local Authorities Transfer Fund (LATF) was established through the Local Authorities Transfer Fund Act, No. 8 of 1998 (GoK, 1999), to achieve three objectives - improve service delivery, enhance financial management and accountability as well as reduce outstanding debts accumulated by local authorities (Kibua & Mwabu, 2008; Mboga, 2009). LATF is one of the public funds devolved to peripheral governance units, within the decentralization framework. As noted by Rondinelli (1999), decentralization entails the transfer of authority and responsibility for public functions from the central government to subordinate or quasi-independent public institutions as well as the private sector. Decentralization involves a combination of dimensions, including fiscal, administrative, political, and economic functions (Rondinelli, 1999; Cheema, 2007; Phillip, 2009). Public finance scholars have applied the concept in various fields, including public administration, economics, management science, law, and public finance, among others.

Whatever the area of application, decentralization responds to limitations and challenges associated with centralized governance systems (Conyers, 2007). Fiscal decentralization is one of the components of decentralized government functions, whose purpose is to improve efficiency in handling, management, expenditure, and accountability for public funds. As noted by Menon, Mutero, and Macharia (2008), fiscal decentralization involves the passing of budgetary authority from centralized governance systems to elected sub-national governments in the form of the power to make decisions on matters revenue and expenditure. Fiscal decentralization has four key attributes, including assigning clear expenditure and revenue responsibilities; intergovernmental fiscal transfer mechanisms from central to local governments; as well as authorization for borrowing and revenue mobilization through loan guarantees from the central government (Phillip, 2009). According to Wachira (2010), governments pursue fiscal decentralization to facilitate the participation of citizens in identification of community priorities, planning and budgeting, implementation as well as monitoring and evaluation. According to Bonoff and Zimmerman (2010), fiscal decentralization stems from the premise that local communities have the ability to prioritize projects in line with their needs, and that, local resources are easily accessible where community members are involved in development processes. In view of this, fiscal decentralization strengthens citizens' role in ensuring accountability and transparency in the management of public funds.

Decentralization is not a new concept in Kenya. The Government first proposed decentralization in the Sessional Paper No. 10 of 1965 on African Socialism and its Application to Planning in Kenya, with a view to strengthening the fight against poverty, disease and illiteracy (Chitere & Ileri, 2008). The Sessional paper marks one of the key initial attempts to decentralize development agenda and resources to the districts and local government authorities across the country (Kibua & Mwabu, 2008; Chitere & Ileri, 2008). In 1983, the Government introduced the District Focus for Rural Development (DFRD) mechanism as its official decentralization policy (Alila & Omosa, 1996; Chitere & Ileri, 2008). Under the DFRD framework, districts became the planning units for decentralized service delivery. However, performance of the strategy was constrained by various factors including limited involvement of communities in project cycle management (Chitere & Ileri, 2008).

As noted by Kibua and Mwabu (2008), decentralized development initiatives brings forth numerous benefits including increased community participation in decision-making, better governance, improved equity in resource sharing, improve the quality of government service delivery, as well as enhanced accountability in fund administration. More recently, decentralization was revisited in the Economic Recovery Strategy for Wealth and Employment Creation (ERSWEC) 2003-2007, which stands out as the policy document providing a clear framework against which devolved funds are leveraged (Kibua & Mwabu, 2008; GoK, 2003). Fiscal decentralization framework is further set out in the First Medium Term Plan (MTP) 2008-2012 (GoK, 2008), as well as Kenya's Vision 2030 (GoK, 2010).

These policy efforts culminated to the establishment of various devolved funds, including LATF. The fund draws from the national revenues - 5% of the annual national income tax collection (Kibua & Mwabu, 2008; Mboga, 2009). The allocation criteria are designed to ensure consistency, fairness and transparency, as follows: a basic minimum lump sum of KES 1.5 million (6.6%) is shared equally among the country's 175 local authorities, while 60% of the fund is disbursed according to relative population sizes of local authorities. The Government allocates the remaining 35.4% subject to local authorities meeting set financial management and accountability criteria (Kibua & Mwabu, 2008; Mboga, 2009). The money disbursed through

LATF supplements local authorities' revenues; it forms about one-quarter of local authority revenues (Kibua & Mwabu, 2008; Mboga, 2009).

In order to access LATF resources, local authorities are required to have action plans, known as Local Authority Service Delivery Plans (LASDAP), which are prepared through participatory processes, involving various stakeholder groups and community members. LASDAP specifies prioritized projects and activities for which the Government and local authority funds should finance. The participatory approach amplifies local communities' voice in project identification, planning, monitoring, evaluation, and accountability processes, as well as nurture ownership of LATF projects (Kibua & Mwabu, 2008; Menon et al., 2008; Bonoff & Zimmerman, 2010).

Furthermore, LASDAP anchors on key pillars focusing on poverty reduction line with the Poverty Reduction Strategy Paper (PRSP) and the Economic Recovery Strategy (ERS) whose priority areas include health, education, and infrastructure and upgrading of informal settlements (Mboga, 2009). The concept behind the LASDAP is to match all expenditure by local authorities to the needs of a local authority area; thus, avoid spending scarce resources on areas that are not of high priority (Institute of Economic Affairs [IEA], 2005). Local authorities adopt completed plans as a resolution, before submission to the Ministry of Local Government (MoLG). It is however, the responsibility of stakeholders to hold councilors and chief officers accountable for LASDAP's implementation; hence, the primacy of their monitoring role (Kibua & Mwabu, 2008; Mboga, 2009).

The MoLG encourages accountability and transparency by disbursing 60% of LATF upon submission of necessary budgetary and technical proposals. The Ministry further emphasizes performance by distributing the remaining 40% of the funds based on LASDAP's performance metrics, such as revenue enhancement strategies (Bonoff & Zimmerman, 2010). In the event of delayed delivery of reports, local authorities are subject to penalties: 15% loss of allocated funds for late filing of returns of up to 30 days, 40% of allocations for lateness of between 31 and 60 days late, and complete loss of LATF for local authorities whose documents are more than 60 days late (GoK, 1999; Bonoff & Zimmerman, 2010).

Furthermore, accountability improves through legal provisions for transparency to citizens. In this regard, local authorities are required to publicize funds received from the central government each year in national newspapers. Besides, local authorities are required to hold annual budget days in the month of June, which provide forums to discuss revenues and expenditures for previous financial years and planned budgets for subsequent financial years with citizens (GoK, 1999; Bonoff & Zimmerman, 2010). Accountability is the obligation of public officers and elected leaders to take responsibility for their actions and decisions (World Bank, 2005). On the same note, Jalal (1999) perceives accountability as a process of holding public office bearers responsible for their performance, actions, and consequences of their decisions. Accountability in the management of public resources is a right to citizens and an obligation to those bearing the responsibility of managing such resources (Jalal, 1999).

A review of literature reveals a considerable variance in opinion regarding the point at which public officers and elected leaders should account to stakeholders. According to Ackerman (2004), whereas some scholars perceive accountability as an ex-post phenomenon, others argue that accountability measures should apply before, during and at the end of office tenure. Whatever the timing, accountability remains the cornerstone for good governance and democracy (World Bank, 2005). Social accountability mechanisms are potentially the most powerful tools against public sector corruption; involving citizens in the project cycle is an important strategy for

initiating a strong oversight authority for the management of public resources in decentralized public institutions, including local authorities (World Bank, 2005).

The World Bank Empowerment and Poverty Reduction Sourcebook, recognize that accountability is an important component of empowerment for poor community members, poverty reduction, and sustainable development. Shende and Bennett (2004) note that the level of poverty in developing countries significantly associates with poor governance, particularly where governments are less accountable and responsive to citizens' needs. Besides, without accountable governance, poor citizens are likely to suffer most due to constrained service delivery (UNDP, 1996). Accountability is important because it imposes discipline among public officers in charge of public resources. Appropriate management of public revenue and expenditure is vital for expanding the menu of services provided, increasing the scope of beneficiaries, and ensuring consistency in service delivery (UNDP, 1996). Furthermore, improvements in accountability have the potential of stimulating economic development, which may manifest in terms of higher per capita income, higher adult literacy, lower infant mortality and reduced poverty (Shende & Bennett, 2004). Accountability in local authorities can be vertical or horizontal. Whereas vertical accountability involves being answerable to specific higher offices within institutional hierarchy of power, which extend to the central government, horizontal accountability involves being answerable to community members. It is particularly important where community services such as primary healthcare, education, water, sanitation, waste management and infrastructure are involved (Shende & Bennett, 2004). Horizontal accountability can apply at all phases of project cycle – planning, programming, budgeting, award of contracts, monitoring of progress and outputs, and evaluation. Community-based organizations often represent community members in the project cycle process, with a view to enhancing accountability. Where communities play an active role in projects, local authorities have proved to be more responsive to local needs and priorities (World Bank, 2005). As noted by Shende and Bennett (2004), communities can play a more critical role in enhancing accountability in local authorities than supervisory structures at the central government. In view of this, public institutions should develop horizontal accountability to supplement vertical accountability as well as build popular participation and self-reliance on the part of citizens (Shende & Bennett, 2004).

Transparency denotes free access to all information about decisions, expenditures, revenues, and other activities of public institutions. Premchand (2001) notes that transparency enables stakeholders, including citizens, community-based organizations, service providers, civil servants, political leaders and development partners, among others to access and appreciate information published data on public finances, annual accounts as well as investigative and other general reports prepared by independent agencies (Shende & Bennett, 2004). Transparency is achievable in institutions where reliable information on government's fiscal policy intentions and forecasts is accessible consistently at minimal or no effort (Premchand, 2001). According to Singh, Rahim & Ray (2006), transparency is closely connected to accountability. Enhancing accessibility of institutional information to stakeholders is a sure way of making public officers accountable and answerable for their decisions. Similarly, UNDP (1996) notes that the level of accountability depends on how much relevant information about public expenditure is accessible the general public, as well as how well members of the public can analyze the information and develop action-oriented conclusions. Access to such information enables citizens to evaluate the intentions of central or local governments, which in turn, reinforces discipline in handling and management of public resources (UNDP, 1996)

The International Monetary Fund (IMF) has set out four principles that define what transparency should entail in public institutions. In this regard, public institutions may improve transparency

by ensuring: public availability of comprehensive information on financial stocks and flows; public availability of information on budget preparation and execution; financial data meeting accepted quality standards and subjected to independent audit scrutiny (IMF, 2001). The audit process often results into financial reports, which should be available to the general public to improve transparency (Premchand, 2001). Fiscal transparency is essential for sound economic governance. As noted by Shende and Bennett (2004), transparency should result in better-informed public debate about the design and objectives of fiscal policies; thus, strengthen the credibility of macroeconomic policies. For this matter, Singh, Rahim, and Ray (2006) asserts that developing the culture of transparency is key for efficient allocation of resources and effectiveness of public fiscal policies. According to Premchand (2001), transparency helps the general public and market participants to hold public officers accountable for their policy decisions, while Shende and Bennett (2004) point out that an important underlying objective of improved transparency is to reduce corruption. According to Hondeghem (1998), public institutions characterized by high degrees of transparency have exhibited greater degree of fiscal discipline and have achieved robust economic performance. In Kenya, the demand for accountability and transparency in the management of public resources has been gaining momentum over the past two decades (Nyangena, Misati & Naburi, 2010).

While the country's budgetary portfolio has been increasing every financial year, accountability for the resources allocated to decentralized public institutions has been a key challenge (Mwawashe, 2010). In the financial year 2012/13, various public institutions, including local authorities could not account for about KES 300 million, particularly due to inadequate enforcement of regulatory frameworks, as well as politically-influenced corruption. A review of pertinent literature reveals that various studies, including Smoke (2000), IEA (2005), Kageri (2010) and Nyangena et al. (2010) have documented issues associated with financial management practices in Kenyan local authorities. However, none of the studies explicitly brought out information about community perspectives on the accountability and transparency in the management of LATF resources. This study adopted a social audit approach to assess community perspectives about various indicators of accountability and transparency in the management of LATF resources by Siaya Municipal Council.

### Analytical Framework

A strong public financial management and accountability system is the key to achieving development objectives and an efficient service delivery system in public institutions, including local authorities (Singh et al. 2006). The public financial management and accountability framework, in Figure 1 indicates key linkages between legislative, budgeting, implementation, reporting and oversight processes in public institutions. Figure 1 suggests that special public funds such as LATF are established and regulated through various complimentary statutes, whose goal is to enhance accountability and transparency as well as improved service delivery. Although such statutes may provide a watertight framework for financial management and reporting, enforcement remains a key challenge in many developing countries, including Kenya. Community involvement in the planning and budgeting process is critical for fiscal accountability and transparency in public institutions. According to Wagle and Shah (2001), community involvement in the entire project cycle, including planning, budgeting, programming, implementation, monitoring and evaluation, provides an omnipresent oversight authority, which in turn, is likely to improve accountability and transparency in the management of public funds.

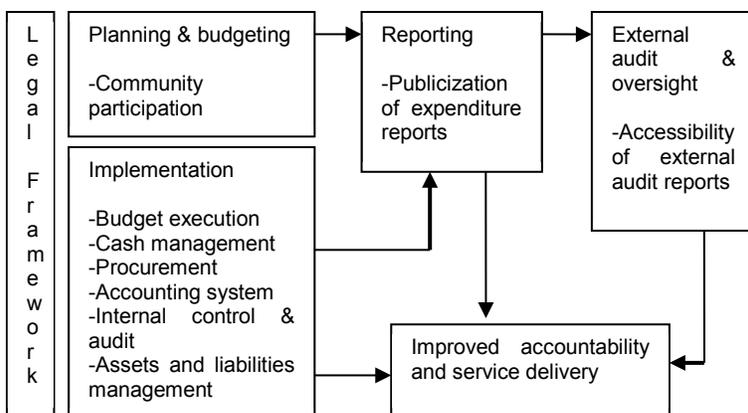
Annual budgets are typically the legal authority for spending public funds; hence, involvement of community members in the budgetary process is paramount in enhancing accountability and

control at various levels of operations (Shende & Bennett, 2004). Laws, regulations, and codes of conduct are insufficient on their own, unless public institutions translate them into action. Consequently, adherence to fiscal regulations is often a challenge to many local authorities (Wagle & Shah, 2001; Shende & Bennett, 2004). Changing social mindsets is important for laws, regulations and codes of conduct to facilitate the achievement of desired results (Hondeghem, 1998).

An effective public financial management system should have in place measures to encourage strict implementation of budgetary items, monitoring and intermittent reviews. More still, public institutions require accounting systems that are complete, accurate, and valid. Such systems should facilitate the preparation of truthful performance reports and provide statements of financial status. For this matter, a computerized accounting system may be more advantageous in enhancing accountability than a manual system (Shende & Bennett, 2004). As noted by Singh et al. (2006), in a manual accounting system, the multiplicity of registers and limited capacity of staff generally often results in accounts remaining in arrears for several years. Furthermore, Andrea, Lucas and Pasteur (2000) point out that sound accounting control systems can make the greatest contribution to the reliability of fiscal data, and are the starting point for ensuring the integrity of the recording and reporting processes.

The existence of strong cash flow management systems also improves accountability and transparency in public institutions. Whereas, excessive liquidity is likely to create opportunity for leakages and non-prioritized spending, cash constraints may cause discontinuation of projects and stifle service delivery. More still, procurement of goods, services and works is a key area that is vulnerable to abuse and loss of public funds. Strict adherence to procurement regulations is perhaps the most important indicator of accountability and transparency in public institutions (World Bank, 2005).

Figure 1: Public Finance Management and Accountability Framework



This Figure shows that analytical framework, which we have adapted and modified from Singh et al. (2006). The Figure indicates linkages between the legislative framework that establishing and regulating public funds in a decentralization context; planning and budgeting processes, which often result to action plans; implementation, reporting and external oversight processes in public institutions. The Figure further outlines indicators of accountability and transparency.

Public institutions should have clearly defined and effective policies, systems and procedures for internal control and audit, which in most cases. Shende & Bennett (2004) indicates that internal control includes administrative procedures governing decision-making processes as well as accounting procedures for governing the reliability of financial records. Public institutions should have functioning internal audit departments and standing committees, whose functions should include scrutinizing fiscal accounts at each level and ensuring compliance with budgetary priorities.

According to the International Organization of Supreme Audit Institutions (INTOSAI), the objectives of internal control systems are to promote orderly, economical, efficient, and effective operations as well as safeguard resources against mismanagement, errors, or fraud. Internal control systems also encourage adherence to laws and regulations, maintenance of reliable financial and management data, as well as timely disclosure of financial reports (Shende & Bennett, 2004). Effective internal control systems must be appropriate, consistent and cost-effective (Singh et al., 2006).

Public institutions should also have in place proper policies, procedures, and database of assets, which should inform decision-making in capital investments. The management of institutional assets and liabilities is an indication of the level of accountability. Furthermore, accountability and transparency anchor on fiscal reporting and dissemination to stakeholders, including taxpayers and voters (Singh et al., 2006). Accountable and transparent institutions should have regular and consistent fiscal reporting as part of institutional culture. Furthermore, such institutions should have in place clearly defined systems for timely and independent external audit, whose reports should be accessible to stakeholders and partners (Singh et al., 2006). Besides, involving community members in the project cycle is important for external oversight, which associates with high levels of accountability in public institutions (Andrea et al., 2000).

## **DATA AND METHODOLOGY**

We applied the cross-sectional survey design to guide the research process, including planning, training and pretesting, data sourcing, data processing and analysis, as well as reporting. The study targeted community members, opinion leaders and civil servants in Siaya Municipality. For a period of 10 days, we contacted up to 200 potential participants. However, only 162 (81.0%) met the inclusion criteria; hence were issued with self-administered questionnaires.

We collected primary data in the month of June 2010 and the process involved identification and prequalification of potential participants, consenting, questionnaire issuance and follow-up. Whereas some participants completed the questionnaire on the spot, we gave others two days to provide their perspectives on various indicators of accountability and transparency in management of public funds.

We applied purposive and snow-ball sampling procedures to select potential participants. In this regard we selected key opinion leaders and civil servants who demonstrated awareness about Local Authority Transfer Fund (LATF) and who had either participated in Local Authorities Service Delivery Plan (LASDAP) planning and budgeting processes or had ever engaged in formal business with Siaya Municipal Council, in their capacity as government officers or personal capacity as suppliers of goods, services or works. As part of prequalification for participation, we engaged participants in informal interviews to gauge their knowledge about operations of the local authority.

We used a self-administered questionnaire with structured and semi-structured questions to source the data. Furthermore, we employed quantitative and qualitative techniques to process and analyze the data. Quantitative analysis generated frequency distributions with percentages and cross-tabulations, we also transcribed, clustered into nodes and explored qualitative data for perspective patterns about the selected accountability and transparency indicators. Detailed description of the design and approaches that we used in this study are available in following publications (Nachmias & Nachmias, 1996; Bryman & Cramer 1997; American Statistical Association, 1999; Owens, 2002; Rindfleisch, Malter, Ganesan & Moorman, 2008).

## RESULTS AND DISCUSSIONS

We sourced the requisite information from 162 community members, including opinion leaders and civil servants. We present these results under two sub-sections, including information on participants' background profile in the first sub-section as well as community perspectives about the accountability and transparency indicators in the second sub-section. In this regard, Table 1 provides a summary of participants' socio-economic profile, where it may be noted that participants included 120 (74.1%) men and 42 (25.9%) women, suggesting that men were probably more aware and more involved in LATF activities than women. Besides, the participants reported ages ranging from 25 to 65 years, with majority, 56 (34.6%) being in the 40-49 years bracket and about one-third, 49 (30.2%) falling between 30 and 39 years. The results in Table 1 further show that most participants had attained at least secondary education. More specifically, 81 (50.0%) reported having college training, 56 (34.6%) had attained secondary education, while 22 (13.6%) were university graduates. Regarding occupation type, the results show that most participants, 72 (44.4%), were businessmen and women, while 21 (13.0%) were politicians, including serving and retired councillors. In addition, among the participants were 12 (7.4%) civil servants sampled from MoLG, Municipal Council, District Treasury, Ministry of Water and Irrigation, District Tender Committee and Ministry of Health. Participants also include 12 (7.4%) primary and secondary school deputy and head teachers, 10 (6.2%) farmers, 8 (4.9%) health facility staff, and 7 (4.3%) faith leaders, among others.

Furthermore, participants reported average monthly incomes ranging from KES 18,000 to KES 166,000. More specifically, 46 (28.4%) participants stated average incomes of at least KES 100,000, 44 (27.25) were in the KES 40,000 to 69,000 income group, while 34 (21.0%) stated average incomes ranging between KES 20,000 and 39,000. These results suggest that the study included participants with good educational, income background, as well as general awareness about functions of the Council vis-à-vis the management of LATF resources.

Table 1: Socio-economic Profile of Participants

Participants attributes	Frequency	Percent
<i>Gender</i>		
Male	120	74.1
Female	42	25.9
<b>Total</b>	<b>162</b>	<b>100.0</b>
<i>Age</i>		
20-29 years	37	22.8
30-39 years	49	30.2
40-49 years	56	34.6
50 years+	20	12.3
<b>Total</b>	<b>162</b>	<b>100.0</b>
<i>Education level</i>		
Primary	3	1.9
Secondary	56	34.6
College	81	50.0

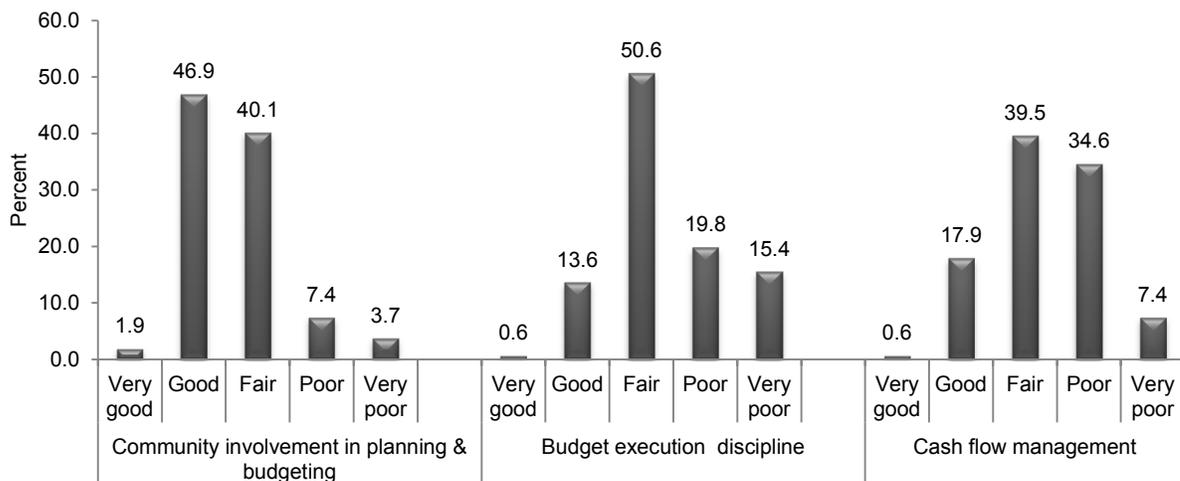
University	22	13.6
<b>Total</b>	<b>162</b>	<b>100.0</b>
<i>Occupation</i>		
Civil servants	12	7.4
Business	72	44.4
Faith leaders	7	4.3
Politicians	21	13.0
Teachers	12	7.4
Farmers	10	6.2
Lecturers	3	1.9
Healthworkers	8	4.9
Retired civil servants	6	3.7
Community health workers	7	4.3
NGO worker	4	2.5
<b>Total</b>	<b>162</b>	<b>100.0</b>
<i>Average monthly income</i>		
<KES 20,000	5	3.1
KES 20,000-39,000	34	21.0
KES 40,000-69,000	44	27.2
KES 70,000-99,000	33	20.4
KES 100,000+	46	28.4
<b>Total</b>	<b>162</b>	<b>100.0</b>

*Presented in this Table is the distribution of participants with regards to socio-economic attribute, such as gender, age, educational attainment, occupation and average income level. Participants included insiders such as Ministry of Local Government staff, Council staff as well as serving and retired councilors. The purpose is to show the caliber of the people whose perspectives about the financial management and accountability systems existing at the time of the study, we have documented in this paper.*

The next sub-section presents results related to community perspectives on the accountability and transparency systems for managing LATF resources at the Council. Involvement of community members in the planning and budgeting processes is important for ensuring that LATF projects match with pressing community needs; thus, set good footing for community ownership of such projects. In view of this, we requested participants to indicate their perspectives on community involvement in planning and budgeting processes. Figure 2 indicates that 76 (46.9%) participants rated community involvement as 'good', while 65 (4.1%) described the same as 'fair'. Cumulatively, about one-half (48.8%) of the participants expressed affirmative perspectives about community involvement in the stated processes.

Participants indicated that involvement of community members in LATF planning and budgeting processes was necessitated by guidelines provided by the MoLG, which require communities to be involved in the formulation of Local Authority Service Delivery Plans (LASDAP). Arguably, involving community members in the planning and budgeting processes is crucial for the understanding of LATF project priorities right from the start, which in turn, will provide a basis for holding public officers accountable at the end of implementation periods. Nonetheless, the Council should improve community involvement in terms of wider scope of representation of community-based groups and organizations, irrespective of their political inclination, as well as increase women's representation in the process.

Figure 2: Community Involvement, Budget Execution and Cash Flow Management

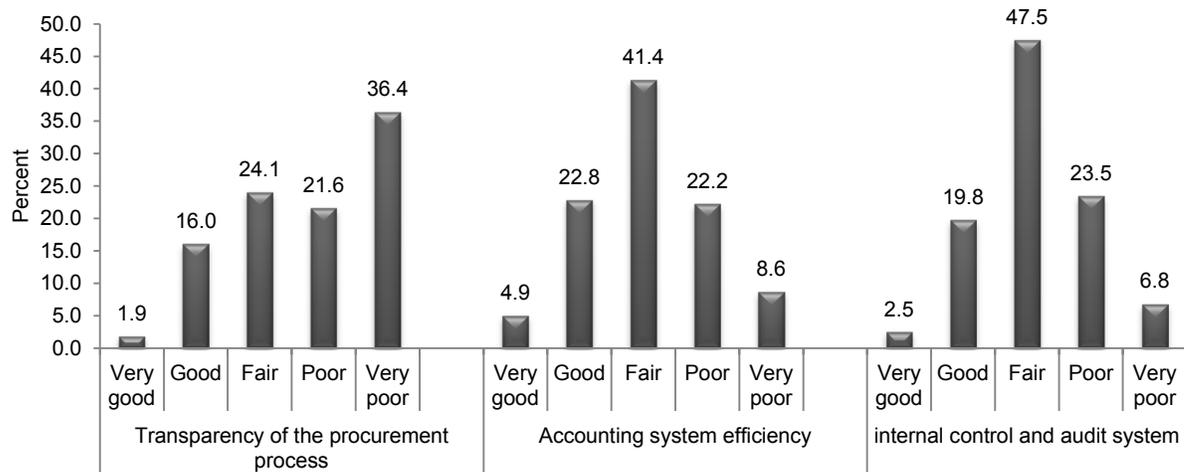


*This Figure presents participants perspectives on various indicators of accountability in public institutions, including community involvement in planning and budgeting processes, budget execution discipline and cash flow management. Cumulatively, about one-half (48.8%) of the participants expressed affirmative perspectives about community involvement in the stated processes; however, up to 35.2% expressed dissatisfaction with budget execution discipline, while 42.0% of the participants expressed negative perspectives about cash flow management.*

The LASDAP preparation process specifies priority projects, which local authorities should target with LATF resources. The main purpose of LASDAP implementation is to match expenditures with community priority needs. Thus, budget implementation process should focus on LASDAP priorities, to avoid potential deviations to activities outside the budgetary scope. Based on this, we requested participants to indicate their perspectives on budget execution discipline. In this regard, Figure 2 shows that 22 (13.6%) participants rated budget execution discipline as ‘good’, while 32 (19.8%) and 25 (15.4%) rated the indicator as ‘poor’, and ‘very poor’, respectively. Cumulatively, 35.2% expressed dissatisfaction with the indicator; thus, suggesting need for the Council to improve budget adherence to effectively deliver services that are responsive to community priority needs.

Cash flow management is important for balancing incoming and outgoing cash. Whereas over liquidity bears the risk of cash leakage for unintended purposes and loss or earnings for the Council, under-liquidity may stifle service delivery or lead to discontinuation of LATF projects. The results in Figure 2 show that 29 (17.9%) participants were of the view that cash flow management at the Council was ‘good’; however, 56 (34.6%) rated the indicator as ‘poor’ and 12 (7.4%) said cash flow management was ‘very poor’. Cumulatively, 42.0% of the participants expressed negative perspectives about cash flow management, which indicates the need for appropriate action to minimize the risks associated with over and under-liquidity. The procurement is probably the heart of accountability and transparency in the management of LATF resources. Without optimal adherence to the existing regulations, procurement is highly at risk of abuse by public officers and elected leaders. It provides the avenue through which public institutions, including local authorities, can lose LATF resources that should improve service delivery. The results in Figure 3 indicate that 26 (16.0%) participants rated transparency of the procurement system as ‘good’; however, 35 (21.6%) and 59 (36.4%) were of the view that the process was ‘poor’ or ‘very poor’, respectively. Overall, 58.0% of the participants reported dissatisfaction with transparency in the procurement process.

Figure 3: Perspectives on Procurement Process, Accounting System and Internal Control System



*This Figure presents participants' perspectives on three indicators of accountability and transparency in public institutions, including transparency of the procurement process, efficiency of the accounting system, as well as internal control and audit system. Overall, 58.0% of the participants reported dissatisfaction with transparency in the procurement process; about one-third (30.9%) expressed dissatisfaction with the accounting system, while the majority, 67 (41.4%) believed that the accounting system was 'fairly' efficient.*

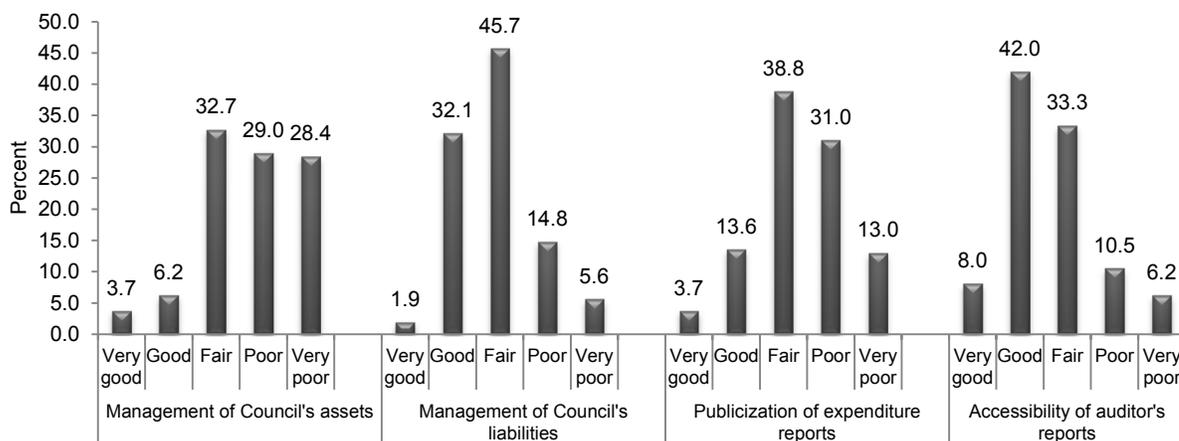
The efficiency of accounting systems is a key pillar for enhancing accountability in the management of public resources. An efficient accounting system ensures ready availability of complete, valid, and accurate financial information to facilitate decision-making as well as inform stakeholders. In this regard, a computerized accounting system may be more advantageous in enhancing accountability than a manual system. The results presented in Figure 3 show that 37 (22.8%) participants rated the efficiency of the accounting system as 'good', while 36 (22.2%) stated that the system was 'poor' and 14 (8.6%) hinted that the system was 'very poor'. Cumulatively, about one-third (30.9%) expressed dissatisfaction with the accounting system. Nonetheless, the study found revealed that the Council was in the process of computerizing its accounting system, albeit with numerous obstacles, including under-funding, high turn-over of technical staff, leading to discontinuation.

Clear policies, systems, and procedures for internal control and audit are essential for enhancing accountability and transparency in the management of public resources. Effective internal control mechanisms should reveal issues such as over-expenditure or unnecessary expenditure, among others, to enable public officers to seek appropriate corrective measures in time. Besides, such a system should have appropriate safeguards against political influence, which may manipulate the system to cover-up expenditure irregularities. The results presented in Figure 3 show that 32 (19.8%) participants rated the effectiveness of internal control and audit systems as 'good', 38 (23.5%) felt the system was 'poor', while 11 (6.8%) said it was 'very poor'. Overall, 30.2% of the participants suggested that the system was not effective. Issues surrounding the internal control and audit system included political influence and lack of independence, which often led to manipulation of financial reports to serve the interests of chief accounting officers and their accomplices.

The management of institutional assets and liabilities is an indication of the level of accountability in public institutions. Besides, proper management of institutional assets is an important indication of good stewardship on the part of chief accounting officers. In this study,

we requested participants to indicate their perspectives about management of the Council’s assets, including buildings, automobiles, furniture, and equipment, among others. The results in Figure 4 show that only 10 (6.2%) participants rated the management of Council’s assets as ‘good’, 47 (29.0%) and 46 (28.4%) indicated ‘poor’ and ‘very poor’ respectively. Overall, up to 57.4% of the participants, expressed outright dissatisfaction with the way public officers were managing Council assets; thus, suggesting the need for appropriate measures to enhance accountability.

Figure 4: Perspectives on Management of Council’s Assets, Liabilities and Financial Reports



*This Figure presents community perspectives on additional indicators of accountability, including management of Council assets and liabilities, publicization of periodical expenditure reports and accessibility of external auditor’s reports. The results show that overall, up to 57.4% of the participants expressed outright dissatisfaction with the way public officers were managing Council assets; about 34.0% were satisfied with liability management at the Council, while up to 44.0% were unhappy with the publicization of expenditure reports.*

Furthermore, liability portfolio is a key indicator of accountability in public institutions. Accountable management systems often have in place guidelines to ensure that the level of liability does not cripple institutional operations as well as service delivery. In this study, Figure 4 shows that 52 (32.1%) participants expressed satisfaction with liability management at the Council by rating it as ‘good’; contrastingly, 24 (14.8%) rated the indicator as ‘poor’, while 9 (5.6%) said it was ‘very poor’. Cumulatively, up to 34.0% of the participants hinted satisfaction with liability management at the Council. Nonetheless, the results suggest that the Council was making effort to control its liabilities, by servicing its debts. However, participants pointed out that improvement in liability management was due to the requirement that all local authorities in the country should address their outstanding debts by the year 2010, as a pre-condition for continued access to LATF resources.

Furthermore, the MoLG requires local authorities to publish information about funds that they receive from the central government each year in national newspapers, while at the community level, the authorities should publicize expenditure, and external audit reports by holding annual budget days in the month of June. The authorities should also post such information on public notice boards and websites to enhance transparency. In view of these requirements, we requested participants to indicate their perspectives on the publicization of expenditure reports at the Council. The results presented in Figure 4 indicate that 22 (13.6%) were of the view that publicization of such reports was ‘good’. Contrastingly, 50 (31.0%) and 21 (13.6%) hinted that the indicator was ‘poor’ and ‘very poor’, respectively. Cumulatively, up to 44.0% of the participants were unhappy with the publicization of expenditure reports.

Regarding the accessibility of external audit reports, the results in Figure 4 show that 68 (42.0%) participants expressed satisfaction by rating the indicator as 'good'. However, up to 17 (10.5%) participants rated the same as 'poor', while 10 (6.2%) were of the view that accessibility of such reports was 'very poor'. Overall, only 16.7% of the participants expressed their reservations about accessibility of such reports. Nonetheless, the results suggest that accessibility of external auditor's reports was a significant achievement by the Council in efforts to enhance transparency in managing LATF resources. However, some participants noted that this is area where the MoLG put emphasis to make local authorities more accountable to communities which they serve.

## CONCLUSIONS

The purpose of this study was to assess and document information on community perspectives on accountability and transparency in the management of LATF resources. The study found that participants were satisfied with indicators such as community involvement in the planning and budgeting process (48.8%), enhancing accessibility of external auditor's reports (42.0%) and liability management (34.0%). However, higher levels of dissatisfaction emerged with regards to indicators such as transparency in the procurement process (58.0%), management of Council assets (57.4%), publicization of expenditure reports (44.0%), cash flow management (42.0%), budget execution discipline (35.2%), accounting system (30.9%) as well as internal control and audit system (30.2%).

Community perspectives provide indications about key areas on which the Government and the local authority should focus to strengthen accountability and transparency in the management of LATF resources. Although the pursuit of decentralized development in Kenya started soon after independence in 1963 (Chitere & Ileri, 2008), these results suggest that the country has not fully reaped the benefits of the paradigm. LATF is one of the special funds that the Government has devolved to the peripheral local authorities, whose purpose is to enhance financial management and accountability, among other objectives (Kibua & Mwabu, 2008; Mboga, 2009). However, its success largely depends on the Government's enforcement of existing regulations, identifying gaps and formulating additional controls, as well as taking public officers and political leaders through a change process.

As noted by Hondeghe (1998), behavior change in public service is not just about enforcement of laws, regulations, and codes of conduct. It requires a change in the mindset, a process that one may not realize overnight. This will provide necessary safeguards against issues such as political interference and corruption in the management of LATF projects. Furthermore, the results suggest that participants were satisfied with indicators in which the Government had earmarked as pre-conditions for continued funding. This implies that enforcement of existing regulations is an approach that the Government should seriously to help nurture the culture of fiscal accountability and transparency, which are the cornerstones of successful decentralized funds.

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# INFLUENCE OF LOCAL AUTHORITY TRANSFER FUND ON SERVICE DELIVERY BY LOCAL GOVERNMENT AUTHORITIES IN KENYA: A CASE OF SIAYA MUNICIPAL COUNCIL

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## ABSTRACT

*The Local Authorities Transfer Fund (LATF) is an intergovernmental transfer system, supplementing the financing of service delivery within the framework of fiscal decentralization. LATF's objectives are to improve service delivery, enhance financial management and accountability as well as reduce debts accumulated by local authorities. The purpose of this study was to establish the influence of LATF on service delivery by local authorities, focusing on Siaya Municipal Council. We gauged residents' perspectives about improvement of water supply, garbage collection, and sewerage services. We sourced primary data from 188 household heads and 202 market traders. The study found that 63.2% of the participants believed that there was no change in water supply consistency, while 69.5% reported the same about adequacy of water provided by the Council. Besides, 55.6% of the participants indicated that garbage collection had deteriorated, while 63.8% said the same about sewerage services. The findings suggest that access to LATF resources over the preceding decade had not improved service delivery in Siaya Municipality. Delivery of services was constrained by political interference (57.4%), procurement malpractices (44.1%), weak revenue base (38.7%), and understaffing (33.1%), among other factors. In view of this, local authorities should shape up to meet the current service demand, as well as gear up to address the needs of urban population, which is set to grow over the coming years.*

**JEL:** 016

**KEYWORDS:** Local Authority, Service delivery, Municipality, Decentralization, Fiscal decentralization

## INTRODUCTION

Decentralization is the process of dispersing functions, powers, or resources away from central governance systems to subsidiary or quasi-independent government structures at the regional, municipal, or local levels (Rondinelli, 1999; Cheema, 2007; Conyers, 2007). Its purpose is to enhance efficiency and increase community participation in decision-making, improve equity in resource sharing, improve the quality of service delivery, as well as enhance accountability in fund administration (Devas & Grant, 2003; Conyers, 2007). The transfer of such authority and responsibility may assume various dimensions, including fiscal, administrative, political, as well as economic powers and functions (Rondinelli, 1999; Phillip, 2009; Muriu, 2013). As noted by Conyers (2007), scholars have applied the concept of decentralization in various fields, including public administration, economics, management science, law, and public finance, among others. Whatever the field of application, the common denominator is that it responds to limitations and

challenges associated with centralized governance and management systems (Conyers, 2007). The dispersion of authority and responsibility in the management of public funds is a key component of decentralization, whose aim is to improve efficiency, accountability, and better service delivery. Fiscal decentralization involves passing of budgetary, revenue and expenditure authority from centralized systems to quasi-autonomous government institutions (Menon, Mutero & Macharia, 2008). The key attributes of fiscal decentralization includes assigning clear expenditure and revenue responsibilities; initiating intergovernmental fiscal transfer mechanisms from central to local governments; and authorizing borrowing and revenue mobilization through loan guarantees from central governments (Phillip, 2009; Muriu, 2013). Since independence, the Government of Kenya [GoK] has been pursuing decentralized development policies, with a view to improving the quality of life for its citizenry. In this regard, the Sessional Paper No. 10 of 1965 on African Socialism and its Application to Planning in Kenya was the first policy document outlining the decentralization agenda, targeting districts and local government authorities across the country (Kibua & Mwabu, 2008). In 1983, the Government introduced the District Focus for Rural Development (DFRD) strategy to further the interests of decentralized development agenda (Alila & Omosa, 1996; Chitere & Ileri, 2008), with districts becoming the key planning units. However, Chitere and Ileri (2008) point out that DFRD's performance was constrained by factors such as non-involvement of community members in project prioritization, implementation, monitoring, and evaluation.

According to Bonoff and Zimmerman (2010), fiscal decentralization anchors on the premise that local communities can prioritize projects in line with their needs and that, local resources are easy to tap where community members are involved in development processes. The Economic Recovery Strategy for Wealth and Employment Creation (ERSWEC) 2003-2007 is perhaps, the government's policy document providing the best framework for fiscal decentralization, within which subsidiary public institutions such as local authorities receive public funds (Kibua & Mwabu, 2008; GoK, 2003). Fiscal decentralization framework is further set out in the First Medium Term Plan (MTP) 2008-2012 (GoK, 2008), as well as Kenya's Vision 2030 (GoK, 2010).

These policy efforts culminated to the establishment of various devolved funds, including the Local Authorities Transfer Fund (LATF), which is founded on the Local Authorities Transfer Fund Act, No. 8 of 1998 (GoK, 1999). The objectives of LATF are to improve service delivery, enhance financial management and accountability, as well as reduce debts accumulated by local authorities. LATF draws from the national revenues and it replenishes from 5% of the national annual income tax (Kibua & Mwabu, 2008; Institute of Economic Affairs [IEA], 2009).

The allocation criteria ensure consistency, fairness, and transparency. The criteria include the following terms: a basic minimum lump sum of KES 1.5 million (6.6%) is shared equally among the country's 175 local authorities, while 60% of the fund is disbursed according to relative population sizes of local authorities. Accessing the remaining 35.4% depends on local authorities meeting set financial management and accountability threshold (Kibua & Mwabu, 2008; IEA, 2009). The money disbursed through LATF supplements local authorities' revenues; it forms about one-quarter of local authority revenues (IEA, 2009). In this regard, article four of the Act indicates that LATF was established 'to supplement the financing of services and facilities they are required to provide under the Local Government Act' (GoK, 1999).

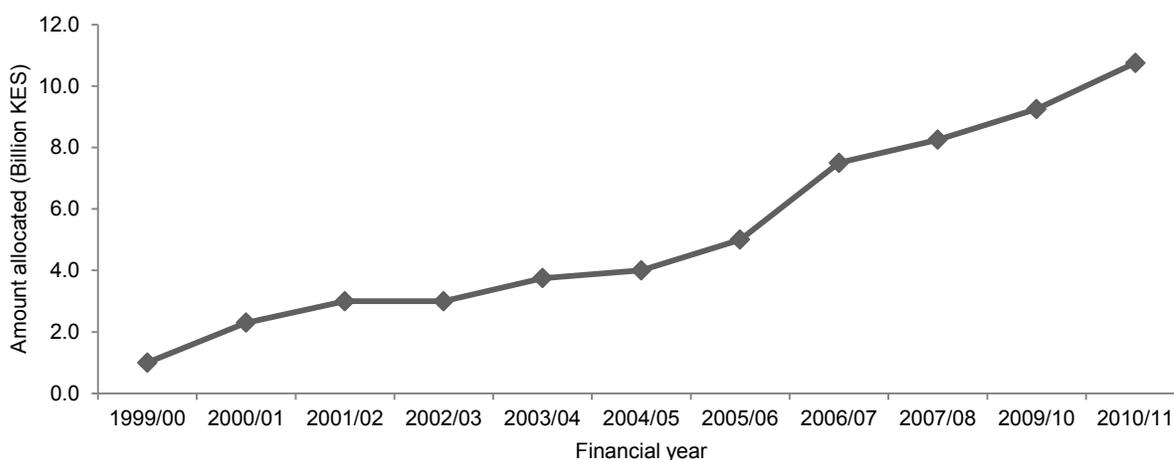
In order to access LATF resources, local authorities are required to have action plans, known as Local Authority Service Delivery Plans (LASDAP), which are prepared through participatory processes, involving various stakeholder groups and community members. The participatory

approach amplifies local communities' voice in project identification, planning, monitoring, evaluation, and accountability processes. It also cultivates a sense of ownership of LATF projects (Kibua & Mwabu, 2008; Menon et al., 2008; Bonoff & Zimmerman, 2010). LASDAP specify prioritized projects and activities that should receive funding. Besides, they are founded on key pillars of poverty reduction, in line with the Poverty Reduction Strategy Paper (PRSP) and the Economic Recovery Strategy (ERS) whose priority focus include health, education, infrastructure, and informal settlement upgrading (IEA, 2009).

Local authorities adopt complete plans as a resolution, before submission to the Ministry of Local Government (MoLG). It is however, the responsibility of stakeholders to hold councilors and chief officers in local authorities accountable for LASDAP's implementation; hence, the primacy of their monitoring role (Kibua & Mwabu, 2008; IEA, 2009). The Ministry encourages transparency by disbursing 60% of LATF upon submission of necessary budgetary and technical proposals. The Ministry further emphasizes performance by distributing the remaining 40% of the funds based on LASDAP's performance targets (Bonoff & Zimmerman, 2010). In the event of delayed filing of returns, local authorities are subject to penalties. For instance, delays of up to 30 days attracts 15% loss of allocated funds; 31 to 60 days leads to the loss of up to 40% of allocations, while delays of more than 60 days may lead to complete loss of LATF (GoK, 1999; Bonoff & Zimmerman, 2010).

Furthermore, legal provisions for transparency to citizens enhance accountability. In this regard, local authorities are required to publish reports about funds received from the central government each year in national newspapers. The authorities are further required to hold annual budget days in the month of June, which provide forums for engagement with citizens about revenue and expenditure reports, as well as planned budgets for subsequent financial years (GoK, 1999; Bonoff & Zimmerman, 2010). A review of annual LATF reports reveal that disbursements have been increasing steadily from KES 1 billion in Financial Year (FY) 1999/2000, to KES 10.8 billion in FY 2010/2011, as indicated in Figure 1.

Figure 1: National LATF Allocation Trend (1999/00-2010/11)



*Presented in Figure 1 are data, which we obtained from the annual LATF reports for the period 1999 to 2011. The data shows that disbursements have been increasing steadily from KES 1 billion in Financial Year (FY) 1999/2000, to KES 10.8 billion in FY 2010/2011. The data reveals significant increments between the FY 2005/06 and FY 2006/07.*

In Siaya Municipality, the data show that the amount allocated has increased from KES 11.7 million in the FY 1999/00 to KES 57.4 million in the FY 2010/11, with significant increment noted between the years 2004/05 and 2005/06.

By the end of 2010, local authorities had received a total of KES 69 billion from the Government since the LATF's inception in 1999. However, Oywa and Opiyo (2011) point out that most of them have nothing tangible to show for the amounts that local authorities have so far received. Instead, persistent complaints about poor service delivery have emerged repeatedly in the media and in public forums (Bonoff & Zimmerman, 2010; Oywa & Opiyo, 2011). Available literature suggest that local authorities are not only failing to provide a satisfactory level of services but are also poorly managed and have departments that are among the most corrupt within the Kenya public sector (IEA, 2005; Nyangena, Misati & Naburi, 2010). Unprecedented proliferation of residents' associations also an indicator of growing dissatisfaction about the quality of services provided by local authorities. The purpose of such associations is to mobilize residents to demand quality services from local authorities as well as pursue legal actions against authorities that fail to improve services (IEA, 2005).

Figure 2: Siaya Municipal Council LATF allocation trend (1999/00-2010/11)

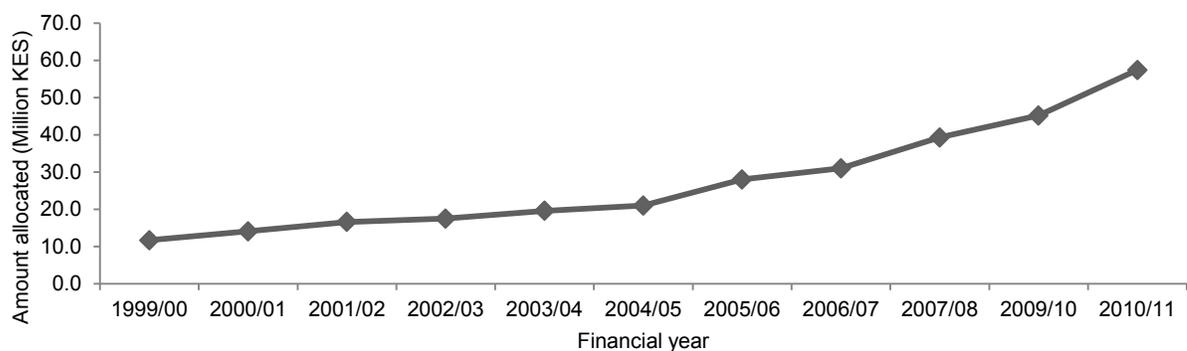


Figure 2 shows the data obtained from the annual LATF reports about amounts allocated to Siaya Municipal Council. The data show that the amount allocated has increased from KES 11.7 million in the FY 1999/00 to KES 57.4 million in the FY 2010/11, with significant increment noted between the years 2004/05 and 2005/06.

The decentralization of LATF resources to local authorities should improve services such as supply of clean water for domestic and industrial use, sanitation, waste management, as well as healthcare and education services, among others (IEA, 2005). A review of pertinent literature reveals that various studies, including Smoke (2000), IEA (2005), Kageri (2010) and Nyangena et al. (2010) have documented issues associated with services delivery in various local authorities in Kenya. For instance, Kageri (2010) found that water supply in Nyeri Municipality was inconsistent, while the amount supplied fell below the water demand by about 30%. In their study, Nyangena et al. (2010) found that four out of eight local authorities accessing LATF experienced difficulties providing necessary services to residents due to financial deficits.

Such findings suggest that after a decade of LATF's operation, a significant proportion of local authorities are yet meet the demand for quality services by their residents. Nonetheless, the literature reveals a paucity of information on the linkage between access to LATF resources and service delivery in Siaya Municipality. Against this constraint, we conducted this study to

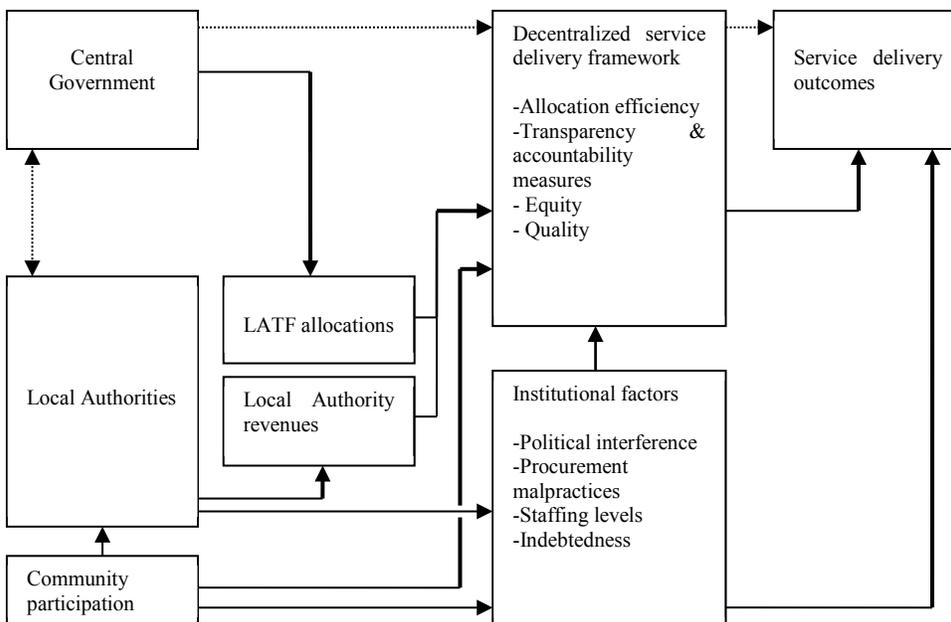
establish residents' perspectives about the quality of essential services, including water, sanitation, and waste management over the preceding two-year period (2007-2009).

### Analytical Framework

The quality of services delivered by local authorities within the decentralization framework depends on the available resources and institutional factors. Figure 3 shows our perception about the linkage between LATF resources and service delivery outcomes within a decentralized framework of service delivery. The central government influences the quality of services through resources disbursed in the form of LATF or other forms of devolved funds such as Constituency Development Fund (CDF), Constituency Bursary Fund (CBF), as well as direct disbursement to Government ministries at the district level. Central governments also provide guidelines for planning, budgeting, expenditure, as well as transparency and accountability measures. The central government further enforces the policy and legal guidelines to ensure compliance by all local authorities.

As recipients, local authorities develop plans (LASDAP) in line with guidelines provided by central governments, which they submit for funding considerations. The planning process should be participatory, involving various stakeholder groups and community members. The participatory approach should amplify local communities' voice in project identification, planning, monitoring, evaluation, and accountability processes, as well as cultivate a sense of ownership of LATF projects (Kibua & Mwabu, 2008; Menon et al., 2008; Bonoff & Zimmerman, 2010). Local authorities also compile and file expenditure returns with the central government.

Figure 3: Perceived Linkage Between LATF and Service Delivery Outcomes



*This figure shows the perceived linkage between LATF and service delivery outcomes, as adapted and modified from Muriu (2013). The figure LATF resources complement local authority revenues and expenditure should prioritize in line with expenditure guidelines within decentralized service delivery framework. Community involvement in planning and oversight of local authorities also influence service delivery outcomes.*

Notably, community participation is important in the planning process, oversight of local authorities, which is likely to influence issues such as political interference, procurement malpractices, and staffing issues, such as inadequacy, motivation, and high turnover of technical staff. Community participation is also crucial in ensuring compliance with transparency and accountability guidelines, allocation efficiency, as well as equity.

## DATA AND METHODOLOGY

We applied the cross-sectional survey design to guide the research process, including planning, training and pretesting, data sourcing, data processing and analysis, as well as reporting. The study targeted residents of Siaya Municipality, including household heads and market traders. The study focused on household heads, who had been residents of the municipality for at least three years from the time of the survey. Those excluded from the study were employees of Siaya Municipal Council and politicians.

Market traders included those who had conducted their business activities within Siaya Municipal Market for at least three years from the time of the survey, must be owners of business premises within the market. Those excluded were traders who were employees of the Council and those who had ever vied for political positions. At the end of data collection, 390 people were successfully interviewed and this included 188 (48.2%) household heads and 202 (51.8%) market traders.

We collected primary data in the month of June 2011 and the process involved identification of eligible participants, consenting and interviewing. We applied cluster random and purposive sampling procedures to select household heads and market traders. We also applied a survey questionnaire with structured and semi-structured questions to source the data. Furthermore, we employed quantitative and qualitative techniques to process and analyze the data. In this regard, quantitative analysis that we obtained frequency distributions with percentages and cross-tabulation, we also transcribed, clustered into nodes and explored qualitative data for patterns and meaning to the role of LATF in service delivery in Siaya Municipality. Detailed description of the design, approaches, and methods that we used in this study are available in various methodological publications such as Nachmias and Nachmias (1996), Bryman and Cramer (1997), American Statistical Association (1999), Owens (2002), Rindfleisch, Malter, Ganesan and Moorman (2008), among others.

## RESULTS AND DISCUSSIONS

The study covered two groups of participants, including household heads residents of Siaya Municipality and market traders at the Siaya Municipal Market.

Table 1: Socio-Economic Profile of Participants

Participants' socio-economic attributes	Household heads		Market traders		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Duration of stay/trade at the market						
3-5 years	26	13.8	23	11.4	49	12.6
6-10 years	51	27.1	51	25.2	102	26.2
>10 years	111	59.0	128	63.4	239	61.3
<b>Total</b>	<b>188</b>	<b>100</b>	<b>202</b>	<b>100</b>	<b>390</b>	<b>100.0</b>
Gender						
Male	91	48.4	91	45.0	182	46.7
Female	97	51.6	111	55.0	208	53.3
<b>Total</b>	<b>188</b>	<b>100</b>	<b>202</b>	<b>100</b>	<b>390</b>	<b>100.0</b>
Age						

<20 years	9	4.8	15	7.4	24	6.2
20-29 years	84	44.7	79	39.1	163	41.8
30-39 years	70	37.2	75	37.1	145	37.2
40-49 years	19	10.1	19	9.4	38	9.7
50 years+	6	3.2	14	6.9	20	5.1
<b>Total</b>	<b>188</b>	<b>100</b>	<b>202</b>	<b>100</b>	<b>390</b>	<b>100.0</b>
Education level						
None	3	1.6	2	1.0	5	1.3
Primary	65	34.6	55	27.2	120	30.8
Secondary	96	51.1	115	56.9	211	54.1
College	18	9.6	24	11.9	42	10.8
University	6	3.2	6	3.0	12	3.1
<b>Total</b>	<b>188</b>	<b>100</b>	<b>202</b>	<b>100</b>	<b>390</b>	<b>100.0</b>
Average income						
<KES 20,000	11	5.9	28	13.9	39	10.0
KES 20,000-29,000	34	18.1	33	16.3	67	17.2
KES 30,000-39,000	24	12.8	41	20.3	65	16.7
KES 40,000-49,000	29	15.4	26	12.9	55	14.1
KES 50,000-59,000	17	9.0	24	11.9	41	10.5
KES 60,000-69,000	24	12.8	19	9.4	43	11.0
KES 70,000-79,000	21	11.2	16	7.9	37	9.5
KES 80,000+	28	14.9	15	7.4	43	11.0
<b>Total</b>	<b>188</b>	<b>100</b>	<b>202</b>	<b>100</b>	<b>390</b>	<b>100.0</b>

*This table shows the distribution of participants based on various attributes, such as duration of stay at the current place of residence, duration of trade at the Municipal Market, gender, age, educational attainment and average income level. The last column provides statistics for the whole lot of participants.*

The common factor about participants in the two groups is consumption of essential services provided by the Municipal Council, including water, sanitation, and garbage collection. Whereas household heads provided their perspectives about domestic services, we requested traders to provide their views about services provided at the Municipal Market.

We sourced primary data from 390 participants, including 188 (48.2%) household heads and 202 (51.8%) market traders.

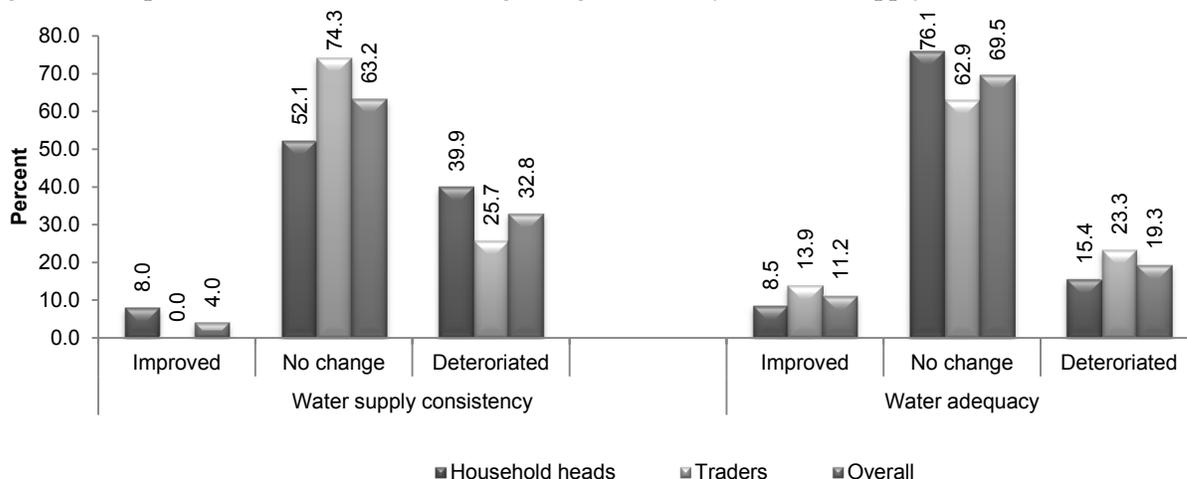
The results presented in Table 1 show that most household heads, 111 (59.0%) had stayed in their residence for at least 10 years, while at the market, 128 (63.4%) traders had operated at the Municipal Market for the same duration. This shows that most participants were likely to be familiar with services provided by Siaya Municipal Council, making them better placed to provide accurate judgment about the quality of services provided by the Council.

The household heads included 97 (51.6%) women and 91 (48.4%) men, while the traders included 111 (55.0%) women and 91 (45.0%) men. Most household heads, 84 (44.7%) were aged between 20 and 29 years, and so were 79 (39.1%) traders. Those indicating the 30 to 39 years age bracket included 70 (37.2%) household heads and 75 (37.1%) traders. Regarding educational attainment, 96 (51.1%) household heads and 115 (56.9%) traders had reported having secondary education; 65 (34.6%) household heads and 55 (27.2%) traders indicated primary education, while 18 (9.6%) household heads against 24 (11.9%) traders stated college education. In terms of average monthly income, 34 (18.1%) household heads and 33 (16.3%) traders were in the bracket of KES 20,000 to 29,000; another 24 (12.8%) household heads and 40 (20.3%) traders indicated KES 30,000 to 39,000, while those earning between KES 40,000 to 49,000 included 29 (15.4%) household heads and 26 (12.9%) traders.

Regarding perspectives on the quality of services provided by Siaya Municipal Council, participants were requested to rate their judgment on a three-point scale on whether the quality of essential services, including water, garbage collection and sanitation had improved or not over the preceding two years period. In view of this, the results presented in Figure 4 show that out of 188

household heads, 98 (52.1%) indicated that there was no change in the consistency of domestic water supply, 75 (39.9%) said the consistency had deteriorated, while only 15 (8.0%) participants were of the view that the consistency of water supply had improved over the reference period.

Figure 4: Perspectives of Market Traders Regarding the Quality of Water Supply Services



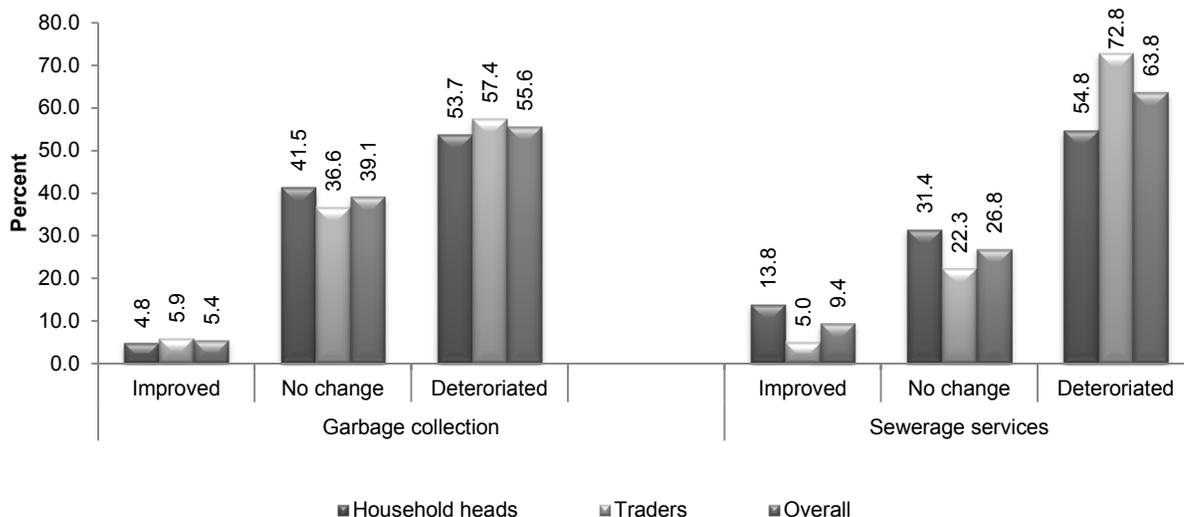
This figure presents results about participants' perspectives about water supply consistency, water adequacy, garbage collection, and sewerage services. The results suggest that more than two-thirds (63.2%) of the participants believe that there was no change in water supply consistency. Regarding water adequacy, up to 69.5% expressed indifference.

At the market, the results suggest that no participant believed that water supply consistency had improved over the preceding two-years period, instead, 150 (74.3%) participants felt that there was no change on water supply consistency, while 52 (25.7%) were of the view that consistency had deteriorated over the reference period.

Still on water supply, figure 4 shows that 143 (76.1%) household heads reported lack of change in the adequacy of water received at home, 29 (15.4%) others indicated that water adequacy had deteriorated, while 16 (8.5%) hinted that water adequacy had improved over the reference period. In addition, 127 (62.9%) market traders felt that there was no change on the adequacy of water received, vis-à-vis their family needs; while 47 (23.3%) felt that the quantity of water received at the market had deteriorated over the preceding two-years period. Only 28 (13.9%) were affirmative that water quantity had improved.

Figure 5 further shows that up to 101 (53.7%) household heads indicated that collection of domestic garbage had deteriorated over the preceding three-years period, 78 (41.5%) had not seen any change, while only 9 (4.8%) felt that the service had improved. Among market traders, the results show that about two-thirds of participants, 116 (57.4%), were of the view that garbage collection at the market had deteriorated over the reference period; 74 (36.6%) said there was no change, while 12 (5.9%) believed that the service had improved.

Figure 5: Perspectives of household heads regarding the quality of water supply services



*This figure presents results about participants' perspectives about water supply consistency, water adequacy, garbage collection, and sewerage services. The results suggest that up to 55.6% of the participants indicated that garbage collection had deteriorated, while another 63.8% stated that sewerage services had also deteriorated.*

Furthermore, 103 (54.8%) household heads were of the view that sewerage services had deteriorated, 59 (31.4%) suggested no change, while only 26 (13.8%) believed that some improvement had been realized. At the market, most traders, 147 (72.8%), were of the view that the service had deteriorated, 45 (22.3%) said there was no change, while 10 (5.0%) thought that sewerage services at the market had improved. Furthermore, we requested participants to indicate factors influencing service delivery at the Council. The results presented in Table 2 show that out of 390 participants, 224 (57.4%) cited political interference as the main constraint. Participants noted that service delivery was impeded by interference by political leaders both from within the Council as well as from outside, including councilors, members of parliament, minister for local government and in some instances, the president. Since the Local Government Act (Cap 265) allows for the appointment of councilors by higher authorities such as the Minister or the President. Many times councilors appointed by higher authorities found it hard to submit to the authority of Council staff and other leaders.

Where councilors are elected, participants cited political party influences infiltrating into the Council to determine who receives particularly services, when and how much. Under such circumstances, services are skewed in favor of areas perceived to be politically loyal to key decision-makers within the Council.

Furthermore, 172 (44.1%) participants reported that service delivery in Council was affected by procurement malpractices, manifesting through situations where some tender committee members acted in favor of particular candidates, tendering documents designed in favor of particular bidders, including political loyalists, business associates or family members, as well as single sourcing of service providers. In addition, participants noted that some politically connected bidders often collude with tender committee officials to overprice materials and works. These practices often culminated to loss of millions of public funds. Table 2 shows that 151 (38.7%) participants indicated that service delivery was constrained by a narrow revenue base because the Council had not fully exploited available economic opportunities. This affected the amount of internally generated revenue, thus, constraining the Council's capacity to meet the expectations of

residents in terms of service delivery as well as meet its financial obligations to suppliers and contractors. It is important to note that LATF resources only supplements local authorities' revenues to improve service delivery (IEA, 2009); thus, making it crucial for local authorities to initiate appropriate measures to generate additional resources.

Table 2: Factors Influencing Service Delivery In Siaya Municipality

Valid responses	Frequency	Percent of response	Percent of cases
Political interference	224	22.4	57.4
Procurement malpractices	172	17.2	44.1
Heavy indebtedness	78	7.8	20.0
Weak revenue base	151	15.1	38.7
Revenue collection inefficiency	66	6.6	16.9
Understaffing	129	12.9	33.1
Other human resource issues	38	3.8	9.7
Unmotivated council workers	94	9.4	24.1
High turnover of professional staff	49	4.9	12.6
<b>Total</b>	<b>1001</b>	<b>100.0</b>	<b>256.7</b>

*This Table presents multiple responses on factors influencing service delivery within Siaya Municipality. The results show that up to 57.4% (sample size = 390) indicated that delivery was impeded by interference by political leaders both from within the Council as well as from outside. Other factors influencing service delivery include procurement malpractices (44.1%), weak revenue base (38.7%), and understaffing, among others.*

Still tied to weak revenue base, some participants, 66 (16.9%), noted that the Council lacks effective internal control measures to prevent leakages of revenues collected at various stages, including in the hands of collectors, financial management department and chief accounting officers. In view of this, participants noted that the financial management system of the Council is grossly inefficient. More still, 129 (33.1%) participants identified understaffing as one of the key human resource issues constraining service delivery at the Council. Understaffing was further linked to delayed replacement of professional and technical staff leaving the station through transfers as well as those absent due to prolonged illness or natural attrition. Instead, the Council encouraged available staff coped with the resultant heavy workload through multi-tasking, sometimes performing tasks for which they had no training at all. Moreover, up to 94 (24.1%) participants linked to service delivery with lack of motivation for Council staff, particularly due to low pay and delayed salaries, which at the time of the study, had run into several months.

The results in Table 2 further indicate that 78 (20.0%) participants associated poor service delivery with heavy indebtedness to suppliers of goods, services, and works. Participants further attributed the debts to mismanagement of public resources due to political interference, limited enforcement of transparency and accountability regulations by the Minister. Participants also linked heavy indebtedness to the narrow revenue base and revenue collection inefficiencies. The results show that 49 (12.6%) participants cited high turnover of professional and technical staff as one of the key factors weakening service delivery by the council. We attributed this challenge to conflict between technocrats and councilors. Participants cited cases where councillors harassed, intimidated, assaulted and even manipulated the system to have technical staff standing on their way transferred to other stations, which in turn, affected the continuity of projects initiated to improve service delivery, as well as provide loopholes for diversion of funds to private accounts. Other human resource issues cited by 38 (9.7%) participants included hiring of unqualified people to perform technical duties and payment of 'ghost' workers. In this regard, participants cited instances where some Council workers were hired without due consideration of their ability to

perform the tasks entailed in effective service provision. Participants also cited were cases where particulars of elected leaders' relatives clandestinely found their way into the workers payroll; thus, siphoning out resources that could be used to improve the quality of services.

## CONCLUSIONS

The purpose of this study was to establish the influence of LATF on service delivery by local government authorities, focusing on Siaya Municipal Council. We set the study to achieve this through residents' perspectives about the quality of essential services, including water, garbage collection, and sanitation, over the preceding two years period (2007-2009). The study found that more than two-thirds (63.2%) of the participants believed that there was no change in water supply consistency, while 69.5% indicated that there was no change regarding the adequacy of water. Nonetheless, up to 32.8% believed that water supply consistency had deteriorated, while 19.3% reported the same about water adequacy. In addition, 55.6% of the participants indicated that garbage collection had deteriorated, while 63.8% stated the same about sewerage services. These findings suggest that the disbursement of LATF resources to Siaya Municipal Council for about ten years had not improved service delivery to the residents. Rather, service delivery is constrained by a number of factors including interference by political leaders, non-adherence to public procurement regulations, weak revenue base, and understaffing among other factors.

As urban populations grow at an unprecedented rate, so is the demand for services from local authorities. There is no doubt that rapid growth of population will require a higher measure of infrastructural and capacity expansion to deliver services. Based on the findings of this study, it may be incorrect to state that Siaya Municipal council is prepared to accommodate the growth of its population, which the 2009 National Population and Housing Census analytical report placed at 2.4% per annum. Kenyan local authorities, including Siaya Municipal Council should shape up to meet the current demand for services, as well as gear up to respond to the challenges of the expected population in the coming years.

Although local authorities have been clamoring for greater autonomy, public reactions regarding the quality of services and pervasive corruption militate against any move to amend the law to grant such autonomy. Without adequate adherence to the existing transparency and accountability regulations, Siaya Municipal Council, alongside other local authorities in Kenya, are likely to experience more aggression from members of the public, demanding for better services. The unprecedented proliferation of residents' associations is a clear indication that members of the public are tired of paying taxes and not receiving value for their money in terms of services. This situation may culminate to public unrest and disruption of life and livelihoods in affected local authorities. Consequently, the Government should take necessary action in time to enforce accountability measures to improve service delivery by local authorities. The Government should give citizens more oversight power by opening up reporting channels, establishing hotlines and circulating these widely and decentralizing witness protection institutions to enhance accountability at Siaya Municipal Council and other local authorities. The Government should further enhance accountability by ensuring that local authorities comply with section 82 of the Local Authorities Act (Cap 265), which requires that all minutes of local authority proceedings should be available to all tax payers and voters. In addition, there is need for public engagements between the authorities and residents. Increased exchange of information is likely to cultivate as sense of responsibility and accountability.

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## BIOGRAPHY

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# CONTRIBUTION OF LOCAL AUTHORITY TRANSFER FUND TO DEBT REDUCTION IN KENYAN LOCAL AUTHORITIES AND INSTITUTIONAL VULNERABILITIES TO FURTHER DEBT: A CASE OF SIAYA MUNICIPAL COUNCIL

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## ABSTRACT

*Debt can be rewarding in case of moderate use, but can be disastrous in cases of imprudence. Excessive debt has been a key challenge to Kenyan local authorities, constraining service delivery and undermining financial sustainability. The Government established and decentralized the Local Authorities Transfer Fund (LATF) to enable local authorities reduce the debt burden. The purpose of this study was to assess and document information on the contribution of LATF towards debt reduction at the Council, as well as identify institutional vulnerabilities that may perpetuate further indebtedness. We sourced primary data from 162 community members, including opinion leaders and civil servants. The study found that the debt portfolio had reduced steadily from KES 157.4 million in the 1999/00 to KES 98.4 million in the 2010/11, while allocations to the Council had increased from KES 11.7 million to KES 57.4 million over the same period of time. The analysis found that LATF allocation significantly correlated with outstanding debts, suggesting up to 99% chance that access to LATF resources may have contributed to debt reduction. To achieve financial sustainability, the Government must address various institutional vulnerabilities, including corruption (76.5%), procurement malpractices (59.3%), revenue collection inefficiency (58.0%), outdated accounting systems (54.9%), political influence (39.5%), nepotism (38.9%), and weak internal audit and control systems (30.9%). The study emphasizes that County Governments must take a bold step to enforce key legislations, including Public Officers Ethics Act, as well as the Anti-Corruption and Economic Crimes Act to dismantle corruption cartels, as well as initiate appropriate reforms programs.*

JEL: 016

**KEYWORDS:** Local Authority, Transfer fund, Decentralization, Fiscal decentralization, Debt, Debt vulnerabilities

## INTRODUCTION

Debt is an inevitable phenomenon for all existing and functional entities, be they individuals, corporate bodies or public institutions (Karazijiene & Saboniene, 2009). Debt can be rewarding when beneficiaries use it in moderation, but can be disastrous in cases of imprudent use (Das, Papapioannou, Pedras, Ahmed, and Surti (2010). In the public sector, over-borrowing or excessive accumulation of debt can lead to bankruptcy; thus, stifling the ability of public

institutions to deliver essential services. For this reason, Cecchetti, Mohanty, and Zampolli (2011) metaphorically equate debt to a two-edged sword. Borrowing is important because it allows public institutions to smooth taxes in the face of variable expenditures (Barro, 1979). Without debt, economies cannot grow and macroeconomic volatility would be greater than desirable (Levine, 2005). As pointed out by Cecchetti et al. (2011), without debt, public institutions remain poor and may not cope with the growing population's demands. With debt, public institutions can invest even when their revenues would otherwise not allow. However, borrowing can create severe financial crises when debt ratios rise beyond a certain level (Reinhart & Rogoff, 2009). Accumulation of debt is a risky economic circumstance that may stifle operations of public institutions and deny citizens essential services. In this regard, Cecchetti et al. (2011) note that as debt levels increase, borrowers' ability to repay becomes progressively more sensitive to drops in revenues as well as increases in interest rates. In the event of shocks, the higher the debt the greater the probability of defaulting, and heavily indebted institutions may suddenly become less creditworthy. The consequences may include non-completion of development projects, narrow revenue base, salary arrears, unmotivated workers, industrial action, court cases, which may bear heavy fines and increase debt stock. According to Bernanke and Gertler (1990), debt increases financial fragility and impairs financial stability.

Furthermore, Das et al. (2010) as well as Maana, Owino and Mutai (2008) also warn that debt is bad for economic growth beyond a certain level. Cecchetti et al. (2011) suggest that public institutions should not have a debt stock beyond 85% of the Gross Domestic Products (GDP). In view of the consequences of heavy indebtedness, public institutions should have in place appropriate measures for debt management to prevent pile-up and facilitate the achievement of financial sustainability. Excessive debt has been one of the key challenges affecting local authorities in Kenya by constraining service delivery and undermining financial sustainability. By the end of 2012, the local authorities had accumulated a debt of KES 17,281,183,162 (Limo, 2012), in form of bank loans, salary arrears, among other statutory debts owed to National Hospital Insurance Fund, National Social Security Fund, Pensions Fund, Kenya Revenue Authority, SACCOs and suppliers (Limo, 2012). In response to the debt situation, the Government of Kenya (GoK) established the Local Authorities Transfer Fund (LATF) through the Local Authorities Transfer Fund Act, No. 8 of 1998 (GoK, 1999) to, among other objectives, enable local authorities reduce their debt stock and achieve financial sustainability (Kibua & Mwabu, 2008; Mboga, 2009). LATF is one of the financing facilities that the Government has devolved to local authorities within the decentralization framework. Decentralization entails the transfer of authority and responsibility for public functions, which may be fiscal, administrative, political, or economic, from the central government to subordinate or quasi-independent public institutions as well as the private sector (Rondinelli, 1999; Cheema, 2007; Phillip, 2009). Public finance scholars have applied the concept in various fields, including public administration, economics, management science, law, and public finance, among others. Whatever the area of application, decentralization responds to limitations and challenges associated with centralized governance systems (Conyers, 2007).

Fiscal decentralization is one of the components of decentralized government functions, whose purpose is to improve efficiency in handling, management, expenditure, and accountability for public funds. Fiscal decentralization involves the passing of budgetary authority from centralized governance systems to elected sub-national governments in the form of the power to make decisions on matters revenue and expenditure (Menon, Mutero, & Macharia, 2008). Fiscal decentralization has four key attributes, including assigning clear expenditure and revenue responsibilities; intergovernmental fiscal transfer mechanisms from central to local governments; as well as authorization for borrowing and revenue mobilization through loan guarantees from the

central government (Phillip, 2009). According to Wachira (2010), governments pursue fiscal decentralization to facilitate the participation of citizens in identification of community priorities, planning and budgeting, implementation as well as monitoring and evaluation. Besides, Bonoff and Zimmerman (2010) notes that fiscal decentralization stems from the premise that local communities have the ability to prioritize projects in line with their needs, and that, local resources are easily accessible where community members are involved in development processes. In view of this, fiscal decentralization strengthens citizens' role in ensuring accountability and transparency in the management of public funds.

In Kenya, the pursuit of decentralized development started soon after independence in 1963. In this regard, the Government first proposed the decentralization agenda in the Sessional Paper No. 10 of 1965 on African Socialism and its Application to Planning in Kenya, with a view to strengthening the fight against poverty, disease and illiteracy (Chitere & Ileri, 2008). The Sessional paper marks one of the key initial attempts to decentralize development agenda and resources to the districts and local government authorities across the country (Kibua & Mwabu, 2008; Chitere & Ileri, 2008).

In 1983, the Government introduced the District Focus for Rural Development (DFRD) mechanism as its official decentralization policy (Alila & Omosa, 1996; Chitere & Ileri, 2008). Under the DFRD framework, districts became the planning units for decentralized service delivery. However, performance of the strategy was constrained by various factors including limited involvement of communities in project cycle management (Chitere & Ileri, 2008). As noted by Kibua and Mwabu (2008), decentralized development initiatives brings forth numerous benefits including, better governance, improved equity in resource sharing, improve the quality of government service delivery, as well as enhanced accountability in the administration of public resources. More recently, decentralization was revisited in the Economic Recovery Strategy for Wealth and Employment Creation (ERSWEC) 2003-2007, which stands out as the policy document providing a clear framework against which devolved funds are leveraged (Kibua & Mwabu, 2008; GoK, 2003). Fiscal decentralization framework is further set out in the First Medium Term Plan (MTP) 2008-2012 (GoK, 2008), as well as Kenya's Vision 2030 (GoK, 2010).

These policy efforts culminated to the establishment of various devolved funds, including LATF, which draws from the national revenues - 5% of the annual national income tax collection (Kibua & Mwabu, 2008; Mboga, 2009). The Government designed allocation criteria to ensure consistency, fairness and transparency, as follows: a basic minimum lump sum of KES 1.5 million (6.6%) is shared equally among the country's 175 local authorities, while 60% of the fund is disbursed according to relative population sizes of local authorities. The Government allocates the remaining 35.4% subject to local authorities meeting specified accountability criteria (Kibua & Mwabu, 2008; Mboga, 2009). The money disbursed through LATF supplements local authorities' revenues; it forms about one-quarter of local authority revenues (Kibua & Mwabu, 2008; Mboga, 2009). In order to access LATF resources, local authorities are required to have action plans, known as Local Authority Service Delivery Plans (LASDAP), which are prepared through participatory processes, involving stakeholder groups and communities. LASDAP specifies prioritized projects and activities for which the Government and local authority funds should finance. The participatory approach amplifies local communities' voice in project identification, planning, monitoring, evaluation, and accountability processes, as well as nurture ownership of LATF projects (Kibua & Mwabu, 2008; Menon et al., 2008; Bonoff & Zimmerman, 2010).

Furthermore, LASDAP anchors on key pillars focusing on poverty reduction in line with the Poverty Reduction Strategy Paper (PRSP) and the Economic Recovery Strategy (ERS) whose priority areas include health, education, and infrastructure and upgrading of informal settlements (Mboga, 2009). The concept behind the LASDAP is to match all expenditure by local authorities to the needs of target communities; thus, avoid spending scarce resources on activities that are not addressing the immediate need so of target beneficiaries (Institute of Economic Affairs [IEA], 2005). Local authorities adopt completed plans as a resolution, before submitting to the Ministry of Local Government (MoLG). It is however, the responsibility of stakeholders to hold councilors and chief officers accountable for LASDAP's implementation; hence, the primacy of their monitoring role (Kibua & Mwabu, 2008; Mboga, 2009). The MoLG encourages accountability and transparency by disbursing 60% of LATF upon submission of necessary budgetary and technical proposals.

The Ministry further emphasizes performance by distributing the remaining 40% of the funds based on LASDAP's performance metrics, such as revenue enhancement strategies (Bonoff & Zimmerman, 2010). In the event of delayed delivery of reports, local authorities are subject to penalties: 15% loss of allocated funds for late filing of returns of up to 30 days, 40% of allocations for lateness of between 31 and 60 days late, and complete loss of LATF for local authorities whose documents are more than 60 days late (GoK, 1999; Bonoff & Zimmerman, 2010). Furthermore, MoLG requires local authorities to publicize funds received from the Government each year in national newspapers. Besides, local authorities should to hold annual budget days in the month of June, which provide forums to discuss revenues and expenditures for previous financial years and planned budgets for subsequent financial years with citizens (GoK, 1999; Bonoff & Zimmerman, 2010).

In spite of such measures, local authorities remain heavily burdened in excessive debts, which continue to rise by day. There are also indications that local authorities have been misusing LATF resources (Oywa & Opiyo, 2011). As noted by the former Permanent Secretary for Local Government, about 75% of the 175 local authorities in the country have been sinking in the abyss of corruption and indebtedness. In 2010, a survey conducted by Transparency International ranked local authorities/Ministry of Local Government as the second most corrupt public institution after the Kenya Police (Ngunjiri, 2010). In 2011, the National Taxpayers Association (NTA) revealed that the Government lost KES 444 million in Constituency Development Fund (CDF) and LATF in 28 constituencies and five local authorities. Siaya Municipal Council alone had a debt stock of close to KES 100 million.

A little earlier in 2007, an independent study on the impact of the LATF in Kenya indicated that local authorities were reeling under the burden of debts, which prevented some of them from securing statutory clearance letters, a prerequisite for accessing LATF resources (GoK, 2007). The Government's policy required local authorities to clear all debts by the year 2010; thenceforth, no institution would use LATF resources pay debts. Nonetheless, there is little documentation about how LATF resources have contributed towards debt reduction and achievement of financial sustainability by local authorities. Even though a number of studies, including Smoke (2000), IEA (2005), Kageri (2010), and Nyangena et al. (2010) have documented various issues associated with LATF, none has explicitly assessed the role of LATF in debt reduction and persistent vulnerabilities that may still fuel debt levels and undermine the financial sustainability. This study adopted a case study approach to assess the contribution of LATF towards debt reduction and vulnerabilities of Siaya Municipal Council to further indebtedness. Understanding debt vulnerabilities will enable County Governments, which have

since taken over local authorities, to initiate appropriate measures to avert solvency issues in the future.

## DATA AND METHODOLOGY

We applied the cross-sectional survey design to guide the research process, including planning, training and pretesting, data sourcing, data processing and analysis, as well as reporting. The study targeted community members, opinion leaders and civil servants in Siaya Municipality. For a period of 10 days, we contacted up to 200 potential participants. However, only 162 (81.0%) met the inclusion criteria; hence were issued with self-administered questionnaires. We collected primary data in the month of June 2010 and the process involved identification and prequalification of potential participants, consenting, questionnaire issuance and follow-up. Whereas some participants completed the questionnaires on the spot, we gave others two days to provide their perspectives on institutional vulnerabilities that may push the Council into further indebtedness.

We applied purposive and snow-ball sampling procedures to select potential participants. In this regard we selected key opinion leaders and civil servants who demonstrated awareness about Local Authority Transfer Fund (LATF) and who had either participated in Local Authorities Service Delivery Plan (LASDAP) planning and budgeting processes or had ever engaged in formal business with Siaya Municipal Council, in their capacity as government officers or personal capacity as suppliers of goods, services or works. As part of prequalification for participation, we engaged participants in informal interviews to gauge their knowledge about operations of the Council. We used a self-administered questionnaire with structured and semi-structured questions to source the data. Furthermore, we employed quantitative and qualitative techniques to process and analyze the data. Quantitative analysis generated frequency distributions with percentages and cross-tabulations, we also transcribed, clustered into nodes and explored qualitative data for patterns about the institutional vulnerabilities to further indebtedness. Detailed description of the design and approaches that we used in this study are available in following publications (Nachmias & Nachmias, 1996; Bryman & Cramer 1997; American Statistical Association, 1999; Owens, 2002; Rindfleisch, Malter, Ganesan & Moorman, 2008).

## RESULTS AND DISCUSSIONS

We sourced the requisite information from 162 community members, including opinion leaders and civil servants. We present the results under three sub-sections, including information on participants' background profile in the first sub-section, contribution of LATF to reduction of the Council's debt stock in the second sub-section as well as institutional factors predisposing the Council to further indebtedness in the third sub-section. Table 1 provides a summary of participants' socio-economic profile. The results shows that participants included 120 (74.1%) men and 42 (25.9%) women, suggesting that men were probably more aware and more involved in LATF activities, as well as business with the Council than women. The participants were aged between 25 and 65 years, with majority, 56 (34.6%) being in the 40-49 years bracket and about one-third, 49 (30.2%) falling between 30 and 39 years.

Table 1: Socio-Economic Profile of Participants

Participants attributes	Frequency	Percent
<i>Gender</i>		
Male	120	74.1

Female	42	25.9
<b>Total</b>	<b>162</b>	<b>100.0</b>
<i>Age</i>		
20-29 years	37	22.8
30-39 years	49	30.2
40-49 years	56	34.6
50 years+	20	12.3
<b>Total</b>	<b>162</b>	<b>100.0</b>
<i>Education level</i>		
Primary	3	1.9
Secondary	56	34.6
College	81	50.0
University	22	13.6
<b>Total</b>	<b>162</b>	<b>100.0</b>
<i>Occupation</i>		
Civil servants	12	7.4
Business	72	44.4
Faith leaders	7	4.3
Politicians	21	13.0
Teachers	12	7.4
Farmers	10	6.2
Lecturers	3	1.9
Healthworkers	8	4.9
Retired civil servants	6	3.7
Community health workers	7	4.3
NGO worker	4	2.5
<b>Total</b>	<b>162</b>	<b>100.0</b>
<i>Average monthly income</i>		
<KES 20,000	5	3.1
KES 20,000-39,000	34	21.0
KES 40,000-69,000	44	27.2
KES 70,000-99,000	33	20.4
KES 100,000+	46	28.4
<b>Total</b>	<b>162</b>	<b>100.0</b>

Presented in this Table is the distribution of participants about socio-economic attribute, such as gender, age, educational attainment, occupation, and average income level. Participants included insiders such as Ministry of Local Government staff, Council staff as well as serving and retired councilors. The purpose is to show the caliber of the people whose perspectives about the financial management and accountability systems existing at the time of the study, we have documented in this paper.

The results in Table 1 further show that most participants had attained at least secondary education. More specifically, 81 (50.0%) reported having college training, 56 (34.6%) had attained secondary education, while 22 (13.6%) were university graduates. Regarding occupation type, the results show that most participants, 72 (44.4%), were businessmen and women, while 21 (13.0%) were politicians, including serving and retired councillors. Participants reported various occupations. In this regard, the results show that 12 (7.4%) participants were civil servants sampled from MoLG, Municipal Council of Siaya, District Treasury, Ministry of Water and Irrigation, District Tender Committee and Ministry of Health. Participants also included 12 (7.4%) primary and secondary school deputy and head teachers, 10 (6.2%) farmers, 8 (4.9%) health facility staff, and 7 (4.3%) faith leaders, among others. This shows that the study captured views of a wide spectrum of community members. Furthermore, participants reported average monthly incomes ranging from KES 18,000 to KES 166,000. More specifically, 46 (28.4%) participants stated average incomes of at least KES 100,000, 44 (27.25) were in the KES 40,000 to 69,000 income group, while 34 (21.0%) stated average incomes ranging between KES 20,000 and 39,000. These results suggest that the study included participants with good educational, income background, as well as general awareness about functions of the Council vis-à-vis the debt accumulation. We sourced secondary data on LATF allocations and Siaya Municipal Council's debt stock from the MoLG. In Siaya Municipality, the data show that the amount allocated has increased from KES 11.7 million in the FY 1999/00 to KES 57.4 million in the FY

2010/11, with significant increment noted between the years 2004/05 and 2005/06. The data further indicates that debt portfolio has reduced steadily from KES 157.4 million in the FY 1999/00 to KES 98.4 million in the 2010/11 FY. Although the Council had not fully paid its debts, participants affirmed that access to LATF contributed significantly to the reduction of debt stocks, as indicated in Figure 1.

Figure 1: Amount of LATF Allocations and Outstanding Debts (1999/00-2010/11)

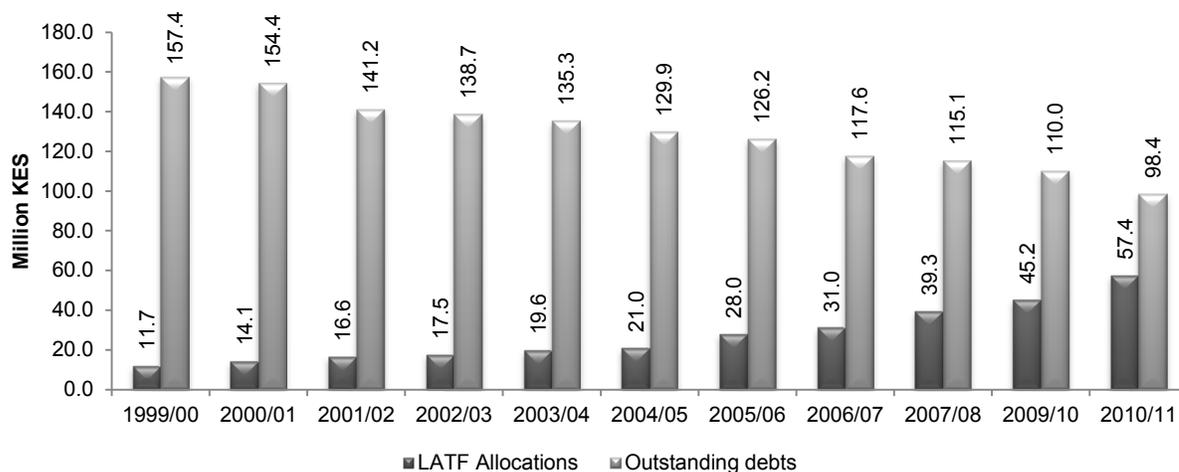


Figure 1 shows the data obtained from the annual LATF reports about amounts allocated to Siaya Municipal Council. The data show that the amount allocated has increased from KES 11.7 million in the FY 1999/00 to KES 57.4 million in the FY 2010/11, with significant increment noted between the years 2004/05 and 2005/06. The data further indicates that debt portfolio has reduced steadily from KES 157.4 million in the FY 1999/00 to KES 98.4 million in the 2010/11 FY

We performed a correlation analysis between LATF allocations and outstanding debts, the results of which we present in Table 1. The analysis obtained a correlation coefficient of -0.950, which is significant at 0.05 error margin; thus, suggesting up to 99% chance that LATF allocation significantly correlated with outstanding debts. This suggests that access to LATF resources may have contributed to the observed reduction in the Council's debt stock. Despite the achievement, participants identified various institutional factors that were likely to drive the Council back to excessive indebtedness, which we present in Table 2. The results show that up to 124 (76.5%) participants cited corruption as the main factor increasing the Council's vulnerability to further indebtedness. Participants further identified various forms of corruption at the Council, including embezzlement (30.8%), bribery (26.3%), extortion (24.8%), and patronage systems (18.0%).

Table 1: Pearson correlation results

Correlations			
		LATF allocations	Outstanding debts
LATF allocations	Pearson Correlation	1	-0.950**
	Sig. (2-tailed)		.000
	N	11	11
Outstanding debts	Pearson Correlation	-0.950**	1
	Sig. (2-tailed)	.000	
	N	11	11

\*\* Correlation is significant at the 0.01 level (2-tailed). This Table presents the summary of Pearson Correlation Coefficient. The analysis obtained a correlation coefficient of -0.950, which is significant at 0.05 error margin; thus, suggesting up to 99% chance that LATF allocation significantly correlated with outstanding debts. This suggests that access to LATF resources may have contributed to the observed reduction in the Council's Debt stock.

Participants affirmed that corruption led to loss of Council resources and properties, affecting the completion of development projects, as well as the payment of bank loans, salaries, and suppliers' fees, among other statutory debts. Arguably, local authorities may be more susceptible to corruption because interactions between private individuals and officials happen at greater levels of intimacy and with more frequency at more decentralized levels. Thus, the need for the Government to enforce necessary legal frameworks, including the Public Officers Ethics Act of 2003, as well as the Anti-Corruption and Economic Crimes Act of 2003. Closely associated to corruption is the public procurement, which is the main process through which local authorities spend public funds. In Kenya, public procurement accounts for over 10% of the GDP, making it a large market for suppliers and contractors. With this amount of resource, public procurement tops the list of sectors with high opportunities for corruption. In this study, the results in Table 2 shows that up to 98 (59.3%) mentioned procurement malpractices as a key institutional vulnerability towards excessive indebtedness.

Table 2: Institutional Vulnerabilities to Further Indebtedness

Valid responses	Frequency	Percent of responses	Percent of cases
Corruption	124	21.4	76.5
Procurement malpractices	96	16.6	59.3
Political influence	64	11.0	39.5
Outdated accounting systems	89	15.3	54.9
Nepotism	63	10.9	38.9
Internal audit and control systems	50	8.6	30.9
Revenue collection inefficiencies	94	16.2	58.0
<b>Total</b>	<b>580</b>	<b>100.0</b>	<b>358.0</b>

*This table presents factors that may push Siaya Municipal Council to further indebtedness, including corruption, procurement malpractices, political interference, outdated accounting system, nepotism, weak internal audit and control systems, as well as revenue collection inefficiencies. The third column presents percentages of each response based on total responses (580), while the fourth column presents percentages of participants mentioning a particular factor based on the sample size (162).*

In addition, the participants identified various procurement malpractices that were rampant at the Council at the time of the study. This included emergency procurement, where senior Council officers created emergency situations to justify immediate sourcing of goods and services without going through the long tendering process as provided for in the Procurement Regulations. Malpractices also included tender splitting, where senior Council officers split tenders into small amounts that fall within their threshold to authorize, without necessary going through the District Tender Committee. Other issues that participants cited include designing tender documents to fit particular bidders, as well as collusion with particular politically connected bidders to inflate the prices of goods and services. Participants indicated that the Council generated revenues through housing rents, land rates, trade license fees, burial permits, parking fees, bus park fees, and market cess, among others. They pointed out that the revenue base was not only narrow but also deficient in terms of appropriate control measures to prevent revenue loss in the hands of Council officers. Table 2 shows that 94 (58.0%) participants mentioned revenue collection inefficiency as one of the vulnerabilities that may force the Council to further indebtedness. This implies that non-expansion of the revenue base as well as failure to initiate appropriate reforms in revenue collection may compel the Council to continue operating on deficit budgets, which will inevitably perpetuate indebtedness. For decades, local authorities in Kenya have been following the colonial British municipal accounting system. At the time of the study, the Council was in the process of upgrading the accounting and financial reporting system under the Kenya Local Government Reform Program. Table 2 shows that 89 (54.9%) participants cited outdated accounting system as a key vulnerability to further indebtedness. Participants associated the existing accounting

systems with numerous shortcomings, including the ease of manipulation by deliberately making wrong entries, as well as altering or transposing figures.

Even worse was that such manipulations were often so hidden that they escape the attention of external auditors, particularly because of bulkiness and untidiness of file storage facilities. Participants also pointed out that the existing accounting system lacked appropriate security safeguards, making the files accessible to Council officers who may have ill motives. Based on this, some participants asserted that so long as the accounting system is not upgraded, the Council remains vulnerable to loss of public resources by existing and future cartels; thus, increasing the risk of indebtedness. The results in Table 2 further shows that up to 64 (39.5%) participants cited political influence, which the closely linked to corruption and procurement malpractices. Political influence manifested itself through deliberate diversion of funds to non-prioritized projects with the aim of rewarding specific communities perceived to be politically loyal; as well as influence of the procurement process to favour political loyalists, business associates or family members. Participants noted that projects that were politically-driven were often never completed or if completed, provided evidence of poor workmanship.

In some cases, political leaders harassed, intimidated, assaulted and even manipulated the system to have professional MoLG staff standing on their way transferred to other stations. Under such circumstances, professional found it extremely difficult to fulfil the interests of political leaders without breaching formal internal control systems and overspending. Political influence remains one of the key factors likely to push the Council into further indebtedness. The results in Table 2 show that up to 63 (38.9%) participants identified nepotism as one of the factors making the Council vulnerable to further indebtedness. Participants further revealed that nepotism had led to the flooding of lower cadres of support staff without appropriate and comprehensive job descriptions. Reportedly, most workers in the lower cadres were relatives of either senior Council officers or serving and past civic leaders, as well as influential persons in Siaya District. Moreover, nepotism encouraged the proliferation of ghost workers. In this regard, key decision makers filled the payroll with names of non-existent workers, who drew salaries from the Council; thus, contributing huge wage bills, pushing the Council into debts. Participants confirmed that ghost workers was still a reality at the Council at the time of the study and their number would increase in future if appropriate preventive measures are not initiated.

Internal control systems are useful in controlling and minimizing chances of fraud. The results in Table 2 shows that up to 50 (30.9%) participants cited weak internal audit control system as one of the factors likely to push the Council into further indebtedness. Participants argued that internal control systems could be effective in environments where the rule of law prevails as well as environments that are devoid of political influence and impunity. However, the Council presented an environment in which internal control systems remain vulnerable to manipulation by senior Council officers and political leaders. Without proper checks, the system may not be useful in preventing fraud and safeguarding Council resources.

## CONCLUSIONS

The purpose of this study was to assess and document information on the contribution of LATF towards debt reduction at Siaya Municipal Council, as well as identify institutional vulnerabilities that were likely to perpetuate further indebtedness. The study found that the debt portfolio had reduced steadily from KES 157.4 million in the FY 1999/00 to KES 98.4 million in the 2010/11 FY, while the amount allocated to the Council had increased from KES 11.7 million to KES 57.4 million over the same period of time.

Based on this, the study found that LATF allocation significantly correlated with outstanding debts (computed  $r^2 = -0.950$ ,  $p\text{-value} = 0.000$ ); thus, suggesting up to 99% chance that access to LATF resources may have contributed to the observed reduction in the Council's debt stock. However, financial sustainability may not be achieved until various institutional vulnerabilities are fully addressed, including corruption (76.5%); procurement malpractices (59.3%), revenue collection inefficiency (58.0%), outdated accounting systems (54.9%), political influence (39.5%), nepotism (38.9%) and weak internal audit and control systems (30.9%).

The results show indications that access to LATF resources may have contributed to the reduction of the debt burden for the Council. However, stakeholders must note that LATF has not fully addressed the debt challenge. As County Governments take over local authorities, there is no doubt that, they are going to inherit the debt baggage, which regrettably, may slow down their take-off. Stakeholders should not mistake the takeover of local authorities for a reform process, as the old systems, the corruption cartels, decision-makers remain the same. Hence, this study emphasizes that County Governments must take a bold step to enforce the key legislations, including Public Officers Ethics Act of 2003, as well as the Anti-Corruption and Economic Crimes Act of 2003 to dismantle previous corruption cartels, as well as initiate appropriate programs to reform the accounting system, revenue collection and internal control systems. Only then can LATF achieve its objectives of helping local authorities to reduce accumulated debts and enable local authorities to achieve financial sustainability.

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# MESSAGE TRANSMISSION EFFECT BETWEEN DIFFERENT FIRM SIZE INDICES: EVIDENCE FROM TAIWAN STOCK MARKET

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## ABSTRACT

*So far, the firm size transmission effect for emerging markets have rarely been studied in the past primarily because of the lack of firm size stock index in emerging markets. This study builds three stock indices of different firm sizes from the firms in Taiwan's stock market (listed and over-the-counter), following the approach of Taiwan Capitalization Weighted Stock Index. Thereby, this paper aims to use the dynamic conditional correlation model to study the spillover effect of volatility. After obtaining the indices for each firm size, this study uses DCC-GARCH (Engle, 2002) to conduct a study on firm size message transmission effect during pre- and post-financial tsunami periods. For the fluctuation in Taiwan's stock market, our research findings show that the firm size message transmission effect was insignificant before financial tsunami, but significant after financial tsunami. This study finds the occurrence of message transmission effect from bigger companies to smaller companies, but not reversely. The results may provide investors with recommendations for decision-making: after a sudden financial event, focus on big firm size indices or big firms. This would help increase investment returns and lower risks.*

**JEL:** G01; G14; G32

**KEYWORDS:** Message Transmission Effect, Firm Size Indices, CCC-Garch, DCC-Garch

## INTRODUCTION

Studies on volatility have always been the primary field among the research in financial product prices. Recently, volatility has extended from static estimation to forecasting through dynamic models with the advancements in calculation tools. Hence this paper uses dynamic models in studying the changes in volatility, as supplements to single-variable model and two-variable model in studying the spillover effects of volatility. With regards to the firm size message transmission effect, Lo and MacKinlay (1988, 1990) were the first to point out that intersecting serial correlations exist in investment combinations with different market values. The returns from stocks of big companies normally precede the returns from stocks of smaller companies. However, Barber and Lyon (1997) and Dimson and Marsh (1999) found in their research that the firm size message transmission effect had a reverse scenario.

Thus, whether or not the firm size transmission effect exists in returns fluctuations, and whether or not it has a reverse scenario, is this study's research motive. This paper aims to study the firm size message transmission effect of fluctuations. Traditional GARCH model hypothesizes that the common variance relationship between the two variable series is constant. That is, the residuals between the two series have a Constant Conditional Correlation (CCC). However, this hypothesis is unreasonable intuitively, since the estimated correlation coefficient would be biased if a CCC is

hypothesized when the time series is faced with structural impact. Moreover, Tse (2000) suggested that setting CCC would result in a problem of robust estimated parameters wherein additional tests would be needed. Engle (2002) used two-stage estimation method to avoid the problem of excessive parameters, setting the conditional correlation as non-constant. This is the two-variable GARCH model under DCC (Dynamic Conditional Correlation Model), referred to DCC-GARCH model, being widely used in empirical studies on the fluctuations in returns of financial assets. This study therefore uses this model to study the firm size message transmission effect of fluctuations.

## LITERATURE

Generally speaking, big size companies have more messages compared to smaller companies so new messages in the stock market would first be reflected in the stock prices of big companies, and then be reflected in the stock prices of smaller companies. Thus, a lead-lag relationship exists between the two's stock price returns and this is known as the message transmission effect. Lo and MacKinlay (1988, 1990) pointed out that intersecting serial correlations exist in investment combinations with different market values. The returns of big companies' stocks normally lead returns of small companies' stocks. However, situations wherein small companies' stocks transmit messages to big companies' stocks have also occurred. Conrad, Gultekin, and Kaul (1991) used the multivariate model to study the volatility transmission relationship under companies with different firm sizes. Their results showed that both estimation methods displayed that a big company's past impact would have an effect on itself and a small company, while on the other hand, a small company's past impact would have no effect on a big company.

The study of Chelley-Steeley and Steeley (1996), found that the conditional variances of each asset group are not only affected by their own past impacts, but they are also affected by the past impacts of the other asset groups with bigger companies. Yet, the past impacts of asset groups with small companies do not spillover to the asset groups with bigger companies. Reyes (2001) also found an asymmetric spillover effect existing in big and small companies. That is, the past impacts of big companies would spillover to small companies, but not the other way around. There were also some local studies on the firm size message transmission effect, though majority of them concentrated on the message transmission effect of returns and only few studied volatility's message transmission effect. Wang (1999) used the GARCH (1,1)-M model to study the relationship between Taiwan's stock market trading volume, rate of returns, and volatility of rate of returns and to focus on volatility's transmission effect. Their results revealed that the stock price volatility spillover is from the big companies' asset group to the small companies' asset group, and not the other way around. Based on the aforementioned scholars' research, it can be observed that in the relationship between returns volatility and firm size, the volatility in small firm size would be more severe compared to the volatility in big firm size. Also, the spillover effect of big size companies was more significant than in small size companies. Moreover, "small size stock effect" has already been proven to have a reverse scenario in returns by scholars. Is there also a reverse scenario for returns volatility? This is at the core of this paper.

## RESEARCH DATA AND METHODOLOGIES

The financial tsunami originated from the subprime mortgage crisis. On January 2007, HSBC Holdings additionally increased the reserve fund for the United States' subprime mortgage crisis for the first time and warned of a possibility for another dramatic increase of provision. After that, the second biggest subprime mortgage company in the United States, New Century Financial, declared bankruptcy on April 2 of 2007, which led to first time that the global stock market

suffered a huge bear market due to the US subprime mortgage problem on July 27, 2007. Taiwan's Weighted Stock Index indices were greatly affected, dropping by 404.14 points. This triggered the continual declaring of bankruptcy and taking over of banks in the United States in 2008. The biggest crisis that triggered the financial tsunami was the Lehman Brothers' declaration of bankruptcy on September 15 of 2008. On the day it was announced that Merrill Lynch was purchased by the Bank of America, US stocks plummeted drastically by 504 points. The biggest insurance firm AIG experienced a financial crisis as well. The government of Taiwan implemented a series of measures to support the market but it still dropped by 258.33 points. Europe had a debit crisis in 2009 and 2010. Thus, 2007 to 2010 has been dubbed the financial tsunami period. Taiwan's stock market was greatly affected during this financial tsunami period. This paper primarily studies the changes in volatility of the Taiwanese stock market before and after the financial tsunami. Thus, for the post-financial tsunami analysis, this study collects data between September 1, 2007 and August 31, 2010. In order to eliminate the impact in the pre-financial tsunami period and to be consistent, this paper collects data between September 1, 2003 and August 31, 2006 for its pre-financial tsunami analysis. The data used in this study is from the Taiwan Economic Journal Data Bank (TEJ). Since this paper studies the firm size message transmission effect, firm size indices need to be defined. This paper chooses the surviving listed companies in Taiwan during the designated research period (dividing them between pre and post periods and eliminating the bottom 5% with the lowest turnovers), and sequences their firm size (based on average market value), obtaining its sample companies as shown in Table 1. For the pre-tsunami period, 860 companies are selected as samples, while for the post-tsunami period, 1100 companies are selected as samples.

Table 1: Number of Samples per Period

	Pre	Post
Surviving Companies	907	1,156
Low Turnover (~5%)	47	56
Sample Companies	860	1,100

This paper mainly studies the impact of financial tsunamis, so the number of samples for the post-tsunami period is set as the target. These samples are divided into 10 groups so there are 110 companies per group. Companies with the biggest firm size comprise the big size stocks; companies with the smallest firm size comprise the small size stocks. The medium size indices are selected from the latter half of the fifth group and the former half of the sixth group. For the pre-tsunami period, 110 companies from each type are selected, so the first 110 companies with the biggest market values are classified into big-sized stocks, while the last 110 companies with the smallest market values are classified into small-sized stocks. Companies with sequence numbers 376 to 485 based on market value are classified as medium-sized stocks. This study uses the calculation method for Taiwan Weighted Capital Index in calculating for the indices of different firm sizes, and calculates the rate of return as follows: the natural exponent of the daily close index at t day divided by daily close index at t-1 day, multiplied by 100.

On the basic statistics aspect, the mean of each sample's stock price index's rate of return is negative during post-financial tsunami period; while the mean of the samples is positive during pre-financial tsunami period, with the exception of the small type stocks. In terms of standard deviation, it can be seen from Table 2 that the standard deviations of the indices in each firm size type are bigger in the post-financial tsunami period than the pre-financial tsunami period. On the

other hand in terms of skewness and Kurtosis, all of the indices skew to the left regardless of period, and all series are leptokurtic. The results of the Jarque-Bera statistics test show that all series data of rate of return does not fit normal distribution.

On the aspect of unit root test, results of the ADF and PP tests can be seen from Table 2. The P values of all series data are smaller than 1% level of significance (-3.44). This signifies that the series data as the constant null hypothesis cannot be rejected. Thus, the series of all indices' stock price index rates of return are set as constant. This paper employs the GARCH model as its research methodology. Bollerslev (1986) pointed out that ARCH/ GARCH required leptokurtic distribution and conditional variance. From Table 2, it can be known that the number of samples in this research presented high leptokurtic distribution, thus conditional variance still needs to be taken into consideration. In order to understand whether the known data in this study have the ARCH effect, it uses Engle's (1982) Lagrange multiplier (LM) test. Moreover, it also observes Ljung-Box's Q statistics. Engle's (1982) LM test observes whether the regression coefficients of the residual sum of squares of the series at different periods are significant, in order to determine whether the autocorrelation and heteroskedasticity of the two time points significantly existed. If the coefficient is significant, the series then has the ARCH effect.

This paper obtains the lagging 6 periods or in other words, observes whether the regression coefficients of the current period's residual sum of squares with the previous five periods are significant or not. The results of Ljung-Box's Q statistics and LM test are shown in Table 3. It can be observed that majority of the series LB (12) in this paper are significant, and that majority of the LB(12)<sup>2</sup> and LM tests are significant at 1% level of significance. This means that the series has conditional heteroskedasticity. Since the GARCH model's mean equation can handle the series autocorrelation, and its variance equation allows variances to be dependent on past variances and interferences so it can accept the existence of conditional variances, using the GARCH model is thus the optimal choice.

Table 2: Basic Statistics and Unit Root Tests of the Rate of Return for Each Type of Stock Price Indices in Taiwan

Size	Period	Observed Value	Mean	Standard Deviation	Skewness	Kurtosis	JB	ADF	PP
Big Size Index	Pre-	746	0.0323	1.2111	-0.4654	6.7358	461 ***	-26.4604 ***	-26.4521 ***
	Post-	746	-0.0205	1.6946	-0.1652	4.5132	75 ***	-25.9563 ***	-25.9266 ***
Medium Size Index	Pre-	746	0.0137	1.1364	-0.9094	9.0228	1230 ***	-23.7066 ***	-24.0216 ***
	Post-	746	-0.0345	1.7980	-0.6609	4.1892	98 ***	-22.8318 ***	-22.8375 ***
Small Size Index	Pre-	746	-0.0254	0.9648	-0.7326	10.0168	1597 ***	-21.1108 ***	-21.5431 ***
	Post-	746	-0.0057	1.3900	-0.8851	4.5161	169 ***	-20.2348 ***	-20.6586 ***

Note: \*, \*\*, \*\*\* represent under 10%, 5%, and 1% level of significance respectively. JB is Jarque-Bera test statistics. This signifies rejection of the null hypothesis of normality. ADF and PP are Augmented Dickey-Fuller and Phillips-Perron unit root test. The threshold value of ADF and PP at .01, .05, and .1 are -3.44, -2.86, and -2.57 respectively.

Table 3 Ljung-Box's Q statistics and ARCH Test Effects of the Rate of Returns for Each Type of Stock Price Indices in Taiwan

Firm Size	Period	LB(12)	LB(12) <sup>2</sup>	ARCH LM(6)
Big Size Index	Pre-	21.69 *	173.74 ***	73.42 ***
	Post-	23.57 **	131.85 ***	60.28 ***
Medium Size Index	Pre-	42.75 ***	123.61 ***	67.32 ***

	Post-	34.52 ***	179.66 ***	61.29 ***
	Pre-	94.92 ***	167.61 ***	104.97 ***
Small Size Index	Post-	113.42 ***	111.12 ***	42.70 ***

Note: ARCH(LM) Test is Chi-square test with 6 Degrees of Freedom

However, the traditional GARCH empirical analysis assumes that the common variance relationship between two series is CCC, which is a rather unreasonable practice. Thus, this paper will use Engle's (2002) bivariate GARCH model (DCC-GARCH) to proceed with its research on the co-movement of volatility with each type of firm size indices under different firm sizes. The research methodologies are introduced below:

In assuming that the conditional correlation coefficient is a constant value, Bollerslev (1990) simplified the constant conditional correlation model (CCC) and proposed the GARCH model under CCC whose general formulae are in Equations (1) to (5) below:

$$r_{1,t} = \alpha_{1,0} + \sum_{i=1}^{m_1} \alpha_{1,i} r_{t-i} + \sum_{j=1}^{n_1} \beta_{1,j} r_{2,t-j} + \varepsilon_{1,t} \quad (1)$$

$$r_{2,t} = \alpha_{2,0} + \sum_{i=1}^{m_2} \alpha_{2,i} r_{t-i} + \sum_{j=1}^{n_2} \beta_{2,j} r_{1,t-j} + \varepsilon_{2,t} \quad (2)$$

$$h_{11,t} = \phi_{1,0} + \sum_{i=1}^{p_1} \phi_{1,i} h_{11,t-i} + \sum_{j=1}^{q_1} \theta_{1,j} h_{22,t-j} + \sum_{k=1}^{s_1} \omega_{1,k} \varepsilon_{1,t-k}^2 \quad (3)$$

$$h_{22,t} = \phi_{2,0} + \sum_{i=1}^{p_2} \phi_{2,i} h_{22,t-i} + \sum_{j=1}^{q_2} \theta_{2,j} h_{11,t-j} + \sum_{k=1}^{s_{12}} \omega_{2,k} \varepsilon_{2,t-k}^2 \quad (4)$$

$$\rho_{12,t}^2 = \rho_{12} \sqrt{h_{11,t} \cdot h_{22,t}} \quad (5)$$

The above model assumes that there is a fixed conditional correlation between the residuals of the two series. This hypothesis not only adjusts to the data's particular characteristics, but whether or not  $\rho$  is a fixed constant becomes an empirical problem and is intuitively rather unreasonable. Thus, Engle (2002) proposed the dynamic conditional correlation model (DCC) which set the variance equation's intersection in the lagging period as 1. The model can be seen in Equations (6) to (10) below:

$$r_{1,t} = \alpha_{1,0} + \sum_{i=1}^{m_1} \alpha_{1,i} r_{1,t-i} + \sum_{j=1}^{n_1} \beta_{1,j} r_{2,t-j} + \varepsilon_{1,t} \quad (6)$$

$$r_{2,t} = \alpha_{2,0} + \sum_{i=1}^{m_2} \alpha_{2,i} r_{2,t-i} + \sum_{j=1}^{n_2} \beta_{2,j} r_{1,t-j} + \varepsilon_{2,t} \quad (7)$$

$$h_{11,t} = \phi_{1,0} + \sum_{i=1}^{p_1} \phi_{1,i} h_{11,t-i} + \sum_{j=1}^{q_1} \theta_{1,j} h_{22,t-j} + \sum_{k=1}^{s_1} \omega_{1,k} \varepsilon_{1,t-k}^2 \quad (8)$$

$$h_{22,t} = \varphi_{2,0} + \sum_{i=1}^{p_2} \phi_{2,i} h_{22,t-i} + \sum_{j=1}^{q_2} \theta_{2,j} h_{11,t-j} + \sum_{k=1}^{s_{12}} \omega_{2,k} \varepsilon_{2,t-k}^2 \quad (9)$$

$$q_{12,t} = \bar{\rho}_{12} + \alpha(z_{1,t-1}z_{2,t-1} - \bar{\rho}_{12}) + \beta(q_{12,t-1} - \bar{\rho}_{12}) \quad \bar{\rho}_{12,t} = \frac{\sigma_{12,t}}{\sqrt{q_{11,t} \cdot q_{22,t}}} \quad (10)$$

Wherein  $q_{12,t}$  is the covariance between the two series;  $\rho_{12,t}$  is the dynamic conditional correlation coefficient, a value that changes every period. This equation is the difference between DCC and CCC settings. Set  $r_{i,t}$  as the series data with a mean of 0,  $i$  as the rate of return of each stock index. Thus, the definition of dynamic conditional correlation coefficient is  $\rho_{12,t} = \frac{E_{t-1}(r_{1,t}r_{2,t})}{\sqrt{E_{t-1}(r_{1,t}^2) \cdot E_{t-1}(r_{2,t}^2)}}$ . Then set  $\sigma_{i,t}^2 = E_{t-1}(r_{i,t}^2)$ , so that  $z_{i,t} = \frac{r_{i,t}}{\sigma_{i,t}}$ . The correlation coefficient can be written as  $\rho_{12,t} = E_{t-1}(z_{1,t} \cdot z_{2,t})$ , so  $\bar{\rho}_{12}$  is the non-conditional correlation coefficient.

Engle (2002) proposed that the DCC model uses a two-step approach to estimate: first use the GARCH model to estimate the different variables, and then after estimating the standardized residual of the first step, estimate the correlation coefficient.

Next, this paper studies the co-movement of firm size effect. It classifies firm size by big, medium, and small size stocks. Thus, there are three groups of DCC model bivariate GARCH models. These are shown below:

$$r_{j,t} = \alpha_{ij0} + \alpha_{ijj}r_{ij,t-1} + \alpha_{ijk}r_{ik,t-1} + \varepsilon_{ij,t} \quad (11)$$

$$r_{k,t} = \alpha_{ik0} + \alpha_{ikj}r_{ij,t-1} + \alpha_{ikk}r_{ik,t-1} + \varepsilon_{ik,t} \quad (12)$$

$$h_{ijk,t} = \phi_{ij} + \phi_{ij}h_{ijj,t-1} + \theta_{ijk}h_{ikk,t-1} + \omega_{ij}\varepsilon_{ij,t-1}^2 \quad (13)$$

$$h_{ikk,t} = \phi_{ik} + \phi_{ik}h_{ikk,t-1} + \theta_{ikj}h_{ijj,t-1} + \omega_{ik}\varepsilon_{ik,t-1}^2 \quad (14)$$

$$q_{r_j r_m,t} = \bar{\rho}_{r_j r_k} + \alpha_{r_j k} (z_{r_j,t-1}z_{r_k,t-1} - \bar{\rho}_{r_j r_k}) + \beta_{r_j k} (q_{r_j r_k,t-1} - \bar{\rho}_{r_j r_k}) , \quad (15)$$

$$\bar{\rho}_{r_j r_k,t} = \frac{q_{r_j r_k,t}}{\sqrt{q_{r_j r_j,t} \cdot q_{r_k r_k,t}}}$$

where  $(j, k) = (b, m), (b, s), (m, s)$

## EMPIRICAL ANALYSIS

This section analyses the firm size message transmission effect pre- and post-financial tsunami. On the subject of firm size message transmission effect, this paper studies the interaction between the big, medium, and small stocks. Thus, the three group DCC-bivariate model is used to describe this once again, as shown in (11) to (15).

As mentioned earlier for the mean equation coefficient estimation, AR(1) is used for estimation. Since the focal point of this study is in observing variance equations and covariance equations, thus the determination, estimation process, and results related to mean equations are not presented. Table 5 shows coefficients of variance equations (13) and (14) and covariance equation (15) under the DCC-GARCH model of each firm size index.

In the covariance equation, this study finds that the coefficients in the covariance equation for each type of stock  $\alpha_h$  and  $\beta_h$  are significant, also that  $\alpha_h + \beta_h < 1$  ( $h = bm, ms, sb$ ). This means that the correlation coefficient of in the market changes according to time. This also shows using

DCC-GARCH to study the variations in the market is reasonable. On the firm size message transmission effect, this paper's results show that  $\alpha$  coefficients are generally significant both pre- and post-financial tsunami (0.0218, 0.0273, 0.0358), (0.0120, 0.0433, 0.0730). This implies that the dynamic conditional correlation coefficient for each type of firm size is significantly affected by the previous period's standardized residuals. For the  $\beta$  coefficient, they all show as positive both pre- and post-financial tsunami (0.8170→0.9510, 0.8079→0.9072, 0.8003→0.8651), which signifies that the dynamic conditional correlation between the two series is rather stable and significantly increases to as high as 0.8. This means that in each firm size, the dynamic conditional correlation has a high degree of stability.

To study the firm size transmission effect, the emphasis is placed on the changes in  $\theta$ .  $\theta$  represents the two-step intersecting relationship, or the transmission of volatility. In observing the size of the values, this paper finds that none of the volatility transmissions in each firm size market show significance. In  $\theta_{kj}$  (big affects small), this paper finds that it is insignificant pre-financial tsunami but significantly changes post-financial tsunami  $\theta_{kj}$  (big affects medium: 0.1074; big affects small: 0.0889, medium affects small: 0.01724). A positive relationship is shown. With regards to the firm size message transmission reverse effect,  $\theta_{jk}$  (small affects big) can be used to determine. This paper observes that  $\theta_{jk}$  is insignificant both pre- and post-financial tsunami, which shows that the firm size message transmission reversal does not exist.

Table 4: Estimation Results of Firm Size Message Transmission Effect under DCC-GARCH Model

Index	Period	$\phi_j$	$\phi_k$	$\phi_j$	$\phi_k$	$\theta_{jk}$	$\theta_{kj}$	$\omega_j$	$\omega_k$	$\alpha$	$\beta$
BM	Pre-	-0.0110 (0.7667)	-0.0781 ** (0.0365)	0.2165 (0.1400)	0.1912 (0.1546)	0.0192 (0.7386)	0.0598 (0.3024)	-0.1451 (0.2375)	-0.2013 * (0.0877)	0.0218 *** (0.0074)	0.8170 *** (0.0000)
	Post-	-0.0520 (0.1617)	-0.1203 *** (0.0012)	-0.0396 (0.7778)	0.2584 ** (0.0327)	0.0327 (0.5847)	0.1074 * (0.0917)	0.0131 (0.8707)	-0.1368 ** (0.0406)	0.0120 * (0.0618)	0.9510 *** (0.0000)
BS	Pre-	-0.0114 (0.7566)	-0.0606 (0.1035)	0.2188 (0.1359)	0.2047 * (0.0737)	0.0133 (0.8166)	0.0343 (0.4765)	-0.1432 (0.2439)	-0.2430 ** (0.0476)	0.0273 *** (0.0017)	0.8079 *** (0.0000)
	Post-	-0.0556 (0.1327)	-0.1114 *** (0.0026)	0.0093 (0.9452)	-0.0001 (1.0000)	-0.0171 (0.7520)	0.0889 ** (0.0914)	0.0090 (0.9129)	-0.0739 (0.9488)	0.0433 *** (0.0000)	0.9072 *** (0.0000)
MS	Pre-	-0.0675 (0.0700)	-0.0563 (0.1302)	0.2684 ** (0.0537)	0.1861 (0.1249)	-0.0227 (0.7342)	0.0618 (0.3559)	-0.2054 (0.0860)	-0.2493 ** (0.0435)	0.0358 ** (0.0110)	0.8003 *** (0.0000)
	Post-	-0.1171 (0.0015)	-0.1027 *** (0.0056)	0.2558 ** (0.0304)	0.2754 (0.8351)	-0.1082 (0.2519)	0.1724 ** (0.0266)	-0.0757 (0.3509)	-0.3415 (0.7307)	0.0730 *** (0.0000)	0.8651 *** (0.0000)

Index field BM represents  $j=B, k=M$ , BS represents  $j=B, k=S$ , MS represents  $j=M, k=S$

## CONCLUSION AND RECOMMENDATIONS

This study mainly uses the dynamic conditional correlation model to study the spillover effect of volatility. The primary subject it looks into is the firm size message transmission effect. Using the financial tsunami, it studies the changes of the said factors pre- and post-financial tsunami. The empirical results of this study show that the financial tsunami has a significant effect on the dynamic conditional correlation between firm size indices. Hence, it is reasonable to use the dynamic conditional correlation model.

On the firm size message transmission effect related to volatility, this study finds that it is insignificant pre-financial tsunami, yet changes significantly into a positive relationship in the post-financial tsunami period. This supports the research results of Conrad, Gultekin, and Kaul (1991), Chelley-Steeley and Steeley (1996), and Wang (1999). However, this study did not find the signs of firm size message transmission reversal.

Based on this study's results, during pre-financial tsunami, the financial market was operating normally so messages reflected regardless of the firm size. Thus, the firm size message transmission effect did not exist during pre-financial tsunami. However, the financial tsunami caused asymmetric messages transmission. Information on bigger companies could be more transparent than that of smaller companies, causing the occurrence of message transmission effect, and it is from bigger companies to smaller companies, not the other way around. Therefore, the empirical results of this study provide investors with recommendations that after a sudden financial event, focusing on big firm size indices and setting appropriate strategies accordingly would help in raising the performance of investments.

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# U.S. SUPREME COURT WILL RESOLVE CIRCUIT CONFLICT REGARDING TAXATION OF SUPPLEMENTAL UNEMPLOYMENT BENEFITS

Laura Lee Mannino, St. John's University

## ABSTRACT

*On October 1, 2013, the United States Supreme Court granted certiorari in U.S. v. Quality Stores, Inc. At issue is whether Supplemental Unemployment Compensation Benefits (SUB) are subject to the Federal Insurance Contributions Act (FICA). The petition for certiorari indicated that the issue is the subject of eleven pending cases and over 2,400 refund claims, with more than \$1 billion at stake. FICA is imposed on "wages," a term that has a nearly identical definition for FICA and income tax purposes. The government and the taxpayer agree that such payments are subject to income tax; however, language in the income tax statute implies that SUB payments are not wages. The Sixth Circuit relied on this language in holding that SUB payments are exempt from FICA. The decision was a departure from the Federal Circuit's holding in CSX Corp. v. U.S. that SUB payments are subject to FICA. The real tension between the conflicting circuits' opinions lies in whether the definition of SUB for FICA purposes should be determined by an income tax provision of the Internal Revenue Code or a 1956 Revenue Ruling from the Internal Revenue Service that deals with FICA. Oral arguments will be held in January 2014.*

# THE DO'S AND DO-NOT'S OF PUBLISHING PEER-REVIEWED RESEARCH

Terrance Jalbert, The University of Hawaii-Hilo

## ABSTRACT

### GETTING AN IDEA

1. Maintain a running list of your ideas.
2. Every time you have a few minutes, go to your list and ask yourself, in the next 30 minutes how can I advance one of these ideas.

### RESEARCH PARTNERS

#### Selecting a Partner

1. There are advantages to working on your own.
2. Select someone with the right characteristics
  - a. Hard Worker
  - b. Willing to do their share of the work
  - c. Someone with time to conduct research
  - d. Intelligent
  - e. Mutual Interests
  - f. Cooperative
  - g. Likely to reciprocate
3. Good research partners are hard to find. Don't abuse a good research partner.

#### Working with a Partner

1. Start only one paper at a time with a new research partner.
2. Be patient with your research partner. They have a life and due to births, illnesses and other life events, they may not be on your schedule.
3. Recognize on some projects you will do most of the work. On others, your partner may do most of the work.
4. Use caution when selecting one of the professors from your Ph.D. program as a research partner.

#### How Many Authors on a Paper?

1. Two or three authors are good.
2. Four authors is not good but can be ok.
3. More than four authors looks bad.

### WRITING YOUR MANUSCRIPT

#### Writing your Manuscript

1. Use only Microsoft Word to type your document.
2. Using free Word clones causes significant problems in the publication process.

3. Files created in another program and copied or saved as a Microsoft Word file cause significant problems in the publication process.
4. Unless the journal specifically requests otherwise, use the standard Microsoft Word equation editor.
5. Use only Microsoft spreadsheets and Microsoft
6. drawing programs.
7. Back up your files on a daily basis.

### Organizing your paper

1. Organization
2. Abstract
3. Introduction
4. Literature Review
5. Data and Methodology
6. Results
7. Concluding Comments

### Title

1. Descriptive and no more than 15 words.
2. Write a strong title
  - a. Strong Words:
    - i. Empirical, Evidence
  - b. Weak Words:
    - i. Analysis, Case
    - ii. Use Key Words from your Discipline
3. Think about what will look good on your vita.

### Abstract

1. General Introduction to your paper
2. The goal is to precisely communicate to the reader what the paper is about.
3. Not more than 200 words
4. Do not use acronyms
5. Generally do not cite other papers in the abstract

### Introduction

1. A brief introduction to the problem being addressed.
2. Include some summary statistics of the magnitude of the problem.
3. One paragraph discussion of the general state of the literature.
4. What you are going to do in the paper to advance the literature.
5. A few lines indicating how the remainder of the document is organized.

### Literature Review

1. As a general rule do not cite magazines.

2. Use scholar.google.com
3. Narrow your literature review down to those articles that directly relate to the issue you are addressing in your paper.
4. Make sure that everything that you cite in the text is included in your reference section.
5. Make sure that everything you reference is cited in the body of the text.

### Data and Methodology

1. Where the data was obtained from?
2. Time period covered in the analysis?
3. Frequency of the data observations?
4. Variables that the data were collected for?
5. Summary statistics.
6. Hypotheses that are being tested.
7. For regressions, specify the equation being estimated in the text of the document.
8. For Surveys indicate
  - a. Questions included in your survey? (Consider including the survey instrument as an appendix to the paper)
  - b. When was the survey conducted?
  - c. Where was the survey conducted?
  - d. What was the response rate?
  - e. What are the total number of usable observations?
  - f. Did you receive human subject research permission from your University?

### Results

1. Make sure to introduce each table and figure you present in the text of your document.
2. Walk the reader through the results.
3. Select an observation in your table and explain that observation to the reader.
4. Incorporate data into MS Word tables.
5. Segregate your data when possible to get additional results,
  - a. by gender, age, country, region, year, industry, before and after a crises.

### Tables

1. Don't create small one or two line tables.
2. Include information directly in the document text.
3. Combine several small tables into a single table with multiple panels.
4. Do not use exponential notation (3.2E-5).
5. Display appropriate precision
  - a. 0.0021, 1.134, 10.22, 100.6, 1,049.1, 10,432

### Table Description

1. Make sure to include a 3-6 line description below your tables. The reader should be able to understand what is contained in the table without referring back to the text of the document.
2. This description is not to replace the discussion in the text, but to supplement the discussion in the text.
3. Redundancy is ok in this case.
4. Example of Table Description

*This table shows the results of the regressions on CEO compensation using data from 2004. The estimated equation is:  $CEO\ Compensation = a + b_1(CEO\ age) + b_2(years\ with\ company)$ . The first figure in each cell is the regression coefficient. The second figure in each cell is the t-statistic. \*\*\*, \*\* and \* indicate significance at the 1, 5, and 10 percent levels respectively.*

### Concluding Comments

1. Reiterate the goal of your paper.
2. Briefly describe the test methodology and data.
3. Briefly summarize your major findings.
4. Discuss how managers might benefit from the results.
5. Discuss any limitations of your work.
6. Provide suggestions for future research.

### Acknowledgements

1. Do acknowledge anyone that has helped you with the paper.  
     Colleagues, Administrators, Funding Agencies, Assistants, Reviewers, Editors.  
     It is a nice courtesy to the reviewers and editor.
2. It subtly communicates to colleagues the journal is peer reviewed.
3. Few people will be insulted if you acknowledge them but should not have.
4. Many will be insulted if you do not acknowledge them but should have.
5. Acknowledgments-Make sure to indicate that any remaining errors are the authors responsibility.
6. If someone has contributed substantially to your paper consider making them a co-author on the paper rather than just acknowledging them.

### Biography

1. Your biography should indicate your employer, your publication history, contact information and any other important information.  
     Tom Tetertall, Ph.D. is Professor of Management at the University of East Hawaii. He is also an arbitrator for the Human Ethics Commission. His research appears in journals that include: Diversity Review, Management Styles, and Latino Business Review. He can be contacted at: University of East Hawaii, COB, 400 W. 2nd St., Kauai Hawaii, 96333, USA, email: tomt@NHI.edu.
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### **FORMATTING**

1. Editors are looking for papers that are high quality. But they also look for papers that will not add an excessive burden to their work load.
2. They look for authors that will be pleasant to work with on revisions and in the publication process.
3. A properly formatted and written paper communicates to the editor that you will be pleasant to work with, thereby increasing your chance of publication.

4. Check the journal style guidelines to make sure you have the paper formatted properly.
5. Be sure figures and tables are editable in Word
6. Anything created or imported as an image is problematic.
7. Anything that is scanned needs to be recreated.
8. Make sure that figures and tables are legible.
9. If you are unable to edit it in MS Word it should be recreated.
10. When copying from Excel into word make sure to use the “Paste Special”, “Paste as Chart” Command so it can be edited in MS Word.
11. Avoid one-sentence paragraphs.
12. Avoid one-paragraph sections.
13. If you have subsections underneath a main section, start the main section by indicating how the subsections are laid out.
14. Bullet lists do not appear well in journals.
  - a. Longer lists should be placed in a table. Then reference the table in the text of the document.
  - b. Shorter lists should be incorporated directly into the text.
15. Make sure your references are formatted according to journal guidelines.
16. Do not use text boxes
17. Do not use section breaks.
18. Do not use text levels

## WRITING QUALITY

1. Use the grammar checker in MS Word.
2. Use an advanced writing editor:
  - a. Stylewriter \*\*
  - b. Whitesmoke.
3. Write in third person active voice when possible.
4. Give it to a friend to read.

## WORKING WITH THE EDITOR

### Submissions

1. Leave your document set for 1-2 weeks between completion and submission. Give the document a final read before submission.
2. Indicate in your submission correspondence that the paper is not under review elsewhere and has not been published elsewhere.
3. Never EVER submit a document to two journals simultaneously.

### Correspondence

1. Don't ask the editor every week for a status update. (every 2-3 months is sufficient)
2. If you are close to a tenure or promotion decision, do let the editor know. Editors are human and will commonly try to get the review completed prior to the promotion decision date.
3. Use submission numbers in all correspondences.
4. Be courteous when corresponding with the editor.

5. Publishing is to a certain degree political. Be willing to review papers for the journal.

### Reputation

1. Our industry is small. Editors remember if you were especially easy or especially hard to work with.
2. Your reputation is very important, so make sure you leave the best possible impression, even if your paper is rejected.

### Nonresponsive Editors

1. After 3 months, ask if there is any additional information you can provide.
2. After 6 and 9 months request that the editor send a reminder to the reviewers.
3. After 1 year send the editor a status check email.
4. After one year and two weeks, if the editor has not responded, send them a letter withdrawing your paper from publication consideration and try elsewhere.

## **REVIEWER AND EDITOR COMMENTS**

1. Respond to revise and resubmit requests as quickly as possible, but take sufficient time to complete the requested changes.
2. Set the revised manuscript down for a week and reread the paper before submitting it.
3. Do not send the exact same version back to the editor without having addressed the concerns of the reviewers.
4. Do not respond rudely.
5. Prepare a document that indicates how you have addressed each of the reviewers concerns.
6. Your document should review each change that the reviewer has requested and your response to each request individually.

Reviewer Comment: In your data section please indicate the number of observations.

Author Response: Thank you for your suggestion. We have incorporated a sentence indicating the number of observations on page 22 as follows. "The data included 2,436 usable observations."

7. In the event that you are not able to address a reviewers concern. Explain carefully why you are not making the changes, and request the reviewers understanding. Acknowledge the issue in the paper and note it as a limitation, or area for future research.

## **ACCEPTANCES**

1. Make sure to read the page proofs carefully.
2. Pay any fees due. Publishing is expensive, but it is a necessary evil. You have invested a great deal of your time in the research, the publication fee is a small part of your total investment in the project.
3. Expect some time between acceptance and publication.

## **REJECTIONS**

1. Rejections happen.
2. Don't be discouraged by a rejection. Rejections are part of the process.
3. Make any changes that the editor and reviewers suggest and submit the paper to a different journal.

# OMNICHANNEL RETAILING: THE MERGING OF THE ONLINE AND OFF-LINE ENVIRONMENT

Mariette Frazer, University of Johannesburg South Africa  
Beate Elizabeth Stiehler, University of Johannesburg South Africa

## ABSTRACT

*The technological environment is rapidly influencing the way in which shoppers go about retail activities. Shoppers are not only shopping online, but are in fact merging their online and offline shopping practises. The use of multichannel retailing (where different channels of shopping are still being operated in isolation) will now longer suffice and retailers will be forced to move towards what is termed Omnichannel retailing. Omnichannel retailing refers to an integrated shopper experience that merges the physical store with the information rich digital environment, with the aim of providing excellent shopper experiences across all touch points. The potential impact of Omnichannel retailing on the shopper experience is yet to be determined. The aim of this article is to expand the body of knowledge in the field of Omnichannel retailing and to demonstrate how this phenomenon can influence the shopper experience across shopping channels, as well as in-store. It is argued that shoppers are ready to engage in Omnichannel retailing and therefore a new perspective on the retailers' ability to influence shopper experience is provided.*

**JEL:** F23, L22, M15, M31, O30

**KEYWORDS:** Multichannel Retailing, Retail Technology, Mobile Technology, Shopper Engagement, Shopper Experience

## OMNICHANNEL RETAIL

Current literature suggests a strong focus on the use of multichannel retailing (Neslin & Shankar, 2009; Bick & Abratt, 2008; van Birgelen, de Jong, de Ruyter, 2006; Kruger & Fourie, 2003; Stone, Hobbs & Khaleeli, 2002). Multichannel retailing is defined as "... a distribution strategy to serve customers using more than one selling channel or medium such as the Internet, television and retail outlets" (Stone *et al.*, 2002). Omnichannel retailing on the other hand is described by Rigby (2011:11) as: "an integrated sales experience that melds the advantages of physical stores with the information-rich experience of online shopping." Kamel and Kay (2011:1) add that a true Omnichannel experience infers the "desire to serve the customer however, whenever and wherever they wish to purchase merchandise (and return it too)". From these two definitions it is clear that the Omnichannel concept involves the integration of various channels in order to serve the customers in a customised fashion through their channel of choice.

This is different to multichannel retailing in that some retailers, who make use of multichannels, still operate their channels in silos. A true Omnichannel experience would mean that one transaction can span over more than one channel. A customer can for example purchase a product online (digital environment) and he or she can collect it at the supplier's retail outlet (offline). Therefore implementing a true Omnichannel strategy implies the full integration of the off-line and the online shopping experience (Gill, 2013; Rigby, 2011:5). The implementation of an Omnichannel strategy is not without challenges. Traditional retailers are often efficient at everything that involves retailing, but they are not necessarily equally competent when it comes

to the digital environment (Rigby, 2011). Implementing an Omnichannel strategy requires a lot of changes in terms of infrastructure and recruiting competent IT specialists who could help them manage this new concept. Retailers therefore need to realise that the Omnichannel concept may be challenging to implement at first, but the right staff and infrastructure could make the process easier (Gill, 2013). The integration of the channels is only the first challenge presented by this concept and retailers should take caution to not forget about the purpose of this integration, namely providing a “seamless experience”.

### Shopper Experience

Schmitt wrote a paper in 1999 titled “Experiential marketing” which is focused specifically on marketing’s role in the process of progressing towards the development of experience offerings. In Schmitt’s paper, it is argued that marketing was traditionally developed in response to the industrial age and not for the market where people are faced with an information, branding and communications revolution and overload. Traditional marketers typically focus on developing products, planning product lines and extensions, communications and responding to competitive actions, whilst their marketing approaches are heavily focused on selling product features, advantages and benefits (Schmitt, 1999).

Experiential marketing is based on the following characteristics: A strong focus on customer experience, view consumption as a holistic experience, customers are rational and emotional and that the methods and tools of analysis are eclectic. Schmitt (1999) also argues the two most essential concepts of experiential marketing consist of strategic experiential modules (SEMS) and experience providers (ExPros). Managers may use SEMS to create different types of customer experiences which consist of: Sensory experiences (Sense), affective experiences (feel), creative cognitive experiences (Think), physical experiences, behaviors and lifestyles (Act) and social identity experiences (Relate). Further, ExPros is the vehicles used to implement the SEMS, consisting of communications, visual and verbal identity and signage, product presence, co-branding, spatial environments, electronic media and people (Schmitt, 1999).

### The Omnichannel Experience

This paper argues that even though the early research about Omnichannel retailing centres on the challenges posed by integrating channels, retailers should recognize the aim of Omnichannel retailing is to create a seamless experience. Further retailers should be able to improve the seamless shopping experience by approaching their Omnichannel strategies from an experiential marketing perspective. Focusing on the contact points where the retailer could evoke shoppers’ sense, feel, think and act reactions, the correct ExPros needed can be identified and implemented across channels, ensuring a more seamless experience across channels. More in-depth research about the shopper’s needs and behaviours in this new retail environment is therefore essential. The findings could help determine the key contact points that retailers need to use, as well as the shoppers’ behavior at each point, and ensure better shopper experience.

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# CULTURAL SHOCK, ACCULTURATION AND REVERSE ACCULTURATION: THE CASE OF MEXICAN CITIZENS TRAVELING TO AND BACK FROM CHINA AND THEIR COMPETITIVENESS LEVEL

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## ABSTRACT

*Whenever an individual travels abroad in order to live for some years in another country different adaptation processes occur. Cultural shock and acculturation surface as explanatory variables for the phenomenon of cultural adaptation and relate to competitiveness. The first impression, clash and contact with a new environment and the resulting consequences to an individual's perception of it identifies as culture shock. This culture shock has an impact on the person's life and social behavior, not only because of the language (if it is the case) but also due to the cultural differences and local traditions, conventions and folklore. Furthermore, while time passes by, the individual starts to surpass the initial shock and gets immersed and adapts to this new atmosphere, moving to the next stage of this process which is the acculturation phase. Finally, when it is time to go back to his country of origin, the visitor has to go through another process, known as the reverse acculturation process. This involves getting reacquainted with his native state and relocating both physically and mentally to the regions' ways. In order to assess these three phases that occur under such circumstances, several cases of Mexican citizens traveling to and back from China became interviewed. In addition, their self-reported competitiveness level recorded so that a better impression can be formed about the causes behind those institutional reports on the poor results in this matter from individuals sent to China via formal programs (governmental, organizational, private sector, etc.). According to the World Economic Forum's 2012-2013 Global Competitiveness Report (Klaus Schwab, World Economic Forum, 2012) Hong-Kong ranks at the 9th position, Taiwan-China is at the 13th position, China is at the 29th position, and Mexico is at the 53th place. This ranking shows that there is a considerable difference in the competitiveness positions between China and Mexico. Thus, the need to identify the main elements and variables which interlope to cause these extreme differences amid these two nations and particularly for individuals who have been abroad and experienced training, work and day-to-day activities with the Chinese citizens.*

## JEL:

**KEYWORDS:** Competitiveness, Culture Shock, Acculturation, Reverse Acculturation, China

## INTRODUCTION

In recent years, there is a crescent urge to promote cultural-entrepreneurial interchanges with China. This interest derived from the steady yet non-stopping growth of Chinese economy. Based on a series of long term plans and strategies, China gains positions on the global economy. In 2010, it became the world's top exporter (Central Intelligence Agency (CIA), 2013).

Additionally, the People's Republic of China (PRC) moved to the second place in economic growth –displacing Japan- in 2010 after the US (CNNMoney, 2013). Mexico's private and public organizations aim to profit from other countries' information capital and develop a set of interchange programs –academic and entrepreneurial- for citizens willing to travel, learn the language and engage in business activities overseas (economia.gob.mx y otros).

Nevertheless, no recollection –from the qualitative perspective- of the resulting experiences derives from people returning to Mexico from China or people traveling and adapting to the new environment. Especially, there is no narrative or description of the socio-cultural elements affecting individual performance when visiting and working in a foreign country. Emotional variables render significant results when applied within business assessments. Cultural differences, “*foreign language, familiarity with the region, ability to adapt to foreign cultures, and strong emotional characteristics are desired positive factors*” (Gunhan & Ardit, 2005, p. 277; Moss Kanter & Ian Corn, 1994). Reported in the literature, is the fact that different variables affect an individuals' competitiveness level. However, there is a need to conduct in depth analysis (Shen, Lu, & Yam, 2006). Most likely, competitiveness relates to self-efficacy, performance and the resources employed to achieve a task (or effort) (Krishnan, Netemeyer, & Boles, 2002). However, there are other variables linked to this study.

Cultural influence on competitive traits received some attention when assessing between-country differences. The unit of analysis fixed at the nation-state level renders problematic due to the masking of cultural differences between subcultures, or local (ethnic) disparities. Therefore, need to report individual differences arises (Houston, Harris, Moore, Brummett, & Kametani, 2005). Amongst some of the identified cultural traits linked to competitiveness at the individual level, the following stand out: 1. Individualism and collectivism (Hofstede, 2001), 2. Language and culture shock (Furnham, 1993), and 3. Acculturation (Lucas & Stone, 1994).

## LITERATURE REVIEW

### Competitiveness

A revised version of the Competitiveness Index results in a modified two dimensional scale encompassing items correlated with the enjoyment of competition and contentiousness (i.e. a proclivity to avoid conflicts and arguments) (Harris & Houston, 2010). Additionally, trait competitiveness is a personality attribute that includes “*the enjoyment of interpersonal competition and the desire to win and be better than others*” (Spence & Helmreich, 1983, p. 41). Thus, establishing its internal and fully intentional nature (Kohn, 1992). Customarily, competition roots within a negative connotation, and ultimately leads to performance detriment (Stanne, Johnson, & Johnson, 1999). An alternative position suggests that this will stand depending on the person and the location. Furthermore, this proposal states that a competitive environment will boost the individual's competitiveness levels (Fletcher, Major, & Davis, 2008).

### Cultural Shock

Cultural shock is a phenomenon affecting the individual's life when travelling abroad. It is even considered as ‘occupational disease’ needing to reach a cure or the person will succumb to it and leave the country (Ober, 1960/2006). When born and raised in a cultural setting, the individual shares a common world-view and mindedness. Embedded within tradition, language, folklore and ethos, familiarity and acceptance are part of the daily experiences for both the individual and the group. Nevertheless, when individuals leave this cultural arrangement and meet with a new

culture they take with them the taken-for-granted structure of their home culture. They continue to choose actions consistent with it, and to interpret their own and their host's actions in terms of it. (Noesjirwan & Freestone, 1979, p. 190) Thus, when entering a new environment, a clash surfaces because of the struggle to either reject or embrace distinct living arrangements and surroundings (Kim Zapf, 1991). Several definitions pretend to encompass cultural shock. The summarized one entails those individual feelings of frustration with the incapacity to cope, identify with and function within the new culture due to alienation from cognitive frames, understanding of assignments and tasks and unfamiliarity (Taft, 1977). Another depiction of cultural shock states that individuals go through a series of steps when introduced to a foreign country. Namely, those stages are:

1. The honeymoon or tourist stage (i.e. excitement, happiness and emotion)
2. The crises or cultural shock phase (i.e. negative experiences, reactions and irritation)
3. The adjustment, reorientation, and gradual recovery phase (i.e. isolation, reconsideration, attitude change and adaptation) and
4. The adaptation, resolution, or acculturation phase (i.e. stable adjustment, cultural management and assimilation) (Winkelman, 1994).

Therefore establishing a possible solution for the negative effects of cultural shock or the final step of the process known as acculturation.

*Acculturation:* "Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either of both groups" (Redfield, Linton, & Herskovits, 1936, p. 149). Adaptation to the new cultural environment, reflects in three main aspects; psychological, sociocultural and economic (Berry, 1997). It is a self-induced change in attitudes toward the receiving society. As a consequence, individual's reactions, activities, and efficiency become affected –primarily in positive way- by it. For this research effort, the acculturation process focuses on sociocultural aspects related to competitiveness levels.

## METHODOLOGY

### In-Depth Interviews.

Procedures. The interviews and contact became face to face -individually-, and the sessions lasted in average one hour and thirty minutes. The interview's questions developed in Spanish. Appointments to meet at a convenient location and time became standardized procedures for initial contact and the data audio taped for later analysis. Participants informed and consent obtained through documentation provided and authorization gathered for recording the interview. The interviewer acts as the moderator and is in charge of taking notes and pointing out salient topics or pin out critical accounts of information for the interviewee. Rapport building conditions arise when establishing a preferred location for the interviewees; comfort and familiarity results in open, honest and detailed answers and descriptions. Additionally, through contacts and referrals, some interviews complete and favorable setting builds beforehand. Content analysis is the procedure determined for data examination. The unit of analysis for this study is the interview, or the transcript of the conversation (Downe-Wamboldt, 1992). Nevertheless, words should be analyzed via word counts, semantic networks and cognitive maps in order to attain meaning or context through descriptive accounts of the situation. This technique of text reduction relates to condensation, which "*refers to a process of shortening while still preserving the core*"

(Graneheim & Lundman, 2004, p. 106). Therefore, for data analysis, coding and categorization (or meaning unit) procedures stand.

Participant selection. Mexican citizens travelling or having travelled to China and returned back became selected as participants. Hence, purposeful sampling -which is otherwise interchangeably known as selective sampling- applies. The description of purposive sampling will be useful in order to provide some clarification. According to Patton (1990), the *“logic and power of purposeful sampling lies in selecting information-rich cases for study in depth. Information rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research, thus the term purposeful sampling”* (p. 169). Additionally, the sample characteristics and structure will change as part of the research stage and analysis. During the interpretation of the data, *“the question again arises when you decide which parts of a text you should select for interpretation in general or for particular detailed interpretations (sampling within the material)”* (Flick, 2009, p. 115).

Finally, as stated by Patton (2002), there is a clear difference between random and purposive sampling for this case. He gives a thorough description of those cases on which the sample will be purposive, which is the sampling employed for this analysis. The selection of critical cases aims at those cases in which the relations to be studied become especially clear (e.g., in the opinion of experts in the field) or which are particularly important for the functioning of a program to be evaluated. (Flick, 2009, p. 122) Also, it is identifiable from the literature, that each of the participants will be treated as a case, so the case analysis method will be also part of the methods used and the way the information will be processed and analyzed.

Measures. In order to gain a profound understanding about the acculturation phenomenon, personal in-depth interviews conducted for an exploration of the competitiveness changes the travelers experienced when working in China and then returning to Mexico. In-depth semi-structured interviews constitute the data gathering tool. This method became selected for several reasons. Mainly, this is going to be an exploration of the way ‘acculturation’ stands among the participants and how it relates to their competitiveness and changes in the way they perform. Semi-structured interviews provide a reliable source of data compilation solely accounting for a source on a qualitative research project (DiCicco-Bloom & Crabtree, 2006). In this analysis, the use of this measure captured thorough information from the participants combined with other types of tools.

Analysis. The in-depth interviews will be analyzed by first transcribing all the information gathered through the recordings and putting it in text format. Then, data coding will be done by clustering the speech in meaningful categories so that patterns are identifiable and organized into certain criteria. Bogdan and Biklin (1998) suggest first ordering interview transcripts and other information chronologically or by some other basis. Abstraction of text is the term coined to describe *“descriptions and interpretations on a higher logical level. Examples of abstraction include the creations of codes, categories and themes on varying levels.”* (Graneheim & Lundman, 2004, p. 106).

Thus, systematic elicitation for analyzing texts includes word counts (helping to pin point themes within the text) and cognitive maps. Cognitive mapping is a hybrid technique embedding coding with network analysis (Carley & Palmquist, 1992). This tool renders graphical depiction of probable relations between themes and coding, helping with interpretation. When coding, the analyst should identify corpus of texts and later the units of analysis within the texts. Word counts help with this task. Once that those units arise, themes (also known as constructs) come up.

Techniques designed to induce themes include “*line-by-line reading of the text while looking for processes, actions, assumptions and consequences*” (Gery & Russell, 2000, p. 780). Also, looking for word repetition and shifts in content is indicated (Agar & Hobbs, 1985). Some of the coding choices for this analysis include the use of frequencies and occurrences. This assures bias elimination and validity. Therefore, the first stage is to identify frequencies and later conduct co-occurrence comparisons based on the number of concepts (Carley K. M., 1993). Afterward, the identification of categories and dimensions (later translated into variables) helps with the development of theoretical constructs. These constructs should result in unidimensional, exhaustive, mutually exclusive, and independent themes (Smith, 2000, p. 312).

The frequency and co-occurrence analysis will become possible with the use of the Provalis Research® QDA Miner®, WordStat® and Simstat® programs. Additionally, graphical depictions of data and interaction in the form of dendrogram and cluster retrieval is part of the data analysis applications provided. MAXQDA® version 11 program helps in the coding process. Additionally, concept-cognitive maps derive from this data in order to provide a framework for better understanding the phenomenon. Finally, in order to attain map analysis, and to identify possible cognitive networks, an application developed by IBM® called Many Eyes, works for the visualization of data in terms of phrase nets and word trees for text analysis. These connections describe relationships between the words in terms of their semantic connections (i.e. and, of the, the, a, at is, and if there is space between them, pointing out direction as well as meaning). This complies with the requirements for strength, direction, meaning and level of implication of the relationships needed for a thorough mental model analysis (Carley K. M., Extracting Team Mental Models Through Textual Analysis, 1997).

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## IASB AND FASB CONVERGENCE PROJECT: WHERE ARE THEY NOW?

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### ABSTRACT

*The Convergence Project between the International Accounting Standards Board and the Financial Accounting Standard Board in the United States was signed on September 18, 2002 in Norwalk, Connecticut in the U.S. The first is responsible for issuing International Financial Reporting Standards nowadays, these were created 40 years ago. More than one century ago local regulations are used in the U.S. The boards differ in years of experience. With the signing of the agreement both institutions are working to reduce the divergence of accounting. Although they have made significant progress it is appropriate to examine whether the difference in approaches to accounting will affect the achieved agreements. It is relevant to investigate whether the years leading the standards adopted in different countries will impact the final result. The date of completion of the project has been postponed and still has not indicated the date of termination. This research is an analysis of the importance of the convergence of accounting standards at a global level. The study presents statistics on the status of the adoption of international standards by country. The study shows a summary of the expressions made by the directors of both boards about the future of the project.*

**JEL:**

**KEYWORDS:** Convergence, Full IFRS, Little IFRS, IASB, FASB

## **INTRODUCTION**

Several years ago a transformation in accounting procedures has been seen, this is in order to cope with the changes that have occurred around the world in an organized way. Some countries have been able to adapt and face the consequences of these changes, for others it has become more difficult. This is because there are various economic social factors that affect nations in different ways. The evolution of these procedures is due largely to globalization. This has generated pros and cons for the countries. Globalization has made countries that lacked certain resources to enter into agreements with other countries by exchanging goods, services and/or expertise. They have also brought with them the evolution in technology, learning new methods and styles of doing business. It has also led to the increase in communication between countries through commercial agreements. It has generated greater awareness of other cultures and it has led to the exchange of production processes. These relations between the countries have generated new business transactions. The exchange of financial information is necessary for the integration of countries and stock markets. It also allows constant communication between users. With the emergence and proliferation of multinational enterprises (MNE) information flow has been increasing, since MNE generate large amounts of transactions that are the product of local and international trade relations.

Another sector that also generates large amount of financial information are small and medium-sized enterprises, *SMEs*, (Pacter and Scott, 2012). Local and international financial institutions use accounting reports to establish the collateral and interest rates. Other users around the world who use the information are credit rating agencies, investors and suppliers (IFRS, 2009). However, the accounting diversity that currently exists is created by diversity in the legal system, tax regulations, among others. This affects decision-making and implies that companies consume more resources to implement their strategies and achieve their goals. According to (Doupnick and Perea, 2012) is necessary to reduce the diversity at the accounting level to generate comparability in the financial statements. This will allow a group of standards that provide uniformity to be adopted.

To meet the demands of users who require uniform information on 1973 is created the *International Accounting Standards Committee (IASC)* with this begins the era of accounting convergence. Then in 2001 the International Accounting Standards Board (IASB) is created. The IASB is the entity that currently regulates the international financial reporting standards (IFRS) for public companies, full IFRS. Later in July 2009, the IASB published the version of the IFRS for SMEs, little IFRS.

The resistance to change and keep the tradition is an impediment to global convergence, particularly in the United States (Damant, 2006; Gornik and Showerman, 2010). This country is still in the process to converge its accounting standards with the IASB. The convergence project began more than one decade ago with the Financial Accounting Standards Board (FASB). The users, companies and the Government in the United States are in a waiting period that duplicates the efforts and consumes more resource. SMEs in the United States can apply the IFRS (Lozada and Ríos, 2013) however, it's forbidden to public enterprises to apply IFRS. Which means that a ME has to prepare their reports using the, US GAAP and apply IFRS to its subsidiaries. The reconciliation process requires more effort.

To develop a proper analysis, below is a review of the literature related to IFRS and the Convergence Project.

## **THEORETICAL FOUNDATIONS AND REVIEW OF LITERATURE**

### Convergence Project: IASB and FASB

For 11 years the boards have worked together to reduce the divergence of both existing financial reporting standards. They also coordinate their work in order to ensure that the compatibility reached is maintained. The Convergence Project seeks to align rules however, they maintain a degree of divergence as both accounting rules are not identical (INCP, 2013).

In 2002 the Convergence Agreement settled the following initiatives: work altogether, directing efforts in the short term to reduce the differences, encourage the coordination of future work. In 2004, the FASB issued: the *FAS 123 (revised 2004) Stock Based Payments*, *FAS 151, Inventory Costs*, and *FAS 153 Exchange of Non-monetary assets*, these were promoted by the initiative of both boards to submit projects on short-term (IFRS, 2013<sup>a</sup>). On 2005 the SEC proposes to eliminate the requirement of reconciliation, the form 20F.

The Memorandum of Understanding (MoU) was published in February 2006 by the FASB and the IASB. It describes the advances expected to achieve by 2008. In the MoU, the two boards reaffirmed their common objective of developing high quality and common accounting standards (IASB 2002).

In 2007 the SEC removed the requirement of reconciliation for foreign companies that are traded on the American stock exchanges. On August 6 of that year the SEC issued "Concept Release" to allow the issuers in the United States prepare the financial statements in accordance with IFRS. In September 2008, boards published an update of the MoU to report the progress made since 2006 and to set convergence targets until 2011. In 2008 the SEC issued a document proposing a route for the adoption of IFRSs in the United States and a proposal for a regulation on the optional use of IFRS on 2014. It was established that the SEC would decide in 2011 if the adoption of IFRS served the public interest and would benefit investors. The SEC also proposed that U.S. issuers that meet certain criteria can file their financial statements prepared using IFRS starting from December 15, 2009. Also in 2008 ended the first phase of the creation of the new conceptual framework (IASB, 2008).

In March 2009, the FASB reiterated their support in creating quality standards and recommends evaluating strengths, weaknesses, costs and benefits the U.S. could face to advance towards the objective of convergence. Also that year the group created by the boards the Financial Crisis Advisory Group (FCAG) published several recommendations to improve the effectiveness of the work to be done (IASB, 2009). That year the Financial Accounting Foundation (FAF) in collaboration with the AICPA and the National Association of National Accounting Boards began the process of creating a panel (Blue Ribbon) for the study and improvement of the accounting rules in private companies. This new panel was created three years later.

In February 2010 the SEC issued a statement in support of convergence and global accounting standards. In April 2010 the boards published a quarterly report on the progress of the work. In addition, they agree to work for the implementation of a plan that studies the effects of the adoption of IFRS in several areas and examining the regulatory environment that may be affected

by the new rules, among others. In June 2010, the FASB and the IASB agreed to modify its work plan and give priority to the most important projects that were agreed upon in the MoU, 2006.

In 2011 the boards reviewed strategies and discussed technical IASB projects and joint projects between this one and the FASB (IFRS, 2013<sup>b</sup>). In addition, IASB conducted an inquiry and identified that they must work with the conceptual framework so it provides a consistent and practical way of creating IFRS. They also have to improve some rules so that they respond to the needs of the users. It was also identified as necessary to strengthen the process of creating standards. The next conference will be held in 2015.

The SEC in 2012 reported that IFRS in the U.S. would not yet be used in public enterprises (FASB, 2103<sup>a</sup>). The work plan discussed in July of that year did not discuss the voluntary adoption. Moreover, the SEC did not indicate when and how these standards will be incorporated into the American accounting system. They did not provided full support to the adoption however, reported that the SEC is exploring other methods to incorporate IFRS in the US GAAP. We can deduce from the expressions of the SEC executives that the U.S. still shows their disposition to stay involved in the process of convergence. However, it is understood that the convergence era is about to end (PWC, 2013<sup>a</sup>). With the collaboration of the FAF and the AICPA the Private Company Council is created in 2012. The Private Company Council together with the FASB determines the modifications to the US GAAP that are needed to meet the needs of users of private companies (PWC, 2013<sup>b</sup>).

The members of the IASB in October 2012 as a response to the final work plan of the SEC, disclosed that they recognize that the US economic system is unique and that this represent major challenges for the implementation of IFRS. They also recognize that these challenges can be overcome with the appropriate policies.

By 2013 the foundation of IFRS, which is responsible for overseeing the processes in the IASB created the Accounting Standards Advisory Forum (ASAF) to expand the collaborative efforts of the IASB. The FASB is one of the 12 members (FASB, 2013<sup>a</sup>). That same year the AICPA also announces its plan to establish a framework of financial reporting for SMEs (PWC, 2013). For the last quarter of 2013 the future of the Convergence Project is uncertain because both boards are giving attention to their particular agendas. However, although the compulsory adoption or voluntary adoption in the United States is not in sight in the near future, the IFRS continue to be an important issue for American companies. Currently IFRS are still influencing changes in the US GAAP (PWC, 2013).

The boards are still working together. In addition they still maintain separate agendas. Table 3 shows the rules and amendments that both boards are working together on and the approximate date of issue. Table 4 and 5 present separate projects that each board in working on by October 2013. It's assigned to projects C to indicate the closing date for comments, DP for document discussion, ED for published draft, RFI request for information and F to indicate that it is final.

Table 3: Projects of IASB and FASB summarizes at October 2013

Joint Projects Standards and amendment	Responsible Board	Anticipated issuance: 2013	Anticipated issuance: 2014
Emissions trading schemes	Joint	ED	F
Financial Instruments	Joint	ED	F

(classification and measurement)			
Impairment	Joint	ED	F
Hedge accounting	Joint	F	
Financial Instruments	Joint	ED	
Financial statement presentation	Joint		
Insurance contracts	Joint	ED	
Leases	Joint	ED	
Revenue recognition	Joint	F	

Source: PWC. C = Comment deadline / DP = Discussion Paper / ED = Exposure Draft / RFI = Request for Information / F = Final

Table 4 and 5 present the status of the IASB projects. It also presents the approximate date of completion for projects in process.

## CONCLUSIONS

After 11 years of the signing of the Norwalk Agreement some convergence projects have been completed successfully. Several projects have been partially completed and others were discontinued. In some cases there was no consensus between the boards and different standards were created. To date some projects are still in process. The opinion of the auditing and consulting firm PWC is that a single set of global international standards is necessary, IFRS is better positioned than others to achieve this goal. In addition, emphasizes that the users should be bilingual in accounting terms, this will serve to create standards that would better serve users. The SEC still has not decided on the future of IFRS in the United States.

Those interested in the topic in the United States want clarity about the conduct of the IASB and the FASB with the process of convergence. Other users outside the American nation want greater commitment from the nation with the adoption of the IFRS and are waiting for substantial progress. Accounting service providers understand that both boards are keeping their commitment with the convergence project. However, the completions of projects together are a priority and will not be completed until beyond 2014. They also understand that a fast mandate of change is needed by the government, business and other sectors (PWC, 2013<sup>a</sup>). The members of the IASB understand there are still differences that can be reconciled. They are working and have undergone alternate solutions that understand can complement the work of the SEC team.

However, although the adoption of IFRSs in the United States will not be immediately it is advisable that the American companies are kept informed about the process. It is important they know in what way it will affect transactions such as mergers and acquisitions. In addition, it is necessary to disclose information of subsidiaries using IFRS to users abroad. Finally, it is important that users in the United States understand that future changes in the US GAAP are based on joint efforts between the IASB and the FASB.

## Recommendations

To the extent that markets increase their global presence, the number of foreign investors in American companies will increase. These shall require the IFRS-based financial statements. In addition, the American companies that have subsidiaries overseas should report their financial statements as required by each country. It is therefore recommended that multinational companies and SMEs in the United States stay informed about changes in IFRS and to also implement the agreement achieved in the convergence project. These companies should immediately identify what they can do to keep an understanding and mitigate the negative impact, if any, that new changes can bring with IFRS. It is advisable that the executives of the companies participate in the standards creation process. In addition, keep a constant monitoring in

subsidiaries overseas. This is because as more complex transactions arise the accounting standards require changes and new IFRS are created. These changes directly affect the activities between American and foreign companies. They also affect the taxes arising from these mergers and transactions generated jointly and separately. Both boards should establish accounting guidelines for the disclosure of financial information that reflects the economic substance of the transactions, for timely decision making. It is pertinent that the FASB prioritize issues where simplification is needed and where the current information does not provide useful information anymore to meet the changing needs of users in the United States.

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# BIDDING IN THE TREASURY AUCTIONS AND THE EFFECT OF THE SELLER'S STRATEGY

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## ABSTRACT

*The main goal of the paper is to analyze changes in bidding behavior of participants on Treasury auctions arranged by the Ministry of Finance of the Czech Republic and Czech National Bank before, during and after the spillover of the credit crunch crises in 2007 and 2008 in Europe. Most of the auction bidders (more than 75%) are foreign controlled financial institutions or foreign controlled insurance corporations and pension funds. The seller faces a tradeoff between efficiency and revenue. In equilibrium it is optimal to set a positive reservation price both from revenue and efficiency point of view. The reason is that bidders use asymmetric strategies across units in equilibrium. The positive reservation price reduces such an asymmetry. During the crisis the Czech National Bank started to use new extraordinary policy tool-facility. I design a model of the multi-unit auction of Treasury auctions and using the data on individual bidder bids (price-quantity pairs) provided by the Ministry of Finance of the Czech Republic. I compare the impact of various changes in the auction rules on the bidder behavior and the revenue collected in the auction that determines costs of state debt service of the Czech Republic.*

**JEL:** D44, E43, G12.

**KEYWORDS:** Multi-Unit Auction, Banking, Treasury Market, Auction With Heterogenous Agents.

## INTRODUCTION

In the Czech Republic, the Ministry of Finance services the state debt by issuing Treasury securities (T-bills and T-bonds) in auctions. T-bills and T-bonds differ in many characteristics including maturity (T-bill less than a year and T-bond more than a year), coupon payment (T-bill has no coupon) and taxation method. Auctions of both types of securities are organised by CNB. While T-bills are sold in uniform-price auctions, T-bonds are sold in discriminatory-price auctions. After issuing Treasury securities on the primary market, they are further traded on the secondary market.

In a standard game theoretical analyses each bidder submits bids that maximize the bidder's payoff given the strategies of opponent bidders. But estimates of expected utility equilibrium first order conditions (FOC) in auction games are typically difficult if not impossible to evaluate even if their parametric representation has a simple functional form. The analysis of bidder best response strategies is a challenge for the auction theory (see Jackson and Swinkels (2005) for the proof of equilibrium existence). The nonparametric econometrics of auctions is discussed in Athey and Haile (2007) who analyse the strategic considerations that characterise the dealer's best response strategy. Athey and Haile (2007, section 10.1) show that in a multi-unit auction bidder's values can be econometrically identified from the submitted bid distribution.

Since the identification equation is not linear, the econometrician often uses appropriate simplifying assumptions on the bidder's value distributions to derive a representative econometric

model. Nyborg and Strebulaev (2004) provide an example of such a simplified model. Similar approaches were applied in empirical studies on Finish Treasury auctions by Keloharju, Nyborg, and Rydqvist (2005) and on ECB REPO auctions by Bindseil, Nyborg, and Strebulaev (2009). Another type of empirical studies include individual level characteristics to explain submitted bids (e.g. Hamao and Jegadeesh (1998) and Silva (2003)).

There are also non-parametric estimation techniques. If one applies the Constrained Strategic Equilibrium and Simulation Monte Carlo Approach (see Armantier, Florens, and Richard (2008) and Armantier and Richard (2000)) to the auction data numerical approximation of FOC can be computed. By combining these two approaches, it is possible to produce an operational procedure for analyzing a much broader class of game theory models than that for which there exists operational analytical or numerical solutions to their extensive game representation. An application specific form of strategies is motivated by two objectives: 1) ‘bounded rationality’ or ‘rules of thumb’ behavior, 2) functional approximation of more complicated Nash equilibrium solutions. There are, alternatively, other non-parametric approaches to estimate the FOC condition using Bootstrap technique applied by Kastl (2010 ) or GMM (see Fevrier, Preget and Visser (2002)) that we can apply.

## LITERATURE REVIEW

Our dataset was provided by the Ministry of Finance of the Czech Republic and other informational agencies and contains all bids submitted by each bidder in the Czech Treasury Bond auctions over the period from January 2005 to December 2011. For each auction, we know the submitted bid schedule of each bidder and the winning bids for each bidder. We also have information on volume and maturity of the bond.

The data show that noncompetitive bids play a small role with less than 5% of total issue size being allocated through noncompetitive bids. We will therefore abstract from the option of submitting noncompetitive bids in the structural/reduced form model. Similar approach was used in Hortacsu, A. and J. Kastl (2012), Elsinger and Zulehner (2007), and Elsinger, Schmidt-Dengler, Christine Zulehner (2013).

Noncompetitive bids are common in treasury auctions in several countries, although the exact rules regarding allocation and timing of submission of bids vary. While they do play a minor role in the eventual allocation, the option of purchasing at the average price may affect the bidding behavior and hence bias our interpretation of results (marginal valuations, etc.).

One can be reasonably justify that banks have idiosyncratic shocks to their liquidity needs due to deposit flows and the corresponding reserve requirements. The underlying assumption we make here is that these shocks are independent conditional on observed macro, secondary market conditions and other reporting data.

Due to the limited liquidity in the secondary market for Czech T-bonds, we use additional information to approximate the secondary market. We include German government bonds that were selected to fit the characteristics, i.e., end date and maturity, of the Czech government bonds. To capture the macroeconomic conditions, we added the consumer price index and GDP growth of Czech Republic, Germany, France and Netherlands and Eurozone and the exchange rate CZK/EUR. To capture bidders characteristics we use the data from monthly reporting of the Czech banks.

Since the ČNB moved from yield tenders to price auctions in 2004, we converted observed bids into annual yields using information on coupon size, coupon dates, and maturity. We will estimate the parameters in terms of yields.

Our choice of combination of French, Netherlands and German government bonds can be justified by the following consideration. As Figure 1 (source Graf III.6, CNB) reveals the 5-year government bond interest rates move together across all EU countries. The comovement of bond rates is more obvious after the introduction of the Euro until summer 2007 when the first signs of the financial markets crisis appeared. Before the introduction of the Euro we observe a convergence process showing that Czech government bond yields exhibit a similar pattern as the yields from countries such as Germany, France or the Netherlands. Thus, we believe that the use of German government bond yields is a good illustration.

## THE MODEL, DATA AND METHODOLOGY

I will model the strategic behavior of bidders in auctions for short term borrowing (i.e., REPO, T-bill and zero coupon T-bond) with maturity  $t$ . I will assume that both in the period before and after the global financial crisis break up bidders form rationally marginal value for short term funds that we denote as  $v_i(q | I, II_i)$  where  $q$  stands for the number of units demanded in auction,  $I$  represents all the public information common for all banks (e.g. ;data), and  $II_i$  represents the private information of a specific bank (e.g. micro) at given time.

We omit the time index of all variables for simplicity. By assuming that banks behave according to a particular strategic equilibrium model of value or profit maximization, the researcher can map bidder's observed bids and bidding decisions into their unobserved marginal values. The inferences drawn from such approaches rely on the assumed strategic behavior. Then marginal value can be identified from submitted bids (price quantity pairs) given the bidders use the optimal best response equilibrium strategies in the auction by Athey and Haile (2009, see section 10.1.). An overview and comparison of various recent methodologies used by various researchers to analyze multi-unit auctions of Treasury securities is in Cardozo (2010).

Using similar arguments to Kastl (2010) one may assume that bidders do not consider ties when playing equilibrium strategies because bids are rarely rationed in the data. In his approach the seller is flexible in adjusting the number of supplied units ex-post that simplifies the analysis. Let me construct one period  $n$ -bank model. Risk-neutral banks compete to provide funds to the government  $G$  in exchange for T-bills or T-bonds and private sector loans  $L$ . I model the problem of a profit maximizer bank that provides different services, pricing monopolistically the products where information costs are more relevant. We extend the model by Swinkels, in the spirit of Hortacsu McAdams and Elsinger, H. and P. Schmidt-Dengler, Ch. Zulehner (2013) : "Competition in Austrian Treasury Auctions", mimeo.

Let me construct one period  $n$ -bank model. Risk-neutral banks compete to provide funds to the government  $G$  in exchange for T-bills or T-bonds and private sector loans  $L$ . I model the problem of a profit maximizer bank that provides different services, pricing monopolistically the products where information costs are more relevant. The basic profit maximization problem of the bank is: To analyze bidder (=bank=dealer)  $i$ 's problem, suppose that he is a producer endowed with borrowing-lending technology  $A()$  which uses several inputs (various types of assets and liabilities, labour and capital) to provide financial services on the loan-deposit market.

Kastl assumes that banks compete in prices but not quantities. Quantities are generated by an exogenous process  $P_{\{Q\}}$ . Let us assume that  $P_{\{Q\}}$  is uniform on the interval  $[p_{\min}, p_{\max}]$ . We will design the model with the following features:

There are  $T$  discriminatory auctions indexed by  $t = 1, \dots, T$ . In each auction  $t$ , the seller offers  $S_t$  indivisible units for sale to  $N_t$  potential bidders (We will use  $he$  to represent the seller or auctioneer and  $she$  to represent the bidder.).

We allow for  $C$  different categories of bidders denoted by  $c$  such that  $N_t = \sum_{c=1}^C N_t^c$ . Conditional on type  $c$ , bidders in each auction are symmetric and risk-neutral with independent private values. Before the auction each bidder receives a private signal  $\varphi_{i,t}$  drawn from distribution  $F_c$ . The set of all possible signals of bidder  $i$  we will denote as  $\Phi_i$ . Signals are distributed independently within and across bidder types as well as across auctions. The marginal valuation function has the form  $v_i(q, \varphi_{i,t})$ . The marginal valuation function is increasing in  $\varphi_{i,t}$  and weakly decreasing in  $q$ . The marginal valuation function determines the total value  $TV_{i,t}$  of  $q_{i,t}$  T-bonds to each bidder with signal  $\varphi_{i,t}$   $TV_i(q_{i,t}, \varphi_{i,t}) = \int_0^{q_{i,t}} v_i(q, \varphi_{i,t}) dq$

Bidders are required to submit several bid-quantity pairs that specify what they are willing to buy in the auction T-bonds. Namely, we assume that each bidder  $i$ 's strategy space  $S_i$  consists of a triples  $\langle b_{i,t}, Q_{i,t}, K_{i,t} \rangle$  where  $b_{i,t}$  and  $Q_{i,t}$  are non-negative vectors of dimension  $K_{i,t}$  and  $K_{i,t}$  is a natural number. Moreover we restrict the bidders to sort bid-quantity pairs according to bids; i.e.  $b_{i,j,t} \geq b_{i,j+1,t}$  for  $j = 1, \dots, K_{i,t}$ . (Since the seller orders the price quantity pairs according to bids after collecting the bids this restriction has no effect on the auction game up to the permutation of the price-quantity pairs.

The total submitted cumulative quantity is at most  $Q_{i,t}^-$ . The seller truncates the demand curve; i.e.  $y_{i,t}(p | \varphi_{i,t}) = 0$  if  $[\underline{q}_{i,t}, K_{i,t}) > Q_{i,t}^-$ . For each bidder we denote the vector of cumulative quantities as  $q_{i,t}$  where  $q_{i,j,t} = \sum_{k=1}^j Q_{i,k,t}$  for  $j = 1, \dots, K_{i,t}$  and for technical reasons we define also  $b_{i,0,t} = \infty$  and  $q_{i,0,t} = 0$  and  $b_{i,K_{i,t}+1,t} = 0$  and  $q_{i,K_{i,t}+1,t} = \infty$ . Then one can easily construct a stepwise demand and inverse demand curves of bidder  $i$  whose private signal is  $\varphi_{i,t}$

$$y_{i,t}(p | \varphi_{i,t}) = q_{i,j} \text{ if } p \in [b_{i,j}, b_{i,j-1}) \text{ for } p \in [0, \infty) \quad (1)$$

$$y_{i,t}^{-1}(q | \varphi_{i,t}) = b_{i,j} \text{ if } q \in (q_{i,j}, q_{i,j+1}] \text{ for } q \in [0, \infty) \quad (2)$$

Each bidder is restricted to buy at most  $\bar{Q}_{i,t}$  T-bonds in an auction at time  $t$ . Therefore bidders has no incentive to submit such a quantity vector that  $q_{i,K_{i,t}} > \bar{Q}_{i,t}$ . (The total submitted cumulative quantity is at most  $Q_{i,t}^-$ . The seller truncates the demand curve; i.e.  $y_{i,t}(p | \varphi_{i,t}) = 0$  if  $[\underline{q}_{i,t}, K_{i,t}) > Q_{i,t}^-$ )

**The Game.** Before the auction the seller announces the number of T-bonds offered for sale  $O_t$  and a reservation price  $R_t$  where  $R_t \in [0, \infty)$ . Each bidder  $i$  submits a non-increasing step function. This function specifies how much a bidder of type  $\varphi_{i,t}$  demands at price  $p$ . We make two additional assumptions consistent with the auction procedure. First, we assume that whenever there price clearing the market is not unique, the seller uses the most favorable price from her perspective. Second, bids at the lowest price accepted (stop-out-price) may be subject to pro rata curtailments to sell the scheduled issue size. Therefore the quantity the bidder  $i$  wins  $\tilde{q}_{i,t}$ , depends on the submitted bid-quantity pairs of all bidders  $\langle b_{i,t}, Q_{i,t}, K_{i,t} \rangle_{i=1}^{N_t}$ , the quantity of T-bonds

offered for sale  $O_t$ , the reservation price of the seller  $R_t$ , the maximum quantities each bidder can buy in the auction  $\langle \bar{Q}_{i,t} \rangle_{i=1}^{N_t}$ ; i.e.  $\tilde{q}_{i,t} = \tilde{q}_i(\langle b_{i,t}, Q_{i,t}, K_{i,t} \rangle_{i=1}^{N_t}, R_t, \langle \bar{Q}_{i,t} \rangle_{i=1}^{N_t}, O_t)$ .

The ex post payoff to bidder  $i$  depends on the quantity of T-bonds she wins  $\tilde{q}_{i,t}$ , her type  $\varphi_{i,t}$ , the price paid for buying  $\tilde{q}_{i,t}$  T-bonds.

$$\prod(\varphi_{i,t}, \langle b_{i,t}, Q_{i,t}, K_{i,t} \rangle_{i=1}^{N_t}, R_t, \langle \bar{Q}_{i,t} \rangle_{i=1}^{N_t}, O_t) = \quad (3)$$

$$\int_0^{\tilde{q}_{i,t}} v_i(p, \varphi_{i,t}) dp \quad (4)$$

$$- \sum_{k=1}^{K_{i,t}} I(\tilde{q}_{i,t} \geq q_{i,k,t}) \cdot Q_{i,k,t} \cdot b_{i,k,t} \quad (5)$$

$$- \sum_{k=1}^{K_{i,t}} I(q_{i,k-1,t} \geq \tilde{q}_{i,t} > q_{i,k,t}) (\tilde{q}_{i,t} - q_{i,k-1,t}) b_{i,k,t} \quad (6)$$

The first term (4) in equation (3) is the total value of T-bonds bidder  $i$  wins, the second term (5) is what she pays for quantities on which she is not rationed, and the last term (6) is what she pays on quantities on which she is rationed.

Pure strategy is a list of submitted bids based on the observed information that bidder  $i$  knows before the auction, including her type  $\varphi_{i,t}$ , the reservation price, the distribution of all bidder values, the quantity of T-bonds for sale, and the number of opponents, ??? macro variables, micro variables, expectation about future. For the sake of simplicity I will write the pure strategy as a function of private values only. Bidder  $i$ 's pure strategy is a measurable mapping from the set of private signals to the set of weakly decreasing step functions with less than  $K_i$  steps  $\beta_i: \Phi_i \square S_i$ .

We will assume that bidders use pure symmetric strategies within each bidder's category  $c$ .

We assume that supply is non-random, although the MFČR reserves the right to withdraw supply entirely. This happens rarely (once in the history of Czech treasury auctions, when the yield resulting from the auction exceeded that of Belgian yields (Belgium had historically higher yields because of a debt ratio more than double that of Czech Republic). Moreover MFČR reserves the right to sell more T-bonds than  $O_t$  that is announced before the auction. I will assume that bidders are ignoring these changes in supply.

When the opponents use strategies  $\beta_{-i}(\cdot)$ , then the ex ante pointwise payoff to the bidder, whose type is  $\varphi_{i,t}$  and who bids  $\langle b_{i,t}, Q_{i,t}, K_{i,t} \rangle$  is:

$$\prod(\varphi_{i,t}, b_{i,t}, Q_{i,t}, K_{i,t} | R_t, \beta_{-i}(\cdot), O_t) = \int_0^{\tilde{q}_{i,t}} v_i(p, \varphi_{i,t}) dp \quad (7)$$

$$- E \left( \sum_{k=1}^{K_{i,t}} I(\tilde{q}_{i,t} \geq q_{i,k,t}) \cdot Q_{i,k,t} \cdot b_{i,k,t} \right) \quad (8)$$

$$- E \left( \sum_{k=1}^{K_{i,t}} I(q_{i,k-1,t} \geq \tilde{q}_{i,t} > q_{i,k,t}) (\tilde{q}_{i,t} - q_{i,k-1,t}) b_{i,k,t} \right) \quad (9)$$

The expectations in terms (8) and (9) are taken over possible opponent types  $\langle \varphi_{j,t} \rangle_{i \neq j}$  which induces the probability measure of the  $E$  operator (If the supply is random, then the induced probability measure takes this into account.). I use the word payoff to mean the ex ante payoff when no confusion arises.

The bidder maximizes his payoff from a strategy  $\beta_i(\cdot)$ :

$$\max_{\beta_i(\cdot)} E \left( \prod(\varphi_{i,t}, b_{i,t}, Q_{i,t}, K_{i,t} | R_t, \beta_{-i}(\cdot), O_t) \right) \quad (10)$$

The expectations in terms (10) are taken over all possible types  $\varphi_{i,t}$  of bidder  $i$  which induces the probability measure of the  $E$  operator.

The equilibrium concept we use is Bayesian Nash equilibrium. A vector of strategies  $y(\cdot | \cdot)$  constitutes a Bayesian Nash equilibrium if for all bidders  $i$ ,  $y_i(\cdot | i)$  maximizes her expected utility  $i(i)$ .

Similarly to Kastl (2012) we derive the first-order condition.

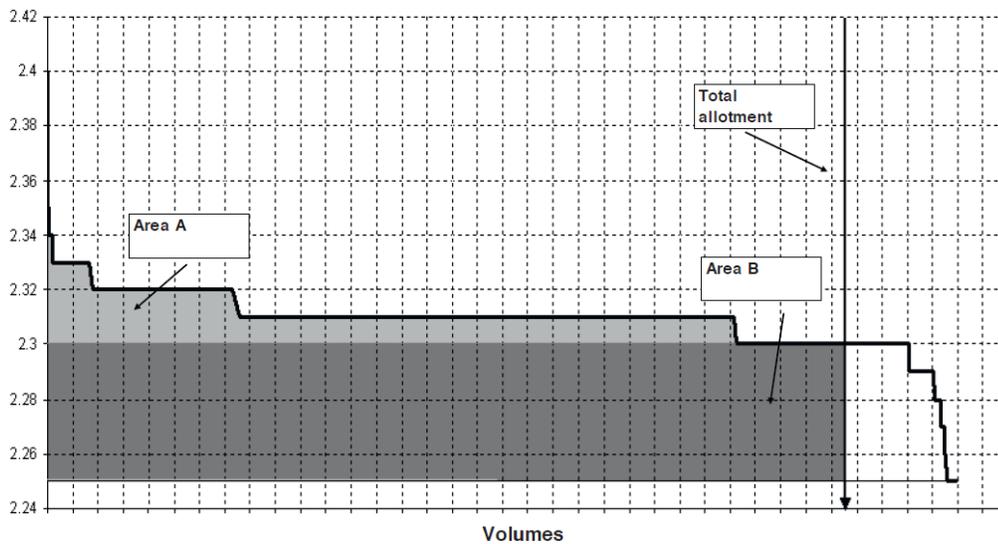
Let  $P^S(\varphi, y(\cdot | \varphi))$  denote the stop-out price associated with type vector  $\varphi$ . Kastl (2012) shows that for all steps  $k$  but the last step  $K_i$  a bidder's bid function has to satisfy

$$v(q_k, \varphi_{i,t}) = b_{i,k,t} + \frac{\Pr(b_{i,k+1,t} \geq P_t^S) \cdot (b_{i,k,t} - b_{i,k+1,t})}{\Pr(b_{i,k,t} \geq P_t^S > b_{i,k+1,t})} \tag{11}$$

We describe how to infer the marginal valuations of bidders from the above equation using resampling.

This way we will construct series of  $\hat{v}_{i,k,t}$ . We define  $\hat{U}_{i,t}^3 = \log((\hat{v}_{i,j,t} - S_t) \cdot q_{i,j,t})$  where  $S_t$  is the expected secondary market value; i.e.  $\frac{b_{i,t}^a - b_{i,t}^b}{2}$  or the sellers minimum accepted price.

**A central bank auction and the funding liquidity risk measures.**



Note: Thick black line is the aggregate demand curve.  $LRP = [(Area A + Area B) / total\ allotment]$ ,  $LRP\_1 = [Area A / total\ allotment]$

Therefore we will calculate the average weighted T-bond value of bidder  $i$  subtracted from some benchmark. We will use a seller's reservation price or secondary market price as benchmark. There is an analogy between constructing of our average value indicator and the approach used by Drehmann and Nikolaou (2009), who construct this indicator for the euro area. The measure is analogous to market liquidity index MIBL used for a particular bidder  $i$  (see CNB (2008, p.35) for the details).

What value measure to choose?

Volume of demanded T-bonds  $\bar{b}_{i,t}^1 = (b_{i,j,t} - S_t) \cdot q_{i,j,t}$  (12)

Weighted average value of T-bonds  $\bar{b}_{i,t}^2 = \frac{(b_{i,j,t} - S_t) \cdot q_{i,j,t}}{\sum_{k=1}^{K_i} q_{i,j,t}}$  (13)

$$\text{Log of (12)} \quad \bar{b}_{i,t}^3 = \log(b_{i,j,t} - S_t) \cdot q_{i,j,t} \quad (14)$$

$$\text{Log of (13)} \quad \bar{b}_{i,t}^4 = \log\left(1 / \left(\frac{(b_{i,j,t} - S_t) \cdot q_{i,j,t}}{\sum_{k=1}^{K_i} q_{i,j,t}} + \varepsilon\right)\right) \quad (15)$$

Given that all opponent bidders  $-i$  submit  $\langle b_{-i,t}, Q_{-i,t}, K_{-i,t} \rangle$  one can define residual supply for bidder  $i$  as the total amount of T-bonds offered for sale minus the demand of the opponent bidders  $-i$

$$RS_{i,t}(p) = O_t - \sum_{j \neq i} y_{j,t}(p | \varphi_{j,t}) \quad (16)$$

We follow the resampling approach proposed by Hortacsu and McAdam (2010) and Kastl (2011). They infer the valuations at the bid steps. The first-order condition is not tractable analytically unless a specific form of the marginal value distribution function has been specified (see Hortacsu (2002), Fevrier et al. (2004), Wolak (2003)). This kind of simplification may justify the usage of parametric methodologies in a few special cases. But I will focus on structural auction modeling advocated by Bajari and Hortacsu (2005) and discussed also in Athey and Haile (2009) and Hendricks and Porter (2007). Kastl (2010) applies this approach to auctions of Czech T-bills and Cassiola et al. (2010) applies this approach to ECB auctions. In their approach one constructs the residual supply curve for each bidder. This curve can be derived from the total number of T-bond offered for sale in the auction by the seller and the bids submitted by the opponent bidders. After that they use various analytical tools for estimation of the demand and supply equations. Their methodology also accounts for asymmetric behavior in the auctions.

Then I will explain these revealed marginal valuations  $v_i(q | I, II_i)$  from the information sets  $I, II_i$  available to the bank at the time of auctions. We will regress marginal values  $v_i$  for a given quantity

observed in submitted bids on the explanatory variables  $I, II_i$ .

$$v_i = \alpha_0 + II_i \alpha_1 + I \alpha_2 + \varepsilon_i$$

I will also consider spreads between marginal values and interbank interest rate variables. Then in the parameters  $\alpha_1, \alpha_2$  will allow us to test various hypothesis on the relations between the interest rates.

I will address the following hypotheses:

We will investigate the effect of the volume of maturing T-bonds around the auction day on the dealers'

demand in auctions. Does the number of tranches influence behavior of dealers in auctions?

Are the bidding strategies affected by adjusting total auction volume after bid submission?

What is the effect of T-bond sale on the dealers' portfolio? How does the dealer's portfolio changes? Does this change depend on their CDS? How does the bidding function depend on CDS of primary dealer's and clients CDS? What factors affect the fraction of the debt financed by domestic financial institutions and what fraction is financed by the rest of the world?

Is the demand in T-bond auctions higher in the case of participants which resale the T-bonds more around the auction day?

What measures can enhance the performance of the primary auction market of T-bonds?

How the bidding behavior of banks in T-bond auctions changed during the recent economic and financial crisis? In particular, CDS of individual banks increased in September 2008, increasing the demand for collateralized transactions. This may have increased the demand for T-bonds and thus their price. On the other hand, the fears from future additional negative liquidity shocks decreased the demand for collateralized transactions and thus the demand for T-bonds declined. We will test which of the two effects prevailed.

How the introduction of CNB liquidity providing REPO operations in October 2008 affected the bidding behavior of banks in T-bond auctions? We will test whether the effect on the demand for T-bonds was positive.

We will investigate contagion effects from abroad on the behavior of dealers. In particular, CDS of a number of EU countries increased significantly in March to May 2009 (CEE countries) and also in March to May 2010 (Greece).

What publicly available information has significant effect on bidder strategies?  
Some preliminary empirical findings will be discussed during the presentation.

## CONCLUSION

In this paper, I design and analyze a model of a uniform price and discriminatory price auctions. The seller offers several identical units for sale to  $n$  bidders. The seller is flexible in adjusting the number of supplied units ex-post that simplifies the analysis. The theory suggests that bidder behavior mimics the best response behavior of an oligopolist who faces fixed total demand. In such an oligopolistic game each agent does not know the private information of the competitors and therefore faces uncertain demand. In this model one can design appropriate estimation techniques and hypothesis testing to analyze multi-unit auction data. The estimation method enhances to capture heterogeneous impact of global financial crises on individual banks from disaggregated level data perspective. Although Czech banking system was not directly hit by sub-prime crises because the exposure to toxic assets was not significant, the liquidity hoarding and interest rate spread widening is present in the Czech Republic similarly to markets in the US, UK and Euro Area, albeit to a much lesser extent. Through the model of bidding we will argue that the bank value for liquidity has been much more dispersed than the raw bidding data show.

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## SPANISH PROCEEDINGS

# INNOVANDO LA EDUCACIÓN EN MEXICO: FACTORES INTERNOS QUE IMPACTAN AL EMPRENDIMIENTO UNIVERSITARIO

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## RESUMEN

*El tema del Emprendimiento ha sido de gran interés para los investigadores mexicanos por años. En la actualidad identificamos que existen competencias deseables en los emprendedores, es por ello, la importancia de comparar las diversas teorías en emprendimiento y su impacto en los programas de educación universitaria. Por lo tanto, el objetivo de este trabajo es hacer un análisis bibliométrico de las principales revistas científicas con estudios realizados por nacionalidad, en el tema de competencias deseables en los emprendedores y como son desarrolladas por los programas de educación universitaria, para analizar la productividad y conocer si el interés en el tema es representativo entre los principales temas de investigación en el ámbito de la comunidad científica así como el grado de importancia por país y nacionalidad de los investigadores. Los resultados permiten afirmar que el tema de del emprendimiento universitario en México es de gran interés y que va incrementándose en la comunidad científica a nivel internacional, con un interés notable en Estados Unidos de América y en Colombia.*

**PALABRAS CLAVE:** Emprendimiento, Universidad, competencias, análisis bibliométrico.

## INNOVATING ON THE EDUCATION IN MÉXICO:INTERNAL FACTORS THAT IMPACT THE UNIVERSITY ENTREPRENEURSHIP

### ABSTRACT

*The topic of entrepreneurship has been of great interest for Mexican researchers for years. At present we identified that there are powers in the desirable entrepreneurs, therefore, is the importance of comparing the various theories in entrepreneurship and its impact on the programs of university education. Therefore, the objective of this work is making a bibliometric analysis of the main scientific journals with studies by nationality, in the theme of desirable skills in the entrepreneurs and how they are developed by the programs of university education, To analyze the productivity and know if the interest in the subject is representative between the major research topics in the field of the scientific community as well as the degree of importance by country and nationality of researchers The results suggest that the subject of the university endeavor in Mexico is of great interest and is increasing in the scientific community at international level, with a significant interest in United States of America and in Colombia.*

**JEL:** L14, L15, M14

**KEYWORD:** Entrepreneurship, University, Competence, bibliometric analysis

## INTRODUCCIÓN

El emprendimiento y la innovación son temas de alto interés en la actualidad, debido a su impacto en la economía de los países. México no es la excepción, los altos índices de desempleo, la falta de oportunidades de crecimiento y desarrollo profesional han promovido el incremento de incubadoras de empresas (SNIE, 2010), a pesar de lo anterior no ha sido suficiente para que México le de trabajo a los 942,000 jóvenes desempleados en edad de 20 – 29 años (INEGI, 2010). Las MiPyME constituyen el 97% del total de las empresas que generan ingresos equivalentes al 23% del Producto Interno Bruto (PIB), además de ser mayoría, representan casi el 70% de las fuentes de empleo de este (Gómez.M, 2006). Cuervo (2011) denomina enterpriser al empresario que actúa solo y se distingue del corporativo. El ser emprendedor es una de las cualidades o características esenciales y fundamentales de un empresario u hombre de negocios, junto a la de otros factores también considerados importantes como la innovación tecnológica, la organización y gestión empresarial (Julca Meza, 2011).

El emprendimiento es una competencia desarrollada dentro de la formación profesional, permite a las instituciones educativas contribuir con el país con profesionales con una inclinación a crear ideas de negocios a partir del aprovechamiento de las oportunidades que se encuentran en el mercado. Para Meza (2011) la educación es un derecho humano y un deber social fundamental, es democrática gratuita y obligatoria. El Estado la asumirá como una función indeclinable y de máximo interés en todos sus niveles y modalidades... está fundamentada en el respeto a todas las corrientes de pensamiento, con la finalidad de desarrollar el potencial creativo de cada ser humano y el pleno ejercicio de su personalidad en una sociedad democrática basada en la valoración ética del trabajo y en la participación activa, consciente y solidaria en los procesos de transformación social consustanciados con los valores de la identidad cultural. La presente investigación nace de la necesidad de comprender los factores determinantes de la actitud emprendedora para innovar dentro de los procesos educativos. De aquí nuestro interés por realizar un análisis bibliométrico del desarrollo teórico sobre la innovación en los sistemas Educativos en México donde se involucran factores que impactan en el emprendimiento universitario.

## REVISIÓN DE LITERATURA.

Existen diversos estudios y conceptualizaciones sobre el emprendedurismo, por su parte Varela (2001) lo define como la persona o conjunto de personas que es capaz de percibir una oportunidad de producción o de servicio y ante ella formula libre e independientemente una decisión de consecución y asignación de los recursos naturales, financieros, tecnológicos y humanos necesarios para poder poner en marcha el negocio que crea valor a la economía y genera trabajo para el y muchas veces para otros. Stevenson (2000) define la actividad de emprender como perseguir la oportunidad más allá de los recursos que se controlen en la actualidad. El emprendedurismo es un campo emergente que se esfuerza por obtener legitimidad como disciplina independiente en las ciencias sociales y, en especial, el de las ciencias administrativas o gerenciales. El sistema educativo es el medio más expedito y eficaz para transmitir, socializar y re-crear la cultura, por lo tanto es desde la “escuela”, en sus diferentes niveles, que se puede materializar el propósito transformador, incluyendo dentro de los currículos y planes de estudio la cultura del emprendimiento en el proceso formativo, y desde allí proyectar la generación de oportunidades laborales, la obtención de riqueza, a través de las sinergias entre los distintos sectores e instituciones, para consolidar la educación como un derecho y creando las oportunidades para que toda la población se encamine hacia el desarrollo humano (Tibana & Duarte, 2009).

La Bibliometría es la ciencia que permite el análisis cuantitativo de la producción científica a través de la literatura, estudiando la naturaleza y el curso de una disciplina científica. consiste en la aplicación e métodos matemáticos y estadísticos para medir cambios cualitativos y cuantitativos que se producen en las publicaciones científicas (Camps, 2007). Flores et al., (2004) define la bibliometría como una “herramienta que permite elaborar un conjunto de indicadores referidos específicamente a la producción científica de una disciplina, proporcionando, de este modo, una base de discusión para estimar el grado de consolidación y desarrollo de la misma”. Los análisis bibliométricos permiten mejorar el acceso electrónico a los repositorios de publicaciones académicas a través de una mayor cantidad de bases de datos. (De Bakker, Groenewegen, & Den Hond, 2005).

## METODOLOGÍA

Esta investigación se orienta a una revisión del patrimonio teórico producido sobre los procesos innovadores en la educación donde se busca identificar factores que desarrollen las habilidades de emprendimiento entre los jóvenes universitarios de México. Se elaboró un análisis bibliométrico retrospectivo y descriptivo. Se utilizó como criterios de búsqueda en los campos año 2009 – 2014 y address México, Latinoamérica y España, pero no arrojaba resultados positivos, así que se decidió revisar que países llevaban la delantera en la investigación sobre el tema. Se incluyeron artículos originales, tesis, libros, papers. Para iniciar la investigación se requiere seleccionar y examinar los índices que permitan concluir sobre la situación siguiendo las propuestas expuestas en la literatura (Agudelo, Bretón-López, & Buena-Casal, 2004; Flores et al., 2004; Pérez et al., 2003)

Los artículos se obtuvieron de la base de datos Web of Knowledge del ISI( El Institute for Scientific Information) que fue fundado por Eugene Garfield en 1960 y adquirido por Thomson (Thompson Reuters) una de las mayores empresas de información. ISI mantiene Web of Knowledge una plataforma basada en la tecnología web y formada por una amplia colección de bases de datos bibliográficas, citas y referencias de publicaciones científicas de cualquier disciplina del conocimiento, tanto científico como tecnológico, humanístico sociológico. (Salvadores Santamaría, 2012). De cada material se analizaron los siguientes indicadores. Indicadores para la caracterización de la colaboración como: número de autores por documento, universidades por documento; Indicadores bibliométricos generales: la nacionalidad de los autores, cantidad de referencias bibliográficas, año de publicación de los artículos, tipo de trabajo realizado, idioma de publicación, número de producciones por universidades. De los 250 títulos que arroja la búsqueda utilizando las palabras claves “ innovation education entrepreneurship” “inovation education” “ model education” “entrepreneurship””higer education” “se les revisaron la introducción, resultados y conclusiones, los criterios de inclusión, de donde se obtuvo un total de 100 artículos que describían temas relacionado al estudio.

## RESULTADOS

Del total de los 250 registros extraídos de ISI, se encontró que 232 registros (92.80%) corresponden a artículos en sus diversas modalidades (ensayos, reportes de investigación, ponencias, estudios y documentos), 6 registros (2.4%) a reseñas bibliográficas, 3(1.2%) material editoriales. El estudio se realizó tomando como base únicamente los 100 registros.

### Indicadores de la Colaboración

a. número de autores por documento -Se determinó la existencia de un total de 102 autores de

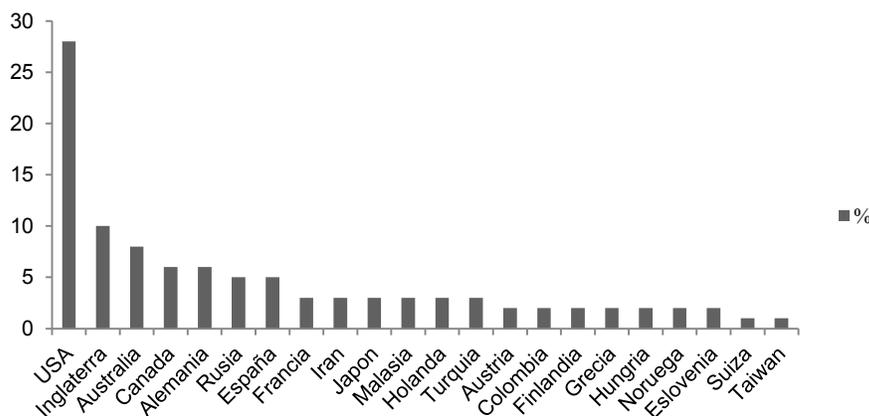
artículos, de éstos 98 (98%) únicamente publicaron un artículo cada uno y sólo 2 autores (2%) dos artículos.

- b. universidades por document-El nivel de colaboración entre las universidades es bajo solo el 20% de los trabajos son colaborativos, y tan solo se involucran 2 Instituciones por trabajo.

### Indicadores Bibliométricos Generales

a. La nacionalidad de los autores En cuanto a la procedencia geográfica de los 100 autores, se advierte que 28 (28%) son de USA, el 10% de Inglaterra, 8% de Australia, 6% Canadá al igual que de Alemania, 5% de Rusia y España, 3 % Latinoamérica, Francia, Iran, Japón, Malasia, Holanda, Turquía como se muestra en la Figura 1.

Figura 1: Nacionalidad de los Autores



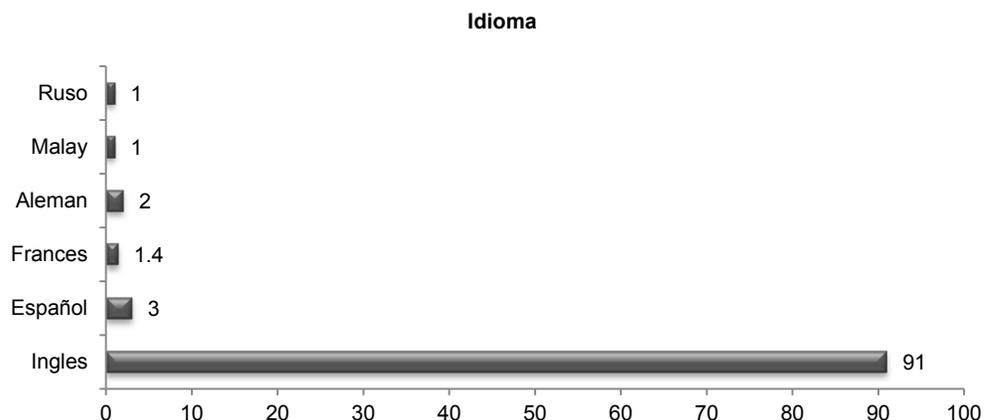
En esa figura se muestra la representación gráfica de las nacionalidades que representan a los autores de la muestra en el periodo del (2009 – 2013).

b. Año de publicación de los artículos Al analizar el número de artículos publicados por año se observa que de los 100 artículos editados durante los 4 años, el año 2013 es el que contabiliza mayor número de artículos (43), seguido por 2012 con 29 trabajos, 2009 con 21, 2011 con 4 y 2010 con 3 artículos. Como podemos observar las investigaciones en el tema han ido incrementándose, aunque no son aun representativa la presencia de Latinoamérica.

c. Tipo de trabajo realizado Los trabajos en la temática presentados en el periodo del 2009 al 2013 son principalmente artículos científicos con un 92%.

d. Idioma de publicación En la Figura 2. muestra que el 91% de los trabajos están escritos en Ingles, siendo el idioma oficial a nivel mundial.

Figura 2: Idiomas en Que se Presentan Los Artículos



*En esa figura se muestra la representación gráfica los idiomas en que están escritos los trabajos objeto de este análisis, donde el idioma ingles tiene una representación mayoritaria. Periodo del (2009 – 2013).*

e .Número de producciones por universidades. Al examinar la procedencia institucional, encontramos que Arizona State Univ, London Sch Hyg Trop Med, Russian Acad SCI, Univ de Florida, Univ Kebangsaan Malaysia, y la Univ Wollongong tienen 2 artículos por universidad. El resto de las Universidades en el periodo del 2009 al 2014 solo tienen un artículo por institución.

## CONCLUSIONES

Al realizar el análisis bibliométrico de las publicaciones relacionadas con la innovación educativa en México: factores internos que impactan al emprendimiento en base de datos Web of Knowledge, se observa que sólo tiene registrados 100 trabajos sobre el tema de un total de 10,000 publicaciones que la componen, siendo muy bajo el nivel de investigación teórico y experimental en el tema. El estudio confirma el incremento en las publicaciones lideradas por los países Estados Unidos de Norteamérica, Inglaterra, España y Alemania en el tema, y una baja representatividad de América Latina y México, Ello evidencia que la innovación educativa no se ha extendido en el contexto tanto en investigación teórica como empírica, lo cual se corresponde con el hecho de que no están claros los factores que impactan en el emprendedurismo universitario. Se reconoce un sesgo debido a que la base de datos tiene el 92 % de trabajos en el idioma inglés dejando de lado toda la producción científica de México y América Latina.

De los 104 autores registrados solo el 20% de ellos colaboran de manera intra-institucional mientras que su nivel de colaboración inter-institucional es casi nulo. El índice Price nos indica que el porcentaje de referencias utilizadas con menos de 5 años de antigüedad fue tan solo de 4, nos confirma que son muy pocas las publicaciones en el tema. El indicador h-index nos confirma que las referencias utilizadas en promedio en cada artículo es de 6 siendo bajo para la importancia planteada del tema en la actualidad. La bibliometría se utiliza en distintas ramas científicas, ya que se considera un método confiable y universal para medir la productividad del sector. (Camps, 2007). El presente análisis es la primera aproximación a los estudios bibliométricos relacionado al tema, así como las limitaciones identificadas se recomienda como futura línea de investigación desarrollar estudios bibliométricos comparando otras bases de datos y directorios donde estén indexadas publicaciones de México, así como países de América Latina como Scielo, Redalyc, Latindex y otros e incrementar los indicadores bibliométricos a aplicar.

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# AFECTACIONES POR EL SERVICIO DE CONSOLIDACIÓN Y DESCONSOLIDACIÓN DE CARGA DE LOS RECINTOS FISCALIZADOS DEL PUERTO DE MANZANILLO, COLIMA, MEXICO

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## RESUMEN

*La presente investigación tienen como objeto mostrar las causas particulares por las que se provocan afectaciones a los usuarios de los recintos fiscalizados en sus operaciones de comercio exterior y mercancías almacenadas en contenedor dentro de los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México, durante la prestación del servicio de desconsolidación y consolidación de carga, las afectaciones que de esto se deriva, responsables de dicha situación, así como la influencia desfavorable que esto ha generado en los usuarios mencionados. La exploración de la información fue a través de una investigación de campo con la elaboración y aplicación de un instrumento de recopilación de información, que para el caso en concreto fue el cuestionario, llegándose a los siguientes resultados: que la principal causa por la que se generan afectaciones sobre las operaciones de comercio exterior y las mercancías de los usuarios de los recintos fiscalizados es la negligencia del personal que realiza el manejo directo de la mercancía, resaltando que se trata en su mayoría de personal afiliado a un sindicato y su falta de capacitación, responsabilizándose principalmente al mismo recinto fiscalizado, teniendo como principales consecuencias el daño o maltrato de la mercancía, la pérdida o destrucción de la misma, el retraso en la logística de la operación de comercio exterior, generando desfavorablemente decisiones en los usuarios como el cambio de recinto fiscalizado para el manejo de sus operaciones de comercio exterior por la falta de competitividad en sus servicios.*

**PALABRAS CLAVE:** Servicio, causas, afectaciones, mercancía, contenedor, puerto, costos, competitividad

## ABSTRACT

*This research has as object show particular causes by which cause damages to users of the sites audited in its foreign trade and goods stored in container operations within controlled enclosures located in the port of Manzanillo, Colima, Mexico, during the provision of the service of deconsolidation and consolidation of cargo the effects arising from this, responsible for this situation, as well as the unfavorable influence that this has generated in the mentioned users. The exploration of information was through field research with the development and implementation of a tool in gathering information that for the specific case was the questionnaire, leading to the following results: the main cause that generates effects on foreign trade operations and goods of the users of controlled enclosures is negligence of the personnel responsible for performing the direct handling of the goods, highlighting that it is mostly affiliated to a Trade Union and their lack of training staff, are primarily responsible to the same trade zone, having as main impact damage or abuse of the goods, the loss or destruction of the same, the delay in the operation of foreign trade logistics, generating decisions adversely in users as the change of premises*

*inspected for the management of their foreign trade operations by the lack of competitiveness in services.*

**KEYWORDS:** Service, Causes, Effects, Merchandise, Container, Port, Costs, Competitiveness

## **INTRODUCCIÓN**

La ampliación del Puerto de Manzanillo en el estado de Colima proporcionará condiciones para escalar posiciones dentro de la red mundial de puertos y constituirse como un eje de apoyo regional e internacional que obtiene carga de la interconexión marítima y las operaciones de transbordo. El puerto de Manzanillo, cuenta con las mejores condiciones geográficas y ventajas comparativas; ya que se ubica en la intersección y cruce de las rutas principales del Pacífico. Significa para México la principal entrada de contenedores, con una participación del 68% en el Pacífico; lo que representa el 46% del Total de TEU'S del país. Por ello es uno de los más importantes a nivel nacional debido a su volumen de operaciones, relativo al movimiento de mercancía contenerizada y despachos, dichas operaciones portuarias han sido brindadas con infraestructura y servicios de clase mundial, dentro de un ambiente de libre competencia, para cubrir y satisfacer eficientemente las exigencias de los usuarios.

La política económica de los puertos mexicanos consiste en ampliar su cobertura, modernizar la infraestructura existente y proporcionar servicios confiables y de calidad para toda la población. Pero el desarrollo de cada una de las terminales portuarias, desde infraestructura y mejora de servicios hasta la diversificación de los mismos, ha sido moderado y necesita aumentar, ya que el sector de puertos se ha convertido en uno de los sectores económicos del país. Actualmente al interior de los recintos fiscalizados existen prácticas laborales no confiables para la integridad de las mercancías, lo anterior derivado de la ineficiencia e ineficacia de los servicios desempeñados por las operadoras portuarias, específicamente durante el servicio de consolidación y desconsolidación de las mercancías que son transportadas y almacenadas en un contenedor. Esta situación pudiera estar entorpeciendo el cumplimiento a las demandas de los usuarios, causando a su vez que los clientes sustituyan su recinto fiscalizado por otro que les garantice mejor servicio, o tal vez cabe la posibilidad de que las líneas navieras sean quienes estén buscando otros puertos para realizar el descarga de su mercancía, derivado del mal servicio.

La realización de una mala manipulación de las mercancías en los recintos fiscalizados genera afectaciones operativas, económicas y materiales, que se ven reflejadas en retrasos en la logística de importación o exportación, costos derivados de gastos, pérdida o daño sobre las mercancías, para los usuarios, llamémosles agentes aduanales, importadores o exportadores que requieren de los servicios de manejo, almacenaje o custodia de sus mercancías. Por lo que el blanco de la investigación es identificar las afectaciones y sus causas que pueden generar los servicios de consolidación y desconsolidación de mercancías que son transportadas a través de un contenedor, cuyo manejo y custodia ha sido encomendado a los recintos fiscalizados del puerto de Manzanillo, Colima, México y en base a los resultados de la investigación proponer la puesta en marcha de las estrategias necesarias para el buen trato de las mercancías para que lleguen a su destino final en condiciones óptimas, evitando así gastos innecesarios e interrupciones en la logística de las operaciones de comercio exterior de los usuarios.

## **REVISIÓN LITERARIA**

El comercio internacional para Witker J. y Hernandez L. (2002:10) es el conjunto de movimientos comerciales y financieros, y en general todas aquellas operaciones cualquiera que sea su naturaleza, que se realicen entre naciones; es pues un fenómeno universal en el que participan las diversas comunidades humanas. Las economías que participan del comercio internacional se denominan economías abiertas. Este proceso de apertura externa se inició fundamentalmente en la segunda mitad del siglo XX, y de forma espectacular en la década de 1990, al incorporarse las economías latinoamericanas, de Europa del Este y el oriente asiático, todo esto como producto de la globalización.

Globalización para Hill Ch. (2007:5) se refiere al cambio hacia una economía mundial más integrada e interdependiente, teniendo según el autor de cita dos caras: Globalización de los mercados y globalización de la producción. La Globalización de los mercados para Hill Ch. (2007:6) consiste en la fusión de los mercados nacionales que por tradición eran distintos y estaban separados, en un solo mercado mundial enorme y la globalización de la producción para el mismo Hill Ch. (2007:7) se refiere a la subcontratación de bienes y servicios a diversos lugares del mundo para aprovechar las diferencias nacionales de costos y calidad de los factores de producción (como mano de obra, electricidad, tierra y capital). Ambos conceptos refieren a la participación de diferentes estados en una sola economía o una economía global o internacional donde se interactúa para generar un beneficio en función de las ventajas o bienes que el otro país o que los otros países ofrecen. Cada vez existe mayor interrelación entre lo que ocurre en los mercados internacionales y lo que sucede en la economía de un país determinado.

Ahora bien en 1990, el promedio de tiempo que se requería para que una corporación procesara y entregara mercancía de su almacén a un cliente era de 15 y 30 días, o incluso más, sin embargo, en esa misma década ocurre un cambio masivo y global como resultado de la tecnología de la información; el comercio mundial fue afectado de manera irreversible por la computación, la entrada del internet y diversas operaciones y prácticas en transmisión de la información. En esta etapa la realidad de la continua conectividad en los negocios ha establecido un nuevo orden de relaciones entre empresas llamado gestión de la cadena de suministros, las practicas se renuevan y se pueden fabricar productos conforme requerimientos específicos y ser entregados de forma rápida en cualquier parte del globo.

La gestión de la cadena de suministros Según Anaya J. (2011:242) es el conjunto de actividades de coordinación y colaboración con los diferentes canales de suministro, tanto internos como externos, así como los proveedores y clientes relacionados con la planificación, gestión del abastecimiento, compra y distribución física de productos. Esencialmente la gestión de la cadena de suministros para el mismo Anaya J. (2011:242) integra las actividades de suministros y gestión de la demanda a lo largo del denominado eje del producto entre diferentes empresas relacionadas, de tal manera que se puede hablar de una red autoorganizada de negocio que coopera para proporcionar productos y servicios. Hoy día ya podemos decir que la competencia no se da entre empresas sino entre cadenas de suministros, estructuras que se pueden definir según Akermans (Cit. por Anaya J. 2011) como grupos de organizaciones semi-dependientes, cada una con sus propias capacidades, que colaboran en una constelación en constante cambio y que atienden a uno o más mercados con el fin de seguir los objetivos empresariales específicos de la colaboración. Dentro de la cadena de suministros, los puertos son un eslabón que facilita el intercambio comercial internacional; en definición un puerto es el conjunto de obras, instalaciones y servicios que proporcionan el espacio de aguas tranquilas necesarias para la estancia segura de los buques, mientras se realizan las operaciones de carga, descarga y almacenaje de las mercancías y el tránsito de viajeros. En general, las funciones de un puerto son: comercial, intercambio modal del

transporte marítimo y terrestre, base del barco y fuente de desarrollo regional. Entre las funciones de índole específica se encuentran: actividad pesquera, de recreo y de defensa.

México tiene una gran actividad económica para la que ha desarrollado una importante infraestructura portuaria. Aunque cada una de las costas del país tiene capacidad para recibir embarcaciones, la importancia de un puerto es considerada a partir de su capacidad de administración integral, y de operación. Los puertos Mexicanos operan a través de un sistema de concesiones del gobierno federal, llamada Administración Portuaria Integral (API), en la actualidad existen 97 puertos, de los cuales los 16 principales son administrados por La Secretaría de Comunicaciones y Transportes, aunque existen otros tres operados por el Fondo Nacional del Fomento al Turismo (FONATUR) como son Cabo San Lucas, Baja California Sur, Ixtapazihuatanejo, Guerrero y Huatulco, Oaxaca. Los puertos del país reciben y envían diariamente miles de toneladas de bienes, cuyas operaciones representan ingresos para el gobierno federal a través de las API's. Sin embargo, es necesaria una continua inversión en los puertos ya que se requieren servicios logísticos, que hagan posible desde el ingreso de la mercancía, hasta su despacho al destino final, por tanto, se desarrollan estrategias para su recepción, vigilancia, servicios administrativos, almacenamiento, y transportación.

Es importante destacar que la carga que se traslada vía contenedor es la que más se mueve en los puertos de Mexicanos, a nivel mundial el movimiento de la carga vía contenedores, se constituye en el instrumento de transporte que ha revolucionado la logística a nivel mundial, ya que mediante este recipiente de veinte pies de largo o cuarenta pies de longitud, puede movilizarse todo tipo de mercancías.

En México para la realización de las transacciones comerciales internacionales se necesita de un Agente Aduanal, mismo que se han convertido en una figura de vital importancia en la correcta gestión de la cadena de suministros, el agente aduanal para Acosta F. (2005:11) es la persona física autorizada por la secretaria de hacienda y crédito público, mediante la expedición de una patente, para ocuparse a nombre y por cuenta ajena de los actos y las formalidades del despacho aduanero y celebrar los actos civiles y mercantiles necesarios para recibir las mercancías, así como para hacerlas llegar a su destino.

Entonces se puede entender que el agente aduanal es el encargado de llevar a cabo el proceso de importación y exportación de las mercancías en el país, sin embargo, cuando éste ejecuta dicho proceso, se ve involucrado con diferentes actores que pueden contribuir o afectar al fácil y rápido desarrollo del proceso para la realización de la operación de comercio internacional y su implícita gestión de la cadena de suministros. Como ya se expresó, en México para los trámites de importación y exportación de mercancías, es decir para la gestión del despacho aduanal o aduanero, es necesario un agente aduanal.

Ahora bien, se entiende como despacho aduanero para Reyes E. (2009:23) una serie de procesos o procedimientos que están establecidos en la ley aduanera, esta es una ley de carácter procedimental a fin de facilitar, por que así está el objeto de la ley en su artículo 1, la entrada y salida de las mercancías, asimismo esta disposición jurídica establece que el despacho aduanero no es un acto ni autónomo de parte de los contribuyentes, ni único para efecto de la autoridad sino que prevé el que todas las partes se involucren con la ayuda de los agentes y apoderados aduanales. Cuando las mercancías atraviesan el proceso del despacho aduanero, dentro de los actos que constituyen el despacho se encuentra el depósito ante la aduana, que para Reyes E. (2009:33) la mercancía queda en depósito ante la aduana con el objeto de ser desaduanizada, sometiéndola a alguno de los regímenes aduaneros.

El depósito ante la aduana conforme lo establece el artículo 23 de la ley aduanera vigente en México, se realiza en un recinto fiscal o un recinto fiscalizado, entendiéndose al primero conforme al artículo 14 primer párrafo de la ley citada como aquellos lugares en donde las autoridades aduaneras realizan indistintamente las funciones de manejo, almacenaje, custodia, carga y descarga de las mercancías de comercio exterior, fiscalización, así como el despacho aduanero de las mismas, y en el caso de los recintos fiscalizados, el mismo numeral de cita lo define como concesión para que los particulares presten los servicios de manejo, almacenaje y custodia de mercancías, en inmuebles ubicados dentro de los recintos fiscales, sin embargo, la legislación aduanera mexicana también prevé la posibilidad de denominarle como recinto fiscalizado al inmueble donde los particulares tengan el uso o goce y que sea colindante con un recinto fiscal o de un inmueble ubicado dentro o colindante a un recinto portuario, tratándose de aduanas marítimas, fronterizas, interiores de tráfico ferroviario o aéreo, y que hayan solicitado al Servicio de Administración Tributaria, dependiente de la Secretaría de Hacienda y Crédito Público de México, la autorización para prestar los servicios de manejo, almacenaje y custodia de mercancías. Es decir los recintos fiscalizados son concesiones o autorizaciones que se otorgan a particulares quienes son responsables de las mercancías; dicha concesión o autorización sólo se otorgará a personas morales constituidas de conformidad con las leyes mexicanas y cumplan con los requisitos y condiciones que se señalen en las bases de licitación que al efecto emita el SAT.

En relación a todo lo anterior, debe de quedar claro que dentro de la gestión de la cadena de suministros, uno de los elementos más importantes es la logística, que para Trejo P. (2008:31) el concepto de logística aplicado al comercio exterior, es el conjunto de operaciones desarrolladas en apoyo del intercambio o flujo de mercancías o servicios en los mercados mundiales, misma que comprende la consecución, mantenimiento, seguridad y transporte de bienes, con el fin de satisfacer en forma eficiente con el menor costo, esfuerzo y tiempo posibles a los clientes o consumidores. En pocas palabras la logística se traduce en ser competitivos en un entorno globalizado del comercio mundial. Asimismo Reyes E. (Cit. por Trejo P. 2008) la logística representa un conjunto de actos y actividades interrelacionados entre si y que interactúan para mejorar; en términos de tiempo, dinero y esfuerzo, la entrega de un producto al consumidor final. Dentro del proceso logístico encontramos al despacho aduanero que realiza el Agente Aduanal, mismo que sufre afectaciones derivado de los servicios contratados y que son prestados por los recintos fiscalizados en procesos como la consolidación y desconsolidación de la carga o mercancías transportadas a través de un contenedor

## **METODOLOGÍA**

El objetivo principal de esta investigación es conocer las causas particulares por las que se provocan afectaciones a los usuarios de los recintos fiscalizados en sus operaciones de comercio exterior y mercancías almacenadas en contenedor dentro de los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México, durante la prestación del servicio de desconsolidación y consolidación de carga. Resulta interesante resolver algunas cuestiones: ¿Cuáles son la causas por las que se genera la ineficiencia durante la realización del servicio de desconsolidación y consolidación de carga que prestan a las mercancías almacenadas en contenedor los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México? ¿Quiénes son los principales responsables respecto de la ineficiencia en el manejo por parte de los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México de las mercancías almacenadas en contenedor? ¿Cuáles son las afectaciones relacionadas con la ineficiencia durante la realización del servicio de desconsolidación y consolidación de carga que prestan a las mercancías almacenadas en contenedor los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México? ¿Qué decisiones ha generado respecto de la percepción que se ha formado en los

usuarios de los servicios de los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México, respecto de la ineficiencia durante la prestación del servicio de desconsolidación y consolidación de carga?

Además se pueden enlistar algunos objetivos específicos que se cumplirán al término de la investigación: Establecer las causas particulares por las que se provocan afectaciones a los usuarios de los recintos fiscalizados en sus operaciones de comercio exterior y mercancías almacenadas en contenedor dentro de los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México, identificar los principales responsables respecto de la ineficiencia en el manejo por parte de los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México de las mercancías almacenadas en contenedor, identificar las afectaciones relacionadas con la ineficiencia durante la realización del servicio de desconsolidación y consolidación de carga que prestan a las mercancías almacenadas en contenedor los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México, conocer las decisiones que se han generado respecto de la percepción que se ha formado en los usuarios de los servicios de los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México, respecto de la ineficiencia durante la prestación del servicio de desconsolidación y consolidación de carga.

El cumplimiento de los objetivos planteados, así como la resolución a las preguntas elaboradas para la investigación, conducen una hipótesis general. Durante la prestación ineficiente del servicio de desconsolidación y consolidación de carga por de los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México, se provocan afectaciones a los usuarios de los recintos fiscalizados en sus operaciones de comercio exterior y mercancías almacenadas en contenedor. En el transcurso de la investigación se determinó la cantidad de agencias aduanales ubicadas en el municipio de Manzanillo, Colima, México que son usuarios de los servicios de los recintos fiscalizados y al tenerlas plenamente identificadas se siguió el método inductivo, ya que se planteó que durante la prestación del servicio de desconsolidación y consolidación de carga por de los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México, se provocan afectaciones a los usuarios de los recintos fiscalizados en sus operaciones de comercio exterior y mercancías almacenadas en contenedor, que impactan negativamente la llegada a destino final de las mercancías y por consiguiente afectaciones económicas para los importadores y/o exportadores que realizan operaciones de comercio exterior por el puerto de Manzanillo, Colima, México, situación que podría ser aplicada en general en cualquier otro tipo de organización para identificar estas situaciones y que su desempeño sea eficiente.

La investigación tendrá un enfoque cuantitativo ya que para comprobar la hipótesis, el estudio se basará en el instrumentos de medición aplicado, dicho instrumento es un cuestionario que se podrá tabular de manera estadística, a través de herramientas informáticas como el Excel. Cabe hacer mención que la información analizada fue obtenida de una encuesta que se aplicó a una muestra constituida por las agencias aduanales ubicadas en el municipio de Manzanillo, Colima, México que es de 81, sobre la cual se realizó el estudio estadístico. Es importante señalar que a fin de determinar la muestra se utilizó la fórmula de muestra de poblaciones finitas, considerando un universo finito cuando la población objeto de estudio es menor a 500000. La investigación de campo se realizó durante el 2012.

La población a la que se le aplicó la encuesta se determinó en base al padrón de Agencias Aduanales que se encuentran asociadas a la Asociación de Agentes Aduanales del Puerto de Manzanillo, Colima, A. C. (AAPUMAC), de lo anterior se desprende una población de 103 Agencias Aduanales asociadas a esta organización y que se encuentran ubicadas en el puerto de Manzanillo, Colima, México, de las cuales nuestra muestra constó de 81 entidades a aplicarles la

encuesta. Las personas a las que se les aplicó la encuesta fueron los dependientes autorizados (tramitadores) del departamento de operación, pertenecientes a cada una de las 81 agencias aduanales para tener un valor más correcto en las gráficas producto de la tabulación de resultados, estos individuos tienen como característica principal el laborar para una agencia aduanal y participar en las operaciones de comercio exterior que realizan como parte de sus servicios las agencias aduanales ubicadas en el puerto de Manzanillo, Colima, México.

Se elaboró un cuestionario de 15 preguntas que apoyo a saber cuáles son las causas particulares por las que se provocan afectaciones a los usuarios de los recintos fiscalizados en sus operaciones de comercio exterior y mercancías almacenadas en contenedor dentro de los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México durante la prestación del servicio de desconsolidación y consolidación de carga, las afectaciones que de esto se deriva, responsables de dicha situación, así como la influencia desfavorable que esto ha generado en los usuarios mencionados.

## RESULTADOS

Con base en información proporcionada por AAAPUMAC, A. C., se aplicaron un total de 81 cuestionarios. Con base en la investigación de campo realizada, se puede determinar el estado de las agencias aduanales en el 2012, respecto de las afectaciones por el servicio de consolidación y desconsolidación de carga de los recintos fiscalizados del puerto de manzanillo, Colima, México. Después de haber realizado la investigación correspondiente, de haber tabulado y graficado los datos y finalmente haber realizado el análisis y la respectiva interpretación de los datos se han obtenido los siguientes resultados: En relación al planteamiento de la ineficiencia en los servicios de desconsolidación y consolidación de carga que se presta los recintos fiscalizados sobre mercancía transportada en contenedor El 69% de los encuestados respondió que existe ineficiencia durante el manejo de mercancía contenerizada, mientras que el 31% contestó que no existe ineficiencia en el manejo de mercancías durante las servicios de consolidación y desconsolidación debido a que mencionaron que no han presentado algún tipo de problemática con el recinto.

Ahora bien en relación a las causas de la ineficiencia durante este proceso, los encuestados respondieron la principal causa de la ineficiencia es la negligencia del personal de estiba, seguido del 21% que señalo que era falta de supervisión del personal del recinto fiscalizado y un 18% expresando que la premura o celeridad con la que se presta el servicio son la principal causa de ineficiencia, atinente a el principal responsable de la ineficiencia y las afectaciones que de esto se deriva, por la prestación del servicio de desconsolidación y consolidación de carga que prestan los recintos fiscalizados, los encuestados expresaron considerar como principal responsable al recinto fiscalizado con un 63% y con un 20% al personal que manipula directamente la mercancía, asimismo resulto interesante conocer si en alguna ocasión los usuarios habían sufrido algún daño o deterioro en la mercancías en donde el 80% de la muestra expreso afirmativamente esta situación, señalando que los principales daños se relacionaban con el maltrato o destrucción de la mercancía con el 29 y 30 por ciento respectivamente, así como la destrucción o daño sobre el embalaje de las mercancías y el daño debido a la humedad con un 19% y 17% de las respuestas, concerniente a las decisiones que se están tomando por parte de los propietarios de las mercancías y/o consignatarios, debido al mal servicio que están recibiendo por parte de los recintos, los encuestados respondieron que la principales decisiones provocadas eran las de cambio de recinto fiscalizado, cambio de línea naviera y la de cambio de puerto de destino con el 45, 20 y 21 por ciento respectivamente, en relación a las afectaciones económicas, el 80% de la muestra afirmo tener afectaciones por los servicios de desconsolidación y consolidación de carga,

externando que la pérdida de la mercancía, pérdida de clientes por parte del importador y/o exportador o agente aduanal y disminución respecto del valor de las mercancías, son las principales afectaciones económicas con el 47, 25 y 20 por ciento respectivamente, en relación a las afectaciones operativas o logísticas,

Los encuestados respondieron que el retraso en la realización del despacho aduanero de las mercancías, en la carga del vehículo y retraso en la salida de las mercancías del almacén, son las principales afectaciones en la operación o logística con los porcentajes del 41, 29 y 23 por ciento respectivamente del total de respuestas, también se les cuestiono respecto de la existencia de causas que justificaran la ineficiencia en el servicio de consolidación y desconsolidación de carga y respecto del maltrato de mercancías, el 58% del total afirmó no existir causas que justifiquen la ineficiencia y en relación al maltrato de los bienes en contenedor, el 67% señaló que la rapidez con la que se realiza la operación o la prestación del servicio no era causa de justificación del maltrato, encontrando como respuesta en relación al planteamiento de la causa principal de ineficiencia del servicio era con 51% de los resultados la falta de capacitación al personal que manipula las mercancías y en segundo término la falta de espacios para el almacenamiento y/o manipulación de las mercancías con un 18% de los resultados, por último se planteó a la muestra la posibilidad de la implementación de un sistema de gestión de calidad para la mejor en la prestación de los servicios a lo que el 87% expreso que un sistema de esta naturaleza mejoraría el servicio, siendo el área operativa el departamento del recinto fiscalizado en donde se debería de implementar según lo respondido por el 82% de los que respondieron, considerando el 91% de las respuestas que para el puerto de Manzanillo, Colima, México, la implementación de un sistema de gestión de calidad en la prestación de los servicios de consolidación y desconsolidación de carga como una ventaja competitiva.

## CONCLUSIONES

La calidad y eficiencia con la que los recintos fiscalizados ofrecen a los agentes aduanales como usuarios de sus servicios, resulta de suma importancia de acuerdo a la investigación realizada, pues a partir de las opiniones que externan los usuarios entrevistados, se pudo constatar que la ineficiencia en la prestación de los servicios de consolidación y desconsolidación de carga debido a la falta de capacitación al personal que manipula las mercancías y en segundo término la falta de espacios para el almacenamiento y/o manipulación de las mercancías y el equipo adecuado para estas maniobras generan la ineficiencia y por consiguiente se causan afectaciones de naturaleza económica, operativa o logística y en todo caso incluso hasta moral, ya que se genera una percepción negativa por parte de los clientes de los mismos usuarios como los son los importadores y/o exportadores y a su vez de estos con sus clientes respectivamente, que generan decisiones tan extremas como las de cambiar de puerto destino para la realización de sus operaciones de comercio exterior, afectando directamente a la calidad de los servicios de los agentes aduanales, tal como se registró en la indagatoria.

Se puede sustentar que la calidad con la que dichos recintos prestan sus servicios influye directamente a la calidad de los servicios que los agentes aduanales prestan a sus clientes, ya que el despacho aduanero de mercancías que es encomendado a los agentes de aduanas es un elemento importantísimo dentro de la logística que es un factor substancial como lo señala Long D. (2006:5) dentro del proceso de la cadena de abastecimiento que planea, implementa y controla eficiente y efectivamente el flujo y almacenamiento de bienes, servicios e información desde el punto de origen hasta el punto de consumo, para satisfacer las necesidades del cliente. De esta manera si los servicios de los recintos fiscalizados se prestan totalmente con la calidad que exigen los usuarios, se podría obtener una eficaz realización del despacho, un desaduanamiento ágil de

mercancías, un correcto manejo de las mismas, una reducción de costos en el despacho, además de la facilitación del almacenamiento de la carga, y por consiguiente la reducción en los costos de la gestión de la cadena de suministros y por consiguiente la disminución en el encarecimiento de los bienes que son ofrecidos al consumidor final, alcanzando con esto la competitividad en los servicios prestados ya que como lo establece Porter M. (2009:33) No se puede entender la ventaja competitiva si se examina la empresa en su conjunto. La ventaja nace de muchas actividades discretas que ejecuta al diseñar, fabricar, comercializar, entregar y a poyar su producto. Que para este caso nos referimos al servicio otorgado a sus usuarios los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México.

Por tanto se realizan las siguientes recomendaciones sugerencias: Se debe contar con una capacitación constante al personal indicado respecto al servicio al cliente, contar con una capacitación constante al personal indicado respecto al correcto manejo de las mercancías, los directivos deben programar auditorías internas para evaluar la calidad de los empleados, y cerciorarse de que estén en constante mejoramiento, evaluar constantemente la satisfacción del cliente, respecto a sus servicios, apegarse a los tiempos acordados con los clientes. Por todo lo antes expuesto se puede afirmar que en un mundo globalizado las naciones deben que trabajar unidas para conseguir un desarrollo y evolución equitativa, todo en virtud de la interdependencia que el fenómeno de la globalización genera, hoy México depende de factores externos para crecer o decrecer, factores tales como la reactivación económica norteamericana, la creciente competencia de China, Europa del Este, Centro y Sudamérica e India en los mercados de las exportaciones Mexicanas, por ello no basta que las autoridades en todos los contextos hagan su función, para que México sea un país menos costoso para el comercio internacional, también es importante como señala Reyes E. (2006:63)

La suma de esfuerzos para alcanzar la competitividad globalizada, pero no es lo único, empresarialmente debemos cumplir con más metas y tener una mejor política industrial. Por eso es que se establece por el mismo Reyes E. (2006:64) el esfuerzo de todos es lo que puede hacer mejor a México un país competitivo, productivo y generador de empleos. La tarea del sector privado, bien puede sintetizarse en los siguientes puntos, enunciativamente más nunca limitativamente: Capacitación y tecnología, desarrollo de proveedores, infraestructura y logística, orientación a nichos de mercados específicos y especializados, mantenimiento de la productividad y calidad con estándares mundiales y una visión social y regional. Como se ha constatado, con este trabajo de investigación de campo se comprobó la hipótesis planteada, en la cual se afirma que durante la prestación ineficiente del servicio de desconsolidación y consolidación de carga por de los recintos fiscalizados ubicados en el puerto de Manzanillo, Colima, México, se provocan afectaciones a los usuarios de los recintos fiscalizados en sus operaciones de comercio exterior y mercancías almacenadas en contenedor.

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# AVAPRENEURS JÓVENES: UNA COMBINACIÓN DEL BUEN USO Y MANEJO DE LAS 'TICS' CON UNA VISIÓN ESTRATÉGICA SOBRE LOS NEGOCIOS

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## RESUMEN

*Los jóvenes nacieron y crecieron en un entorno marcado por el cambio tecnológico en la era del capitalismo informacional, desigual y post-moderno. En este contexto, destacamos el papel asumido por muchos de ellos, de ser parte de una generación que tiene la capacidad para crear y gestionar empresas basadas en el conocimiento. Así, el objetivo de este trabajo consiste en interpretar el comportamiento de un emprendedor virtual -avapreneur- joven para identificar través de la narrativa biográfica cómo empezó su negocio, cómo percibe su actuación y cuáles son las acciones y motivaciones que determinan comportamiento empresario.*

**PALABRAS CLAVES:** jóvenes - emprendedores virtuales - biografías

## YOUNG AVAPRENEURS: A COMBINATION OF GOOD USE AND GOOD MANAGEMENT OF 'TICS' WITH A STRATEGIC VISION ON BUSINESS

### ABSTRACT

*Young people were born and raised in an environment marked by technological change in the age of informational capitalism, uneven and post-modern. In this context, we emphasize the role played by many of them, that are part of a generation that has the ability to create and manage knowledge-based companies. Thus the aim of this work is to interpret the behavior of a young avapreneur to identify through biographical narrative, how he started his business, how perceived his performance and what are the actions and motivations that determine their entrepreneurs actions.*

**JEL:** M10 – M20

**KEYWORDS:** Youth - Avapreneurs - Biographies

## INTRODUCCIÓN

Los jóvenes nacieron y crecieron en un ambiente marcado por el cambio tecnológico en la era del capitalismo informacional, desigual y post-moderno. En línea con esto Feixa (2006) reconoce que en la actualidad un rasgo distintivo que identifica a muchos jóvenes tiene que ver con su acceso a las nuevas tecnologías desde que tienen uso de razón. En este contexto, caracterizado por Castells (1998) como economía global, informacional y que además funciona en red, destacamos el rol que están asumiendo muchos de ellos, quienes aprovechando las ventajas derivadas del buen uso y manejo que hacen de las nuevas tecnologías de la información y la comunicación -tics-, son parte de una generación que tiene la capacidad de crear y gestionar emprendimientos de negocios

basados en el conocimiento. En relación a esto, entendemos que estudiar el accionar de estos emprendedores jóvenes a través de su propio relato, resulta cada vez más importante no solo porque emergen como un nuevo colectivo social diferenciado, con habilidades innatas que facilitan el desarrollo de sus propios emprendimientos virtuales, sino por la necesidad de comprender situaciones y vivencias personalísimas vinculadas con la creación y gestión de su propia empresa dado que además, en general, estas habilidades y acciones han resultado menos observadas y estudiadas desde el punto de vista de la economía y del análisis de las decisiones estratégicas a nivel empresarial. Así, sobre la base de los planteos previos **el objetivo perseguido** con este trabajo tiene que ver con interpretar el comportamiento de un avapreneur joven para identificar través de la narrativa biográfica, cómo comenzó el negocio, cómo percibe su desempeño y cuáles son las acciones y motivaciones que determinan su accionar empresarial. La finalidad perseguida con este trabajo tiene que ver con discutir estrategias de aproximación a este sector particular de los emprendedores: los emprendedores que son jóvenes y además desarrollan negocios virtuales. En lo que sigue hacemos referencia al encuadre teórico del trabajo, luego describimos la metodología utilizada, a continuación se presentan los resultados del trabajo empírico y por último las conclusiones.

### **BREVE REVISIÓN DE LA LITERATURA**

Parte de la revisión de la literatura aquí realizada se vincula al proyecto de investigación “eENTREPRENEURSHIP: un análisis exploratorio del proceso de creación de empresas virtuales en Mar del Plata”. Dirección y co-dirección: Mg. N. Gentile y Dra. F. Baltar (FCEYS-UNMDP). Investigadora: M. Artigas. El emprendedor como agente de cambio económico-productivo ha provocado la creación de diferentes programas de investigación alrededor de su figura. Kantis (2003a: 4) destaca que “La creación de nuevas empresas se ha convertido cada vez más en un eje estratégico de las políticas de desarrollo productivo (...) debido a la existencia de crecientes evidencias acerca de que hay una relación positiva entre el surgimiento de emprendedores y la diversificación del tejido productivo; la creación de puestos de trabajo; la regeneración de los espacios regionales y, por último, el crecimiento económico.” Brunet y Alarcón (2004: 82) sostienen además que la «empresarialidad» es uno de los temas que ha recibido mayor atención durante los últimos años dado el “amplio consenso en torno a que los empresarios juegan un papel importante en las economías de mercado o en las mixtas, así como la importancia de los «nuevos empresarios» para movilizar los recursos económicos, generar empleo y crear riqueza (...) [a pesar de que, de acuerdo a los autores] paradójicamente, la unidad de análisis principal en el estudio de las características de la actividad económica ha sido principalmente la empresa y no el empresario”.

Galindo Martín y Méndez Picazo (2008: 29) observan que “En las últimas décadas, se ha venido prestando una especial atención a lo que se ha denominado entrepreneurship, término que se ha traducido en ocasiones como «emprendedor». Esto es, aquella persona o personas que desean crear y llevar a cabo un negocio, esto es, desarrollar una actividad productiva”. En relación esto, se destaca la creación del Global Entrepreneurship Monitor Consortium (GEM, <http://www.gemconsortium.org>), el mayor proyecto de investigación internacional que analiza la propensión de la población adulta de un país para participar en actividades emprendedoras, ideado en 1997 por investigadores de la London Business School y Babson College.

El GEM hace una recolección de información primaria a partir de aplicar un cuestionario estructurado a adultos mayores de 18 años y realizar una encuesta a expertos en cada país sobre temas específicos del contexto emprendedor a nivel nacional. Dicho programa, si bien ofrece la ventaja de disponer de una base de datos armonizada, sistematizada y comparable a nivel

internacional, que permitiría sustentar el diseño de políticas de fomento al emprendedor, tiene la contra de no permitir un análisis focalizado y contextualizado de la realidad en la que se crean las empresas y se inician los emprendimientos, a la vez que pasa por alto lecturas subjetivas de los empresarios cuyos rasgos personalísimos coadyuvan a comprender el proceso emprendedor. Esta situación, está en línea con lo que ocurre con otros modelos teóricos orientados a la descripción del proceso de creación de empresas, planteados desde diferentes disciplinas que parecieran orientarse fundamentalmente a describir y analizar los factores que inciden del lado de la demanda del emprendedor o empresario, esto es, factores asociados a la estructura de oportunidades (Reynolds, 1991) y en menor medida, aparecen volcados a estudiar las características asociadas al propio emprendedor o hacedor de la empresa (McClelland, 1961; Gibb y Ritchie, 1982; Shapero y Sokol, 1982). Jaramillo y Parodi (2003: 21) luego de mencionar que en los últimos años “ha crecido el interés por explicar los rasgos particulares de quienes optan por tomar riesgos y crear su propio empleo” destacan que los avances empíricos que se han dado están lejos permitir entender las motivaciones y las características que están presentes en el proceso de formación del emprendedor. Reynolds (1997) por su parte, afirma que analizar el proceso de creación de empresas y/o desarrollo de emprendimientos implica, no sólo estudiar el momento de ingreso de la empresa al mercado, sino también supone reconocer las etapas previas vinculadas con la concepción-gestación-incubación que realiza un agente [el emprendedor y/o empresario] que decide involucrarse en la actividad empresarial junto al ingreso al mercado propiamente y la posterior etapa de supervivencia.

De hecho modelos teóricos reconocidos sobre espíritu empresarial integran factores que inciden de manera diferencial en cada uno de estos momentos. Así, tal como resume Gartner (1989), explicar el fenómeno emprendedor también implica incorporar la noción de “proceso emprendedor” por el cual se hace referencia a un enlace de perspectivas que tienen que ver con la creación de empresas: la individual, la organizacional, la del entorno y la de las acciones y comportamientos de estos agentes. Kantis (2003b: 2) sostiene que “El proceso emprendedor incluye distintas etapas y eventos al interior de las mismas cuyo output es el nacimiento de empresas y de emprendedores. Las etapas son la gestación del proyecto empresario (...); el lanzamiento de la empresa (...) y la gestión de los primeros años de vida de la empresa”. En similar sentido, Graña y Rearte (2004: 10) agregan “que la creación de una empresa se inicia mucho antes que ella comience a operar en el mercado”.

Ahora bien, al trasladar la discusión anterior al universo juvenil, la cuestión de acuerdo a Fernández y Ruiz (2006: 18), “comienza a revestir una complejidad notable” dado que al mismo tiempo que la juventud puede visualizarse como un colectivo social estratégico en lo que hace al fenómeno emprendedor, también reconocen que éstos [los jóvenes] no disponen de condiciones que les faciliten el inicio y consolidación de sus potenciales empresas. En línea con esto, coincidimos con el planteo que realiza Jaramillo Baamante (2004: 36) cuando afirma que “no todas las personas están destinadas a convertirse en emprendedores. Por lo tanto, el nivel de satisfacción y las bondades (...) de los emprendimientos juveniles pasan en primer lugar por la percepción subjetiva de cada sujeto respecto a ser potencialmente emprendedor, y en segundo lugar, dependen del perfil del joven y de sus expectativas”.

Finalmente destacamos los efectos que el actual auge de la economía de red ha generado [y continúa haciéndolo] sobre el funcionamiento empresarial que se materializan entre otras cosas en la emergencia de un nuevo tipo de emprendedor y una nueva modalidad de empresas: el emprendedor virtual -avapreneur- y las empresas virtuales. Estas últimas tienen la particularidad, tal como lo afirman Serarols Tarrés y Pulido (2007: 140), de usar de manera creciente las ‘tics’ para aumentar su eficiencia y reducir sus costes de transacción. En relación a esto, Zitnik y

Drnovsek (2010: 10) consideran que, analizar el campo del e-entrepreneurship [Manuel, 2006] “además de ofrecer un nuevo fenómeno de estudio, representa una oportunidad para estudiar un fenómeno conocido en un nuevo contexto”.

## METODOLOGÍA

Así, dada la emergencia de un nuevo tipo de emprendedor: el emprendedor virtual –avapreneur– que además de ser joven emerge como un “nativo digital” (Prensky, 2001) en razón de llevar incorporadas las nuevas tecnologías de la información y la comunicación como parte de su vida cotidiana, y dada también la importancia que en los últimos años ha ido adquiriendo la metodología cualitativa para el análisis y la comprensión del fenómeno emprendedor en general, para cumplir con el objetivo de este trabajo hemos decidido realizar un estudio de tipo biográfico generando información a partir de una entrevista en profundidad que se complementó con revisión de información secundaria. En relación a la perspectiva biográfica, destacamos el planteo que realiza Baltazar Silva (2008) quien sostiene que la misma toma como punto de partida al empresario entendiéndolo como un actor histórico y además protagonista central de su propia vida, a la vez que visualiza en la actividad que éste realiza una articulación de elecciones racionales, emociones, construcciones de tipo social y cultural y estrategias de futuro. En tal sentido, continúa la autora (2008: 6), “El tema del empresario no es sólo un problema de estrategias de negocios, ni tampoco de capacidades individuales intrínsecas del humano sino que la perspectiva biográfica integra estos aspectos en la concepción de itinerarios y trayectorias. Ahí es donde reside el meollo de la aportación teórica.” Complementando este planteo, también destacamos la postura de Gartner (2010) quien visualiza en el uso la narrativa no un relato ilustrativo sino un método de abordaje de las acciones y comportamientos del emprendedor que sólo pueden entenderse desde la propia experiencia emprendedora. Con relación al proceso de investigación narrativo-biográfico Sepúlveda y Rivas (2003) lo caracterizan diciendo que a la par que permite compartir la construcción de un relato o de una narración y la argumentación teórica acerca de la misma, también representa una estrategia de investigación enmarcada en un proceso de tipo democrático y a la vez colaborativo donde los sujetos pueden hacer explícita su lectura de las experiencias que han ido conformando su identidad.

Así, entendemos que a través del relato biográfico, podemos comprender y aproximarnos a las diferentes acciones, motivaciones y decisiones empresarias asumidas por un emprendedor virtual que además es joven, a la vez que podemos visibilizar de manera particular el impacto que el acceso y manejo de las nuevas tecnologías tiene en todo el proceso. Finalmente, asociado a este método destacamos que el objetivo perseguido con su implementación tiene que ver con identificar el relato cronológico de una historia individual, en este caso particular, la que realiza un emprendedor joven vinculada a la creación y gestión de su emprendimiento virtual.

El caso que aquí proponemos presentar tiene que ver con un emprendedor virtual -avapreneur-joven, Martín, que al momento de entrevistarlo [marzo del año 2013] tenía 29 años, que vivía en la ciudad de Mar del Plata, una localidad con cerca de 600.000 habitantes de la Provincia de Buenos Aires -República Argentina- y que fue fundador de un emprendimiento virtual [en la actualidad lo sigue dirigiendo] que ofrece un servicio de marketing online en la localidad y con extensiones en el país, socio y fundador además de un delivery a nivel local que en virtud de su conocimiento y formación permanente en el uso de las nuevas tecnologías de la información y la comunicación ‘tics’ combinado con una visión estratégica sobre los negocios, ha logrado crecer de manera destacada en los últimos años. La entrevista que le realizamos a Martín indagó en su vida, y en particular en los factores que a lo largo de la misma fueron impactando en el proceso por el cual concibió y puso en marcha su negocio virtual. Asimismo, destacamos que en la

presentación de resultados hemos utilizamos un enfoque narrativo, a través del cual buscamos recuperar palabras, decires y sentires expresados en este caso por *Martín*, que son los que entendemos nos permiten acercarnos y comprender situaciones y fenómenos no universalizables sentidos y vividos por él en todo el proceso de creación de su emprendimiento, y son los que aparecen presentados entre comillas y en bastardilla.

## RESULTADOS

*¿Quién Es Este Avapreneur Joven? “¿Quién Soy?: ”* Martín se define a sí mismo como un “Economista Informático que por ‘error’ se enamoró del Marketing Online”. Asimismo en su página virtual se describe (Desde su página de internet y también esto se deriva de su relato en la entrevista que le realizamos) como “Analista Full-Time, Amante de las Tecnologías, Buscador de Soluciones, Racionalmente Irracional, Flexible, Optimista, Defensor de mis propias Convicciones, Hombre de Palabra y Compromiso... Puros palabreríos al lado de lo realmente importante: Intento ser ‘Buena Gente’. [También reconoce que] “La EFICIENCIA es la base de mi Pensamiento y de la forma de encarar mi propia vida: apunto a encontrar la óptima combinación de los recursos disponibles para la obtención de los objetivos deseados.” [Aclara además que] “Mi formación académica altamente analista... [tiene todas las materias de la carrera Lic. en Economía cursadas] me es de gran utilidad para saber ‘¿Dónde estamos? ¿Hacia dónde vamos? ¿Qué necesitamos mejorar en el camino?’... En tanto mis estudios en Informática, la pasión por las nuevas tecnologías, mi pensamiento muchas veces racionalmente irracional y mi entusiasmo por romper estructuras pero con objetivos claros, son gran parte de la fuente de inspiración para [saber]... ‘¿Cómo llegamos?’. [Finalmente relata que] “Desde hace más de 15 años intento aplicar mis conocimientos y mi forma de encarar las cosas a esto que, desde hace un tiempo, se conoce como ‘Marketing Online’.”

*¿De Qué Se Trata Su Emprendimiento Virtual? “¿Cómo Defino Mi Emprendimiento?”:* Martín está al frente de una “empresa que lo que hace es asesorar todo tipo de empresas que quieran meterse en Internet para obtener algún objetivo en especial... contando [para ello] con todas las herramientas, conocimientos y experiencia que tenemos nosotros [en diseño de sitios web, en campañas en redes sociales, en campañas de posicionamiento de mailing]” y recomendándole a cada uno “lo que nosotros creemos que tendría que hacer su empresa para lograr el objetivo que tiene”. [Al momento de realizar la entrevista] Martín describe que trabaja con otras 3 personas a las que considera parte de un equipo de trabajo [socios] que él dirige: “...yo hago toda la estrategia para que eso cierre... dirijo todo... porque cada uno tiene una visión de lo que hace y no en general.” Con relación a su trabajo manifiesta que “...Hoy cualquier persona puede hacer un sitio web, cualquier persona que diseña puede hacer campañas en redes sociales, el problema es cómo lo hacés para lograr tu objetivo, que [por ejemplo] es en el caso de los deliveries, que vendan. Y somos lejos, tenemos los deliveries que más venden en cada uno de los lugares donde están, pero lejos lejos.”

*¿Cuál Fue Es El Proceso Que Lo Llevó A Fundar Y Estar Al Frente De Su Emprendimiento? “¿Como Empecé Con Esto?”:* ¿Hubo influencias? ¿Cuáles? ¿Cómo incidió el buen uso y manejo de las tecnologías de la información y la comunicación para iniciar su experiencia emprendedora? ¿Cómo lo condicionó el contexto? Para responder a estos interrogantes, reconstruimos un relato cronológico marcado por lo que pudimos identificar como cuatro momentos claves en su vida y en la de su emprendimiento: (1) Los inicios que se remontan a la niñez y la adolescencia (2) La etapa previa al emprendimiento, en la que se facilita la gestación de la idea. (3) La etapa de implementación y su gestión inicial (4) Finalmente se completa la comprensión del proceso a partir de describir brevemente la etapa en que “la empresa sigue creciendo y no hay un techo” y

aparecen nuevas actividades: la empresa de delivery propia y el dictado de cursos sobre herramientas de marketing online en distintos lugares del país.

(1) *Los Inicios: “[Desde Chico Siempre Fui Un] Informático De Corazón:* Martín describe que la informática le “encanta de toda la vida”. Se evidencia además de su relato, un entorno familiar propicio que facilitó su acercamiento a la misma [a la informática]. Recuerda que su primer contacto con las `nuevas tecnologías de la información y la comunicación` fue a los 10 u 11 años cuando en ocasión de su `comunió`n “... me regalaron mi primer computadora y empecé a relacionarme con todo esto...En ese momento había que hacer trabajos para el colegio, bueno en mi casa, era el único que sabía manejar el Encarta (Enciclopedia multimedia digital publicada por Microsoft Corporation desde 1993 hasta 2009), y era copiar y pegar...” Del uso de la enciclopedia digital, pasó a los 12 o 13 años a tomar contacto con internet donde “empecé chateando” [con un chat anterior al conocido como ICQ [ICQ (“I seek you” que en castellano significa “ te busco”) se trataba (continúa vigente) de una mensajería instantánea, la primera de su tipo en ser ampliamente utilizada en Internet, mediante la cual era posible chatear y enviar mensajes instantáneos a otros usuarios conectados a la red de ICQ. También permitía el envío de archivos, videoconferencias y charlas de voz. ICQ fue creado por la empresa israelí Mirabilis a finales de la década del noventa.], que fue el primero que hubo en Mar del Plata] “...nos juntábamos todos los domingos, éramos 10 o 12 en (...) [toda la ciudad], que nos juntábamos todos los domingos... [en un cybercafé]”. De estos primeros recuerdos, Martín pasa a otro momento emblemático: “Mi primera página web la hice a los 14 años, porque yo le enseñaba a los profesores del colegio de cómo hacer la página web porque no tenían ni idea”. En relación a esto rememora además que la armó “...solo. Ni siquiera tenía alguien al lado que lo sepa hacer...” Luego de este momento rememora uno nuevo: cuando empezó a trabajar a los 18 años en la parte de informática del consulado italiano, ahí “... trabajaba con otra gente, había que resolver algo que había que cargar datos y no sé, había que resolverlo. Entonces tenías que cargar 500 cosas, éramos 3 personas, ... 2 se ponían a cargar las 500 cosas, yo no me ponía a cargarlas. Me ponía a hacer un sistema que después me permitiera cargarlas mucho más rápido...” Por esos años Martín comenzó a estudiar la Lic. en Economía y una vez que terminó la carrera decidió estudiar “...dos años de programación, que en realidad, yo siempre trabajé de informática toda mi vida...” Sobre la carrera en economía, reconoce que “lo que me gustó de economía, [es que] te hacía pensar, vos no estabas aprendiendo algo que lo aprendías de memoria, yo odio estudiar de memoria, no puedo estudiar de memoria, no tengo memoria.” Finalmente, destaca la importancia que él asigna a la “prueba y error... yo tengo esa política de querés hacerlo? hacélo vos. No importa que lo hagas mal, probá y rompete la cabeza pensándolo. Después, una vez que le encontraste la vuelta no te lo olvidas más... Entonces fue mi forma de aprender de toda la vida.” Finalmente Martín planteó su predilección por “Todo lo que sea razonamiento, lógica, me encanta. Todo en mi vida en sí. Y en esto lo tenés que aplicar todos los días. Me encanta, de lo que hago estoy enamorado.”

(2) *La etapa previa: aprendí a usar Google AdWords y después “Me enamoré de Analytics”:* Luego de indagar en sus inicios, le preguntamos a Martín cómo surgió su emprendimiento “¿Cómo empecé con todo esto del marketing? [Y] yo empecé a trabajar en una empresa hace 5 años [en 2008 cuando tenía 24 años] que hacía fotografía digital”. Y esa empresa, disponía de una “plataforma para que esos clientes [que eran otras empresas] pidan y puedan imprimir sus fotos a través de internet. Entonces yo entré a trabajar ahí... Medio que me querían para la parte de ventas y yo les dije `mirá, yo no

*sé vender, no me interesa vender...’” a lo que luego siguió “...un primer período de adaptación y después como que me dijeron ‘bueno, fijate en la página Google AdWords’. En relación a este trabajo, él reflexiona que no era claro lo que tenía que hacer y que “en el camino se fue acomodando” (Google AdWords es un programa que utiliza Google para ofrecer publicidad patrocinada a potenciales anunciantes. Desde la página oficial del mismo, se anuncia –entre otras cosas- que “Con AdWords, puede llegar a nuevos clientes mientras buscan en Google palabras relacionadas con su negocio o navegan por sitios web sobre temas relacionados. Además, puede llevar el control de sus costes publicitarios. Le ayudaremos a entender el funcionamiento de AdWords y le ofreceremos una descripción general de los conceptos básicos.” <https://adwords.google.com>).*

Empezó a aprender sobre Google AdWords que era una herramienta que él no conocía y que a partir de conocerla empezó a formarse ideas en torno a cómo “pensar las campañas de marketing sobre los clientes ... [los de la empresa en que estaba]”. Así, recuerda que “Empecé bien atado a AdWords” “empecé a estudiar y a leer, y me fui formando solo [como había sucedido otras veces en el pasado]... Y una vez que se inició en AdWords, a continuación lo combinó con [google] Analytics ((Definida en el sitio oficial como “Analítica web para empresas” en el cual además se describe que: “Google Analytics ofrece muchos recursos formativos. Tanto si utiliza analíticas por primera vez como si es un usuario experimentado, encontrará videos y artículos que le ayudarán a obtener el máximo rendimiento de Google Analytics.”). Y a partir de esto se sincera diciendo: “me encantó, me enamoré de Analytics y de las cosas que podés saber que pasan y cómo interpretarlas para generar y tomar decisiones que te hagan crecer. Me enamoré de Analytics, empecé junto a Analytics.” Así, a partir del buen manejo que empezó a tener de estas herramientas virtuales “...empezó a detectar ‘errores’ en las estrategias [de marketing] de los clientes de la empresa y a sugerir cambios.” Y a continuación empezó a hacer seguimiento de comercio electrónico “... Configuré todo para saber cuánta gente se suscribía [a las páginas a las que les hacía el seguimiento], de dónde... cuánto tiempo tardaba, cuántos días tardaba en comprar, cuánto compraba, cuáles eran los días que más se compraba, los horarios, no sé; mil análisis que después te llevaban a decir ‘bueno, ahora la oportunidad está acá, ¿qué hacemos para aprovecharla?’”. Finalmente, Martín remarca que si bien sus inicios tuvieron que ver con hacerle las campañas a los clientes de la casa de fotografía donde él era empleado, ocurría que “estaba muy limitado...”

*(3) Implementación Inicial: Me Metí 100% Y Empecé A Aprender Muchísimo Y Me Encantaba:* Así, lo que Martín nos sigue contando es que si bien empezó trabajando sólo en la cuestión del marketing online como parte de sus labores como empleado de la casa de fotografía, a continuación decidió dejar ese trabajo dependiente y ponerse de forma autónoma a hacer las campañas de marketing online de diferentes clientes que empezaron a acercarse, incluidos clientes que le pasaban los dueños de la casa de fotografías “Al principio empecé trabajando sólo, después conocí al diseñador, que lo que hice fue tomarlo como empleado, le pagaba por los trabajos que hacíamos. Al programador [otro de los miembros de su equipo] yo lo conocía, trabajaba conmigo ahí en (...) [la casa de fotografía], nunca habíamos hecho nada juntos. Yo resolvía toda la parte de programación, cuando la cosa se empezó a complicar, varios meses después, a complicar en el sentido que empezó a aumentar el trabajo y yo había un par de cosas que no sabía, empezó a trabajar también como empleado conmigo.”

Al salirse de la empresa en la que estaba [la casa de fotografías], y poner su propio emprendimiento Martín nos cuenta que empezó a sentir otra libertad para trabajar “y cuando me metí 100% en eso empecé a aprender muchísimo más y me encantaba.” Así, nos relata que “llegó

*un momento en que la cosa fue creciendo y dijimos 'bueno, la idea es mía y que se yo, pero yo para perfeccionarme necesito un diseñador y un programador'. Había una chica que me ayudaba en redes sociales en ese momento así que dijimos 'bueno, hagamos una sociedad'. Yo tengo el porcentaje mayoritario porque yo empecé con esto pero quiero que ganemos todos, (...) yo solo quiero que se comprometan y no quiero tener problemas."* De esta forma, Martín armó una sociedad en la que él mantiene "el porcentaje mayoritario" dado que fue quien tuvo la idea [y es además quien realiza la dirección].

*(4) La empresa sigue creciendo y no hay un techo. Martín decide fundar deliverys propios y comienza a dictar cursos por distintos lugares del país:* Martín comenta que la empresa siguió creciendo aunque él todavía no visualiza un techo. En relación a esto nos cuenta que percibe y entiende que los avances en las nuevas tecnologías se transforman en nuevas oportunidades del contexto para su negocio, junto a la experiencia y trayectoria que de manera permanente va ganando tanto él como su equipo, junto al placer que supone en su caso personal el hecho de aprender: *"Me encanta aprender, me encanta. Te vas capacitando todo el tiempo y vas pensando y no te quedás... Todo lo que sea razonamiento, lógica, me encanta. Todo en mi vida en sí. Y en esto lo tenés que aplicar todos los días. Me encanta, de lo que hago estoy enamorado."* Martín también nos pone al tanto que su empresa es la única empresa "certificada en Mar del Plata para AdWord, somos una de las doce a nivel país. Lo mismo, Analytics que también estamos certificados y... está bueno. [y que además] Estamos dando cursos y todo eso." En relación a este tema agrega que comenzó a dictar cursos en diferentes lugares del país sobre el uso de herramientas de marketing virtual *"sí, el año pasado fui con el Analytics a Córdoba [también a Buenos Aires] a la Universidad Blas Pascal. Allá fueron clases regulares directamente y después estuve yendo a un par de congresos que tuve que dar en Rosario, algunas charlas."*

Asimismo, el crecimiento en el número de clientes -a nivel local y a nivel nacional- lo motivó a poner oficinas propias para atender a sus clientes. En similar sentido, la mayor experiencia en el tema y los buenos resultados logrados, también lo decidieron a fundar algunos deliverys virtuales propios a partir de reproducir un modelo de negocios que le da resultados *"Lo del delivery en Mar del Plata no sé, porque siempre lo pensé y nunca había tenido tiempo de hacerlo y dije bueno hagámoslo"* [Se dio en un viaje cuando] *"Estaba en Buenos Aires y había una gente que ... entrevistaron como caso de éxito, está allá en Palermo, se llaman La Barata del Central. No tengo ningún problema en decirlo en ningún lado. Realmente...sacamos la idea de eso. Así que ellos hacía un año y medio que estaban y tienen 10.000 seguidores y en Buenos Aires crecieron un montón. Nos encantó la idea, bueno repliquémosla acá como sabemos hacer nosotros..."* Entonces volvieron [el equipo] a Mar del Plata *"Nos buscamos un socio y en dos meses 5.000 seguidores, ya tenemos la mitad de seguidores de ellos en dos meses y ellos lo vienen haciendo hace un año y medio. Ellos son la parte operativa y contrataron una agencia de marketing que les hace lo que hacemos nosotros. Nosotros directamente somos nosotros que hacemos todo."* Finalmente, destacamos de la entrevista con Martín un proceso de aprendizaje conjunto entre todo el equipo que ocurre de manera permanente y la mayor parte de las veces a través del contacto virtual *"Sí, todo el tiempo. Y mismo, ahora, usamos programas de tamizadores de tareas, nosotros cargamos las tareas, se las mandamos al otro, el otro nos responde. Está todo súper coordinado, virtualmente, todo el tiempo."* También relata que la formación y el aprendizaje deben ser permanentes en el ámbito de la economía en red *"sí, permanente. Todo el tiempo salen cosas nuevas, todo el tiempo hay una empresa nueva que podés aprovechar o cosas por el estilo, o estrategias nuevas que surgen. Muchas veces uno las inventa, muchas veces uno ve algo y trata de encontrar la mejor manera de adaptarlo a lo suyo, no sé, tratar de ir superándose uno todo el tiempo. Si te quedás en algo fijo te pasan. De hecho, nosotros empezamos con redes sociales y*

*ahora todo el mundo está copiando lo que nosotros hacemos, entonces nosotros tenemos que hacer más para diferenciarnos.”*

## CONCLUSIONES

Con este trabajo nos propusimos comenzar a indagar, en el contexto de la economía en red y en un escenario en que los jóvenes aparecen con ciertas habilidades innatas vinculadas al uso de las nuevas tecnologías, quiénes son y/o qué rasgos presentan los emprendedores virtuales jóvenes que emergen creando y gestionando empresas basadas en el conocimiento. En relación a esto, reconocimos además la necesidad de comprender situaciones y vivencias personalísimas vinculadas con la creación y gestión de su propia empresa dado que además, en general, estas habilidades y acciones han resultado menos observadas y estudiadas desde el punto de vista de la economía y del análisis de las decisiones estratégicas a nivel empresarial.

Así, sobre la base de estas consideraciones, y entendiendo además las ventajas derivadas del uso de la perspectiva narrativa-biográfica para aproximarnos a este colectivo social, nos acercamos a Martín, un emprendedor virtual joven que es fundador y se encuentra al frente de una empresa de marketing online en la ciudad de Mar del Plata y además es socio y fundador de un delivery a nivel local. En Martín había una peculiaridad que es la que nos motivó a querer investigarla, y era que en virtud de su conocimiento y formación permanente en el uso de tics combinado con una visión estratégica sobre los negocios, ha logrado un crecimiento importante en su emprendimiento en los últimos años. Así, a través de los resultados de esta investigación pudimos reconocer en Martín un emprendedor virtual joven que además de manejar herramientas derivadas de su formación en ciencias económicas, se reconoce fundamentalmente como un “informático de corazón” y analista de siempre, que se fascina siendo autónomo en su aprendizaje a la vez que destaca su habilidad para manejar las nuevas tecnologías de la información y la comunicación aplicadas al marketing, que son las que en definitiva propiciaron su negocio. Un negocio para el cual adquirió habilidades innatas desde su niñez y que sin embargo solo surgió por casualidad, cuando le mostraron la oportunidad que suponían las herramientas virtuales para hacer marketing. Martín es un emprendedor que reconoce las ventajas del trabajo en equipo y la capacidad de aprendizaje de ese equipo, a la vez que también hace explícito que la formación y el aprendizaje deben ser permanentes en el ámbito de la economía en red.

Y esto en su experiencia personal se evidencia como determinante de su éxito. Finalmente y para concluir, además de destacar las oportunidades que las nuevas tecnologías de la información y la comunicación pueden dar a los emprendedores cuando éstos son jóvenes, remarcamos la importancia de profundizar el análisis y comprensión de la variedad y diversidad de situaciones y vivencias previas que los atraviesan y tienen por protagonistas. En ese sentido, insistimos en la importancia de propiciar el reconocimiento de singularidades y especificidades de cada uno de estos emprendedores, si en verdad intentamos comprenderlos, tanto en las etapas previas al desarrollo de su emprendimiento como durante la implementación del mismo.

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# **TURISMO DE INTERESES ESPECIALES: INVESTIGACIÓN DE MERCADO SOBRE LAS MOTIVACIONES DESDE LA PERSPECTIVA DEL CLIENTE**

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## **RESUMEN**

*El presente estudio tiene como propósito conocer las principales motivaciones que tienen las personas a la hora de decidir sus destinos vacacionales en el marco del turismo de intereses especiales en el litoral central chileno. La metodología para la obtención de resultados fue una fase cualitativa exploratoria a través de entrevistas en profundidad y una segunda fase cuantitativa concluyente donde se obtuvieron los principales resultados y recomendaciones de este estudio. Los resultados obtenidos apuntan a generar una oferta orientada hacia la familia, mayor desarrollo de las actividades turísticas guiadas y el incremento de la oferta cultural existente.*

**PALABRAS CLAVE:** Turismo de Intereses Especiales, Motivación, Investigación de mercados, Análisis Multivariado, Marketing.

## **SPECIAL INTEREST TOURISM: MARKET RESEARCH OF MOTIVATION FROM A CUSTOMER**

### **ABSTRACT**

*The present study aims to identify the main motivations of people deciding their holiday destinations within the special interest tourism in Chile's central coast. The methodology for obtaining results was an exploratory qualitative phase through in-depth interviews and a second quantitative stage conclusive where the main findings and recommendations of this study were obtained. The results point to generate an offer family-oriented, further development of tourism activities guided and increasing the existing cultural offer.*

**JEL:** M310

**KEYWORDS:** Special Interest Tourism, Motivation, Market Research, Multivariate Analysis, Marketing.

## INTRODUCCIÓN

En el ámbito turístico una de las preguntas más frecuentes circulan en torno a la toma de decisiones y los motivos que tienen las personas para dirigirse a diferentes destinos vacacionales. Es por esta razón que en este estudio quisimos conocer las principales motivaciones que tienen las personas que visitan el litoral central de Chile, enfocándonos únicamente en el turismo de intereses especiales, que en el último tiempo ha cobrado gran fuerza en el país atrayendo a diferentes segmentos que prefieren destinos poco masivos y en fechas de baja aglomeración.

## REVISIÓN LITERARIA

### Turismo de Intereses Especiales

En la actualidad entender cómo funciona el turismo de intereses especiales es un desafío obligatorio para cada país, como forma de desarrollar y promocionar estrategias de comercialización que permitan generar apuestas sostenibles en los destinos turísticos. Sin embargo, a pesar del desarrollo turístico en Chile, se ha investigado poco sobre un tipo de turismo en particular conocido como Turismo de Intereses Especiales. El TIE, es comprendido por la Organización Mundial de Turismo como una amplia categoría de turismo basado en intereses concretos que incluye naturaleza, cultura, historia y otros campos de índole diversa ofrecidos en un entorno local (OMT, en Ignarra, 1999). Para Albornoz y Rodríguez (2010), el TIE incorpora aquellos viajes que tienen como fin realizar actividades recreativas en contacto directo con la naturaleza y las expresiones culturales con una actitud y compromiso de conocer, respetar, disfrutar y participar en la conservación de los recursos naturales y culturales.

En este sentido, posee los siguientes componentes: a). El motivo por el cual se desplazó el turista es el de recrearse en su tiempo libre realizando diversas actividades en constante movimiento, buscando experiencias significativas; b) En donde busca desarrollar estas actividades con la naturaleza; c) El turista debe asumir al realizar estas actividades un compromiso cuidado, apreciación y respeto con los recursos que está utilizando para recrearse (Bigné et al, 2000). Este tipo de turismo se refiere a formas distintas de viajes basados en motivaciones específicas más allá de los objetivos habituales de vacaciones. Se caracteriza principalmente por ser poco masivo, entregar garantías respecto al cuidado del medioambiente y la sustentabilidad además de entregar especial importancia a la valoración de la experiencia por sobre todo en aquellos turistas que han viajado mucho y buscan algo nuevo que los motive. El turismo de intereses especiales suele generarse en aquellos mercados más maduros ya que responden a una segmentación elevada, donde predomina el turista de alto nivel cultural y socioeconómico, que además posee gran experiencia en destinos. Un elemento importante a considerar es que estos mercados suelen ser más flexibles en sus épocas de viaje, por lo que sus flujos ayudan a desestacionalizar la actividad turística diversificando territorialmente y generando productividad en los destinos y empresas turísticas locales. Esta tal vez sea una de sus principales ventajas.

Es el sector de la actividad turística que más crece hoy en el mundo, reflejando la importancia y el nuevo sentido que el turismo tiene en la sociedad moderna, donde más que una opción por el ocio y la recreación, ha pasado a ser una oportunidad ideal y planificada para ocupar el tiempo libre con nuevas experiencias físicas y espirituales de conocimiento y desarrollo personal. Por esta razón, el conocimiento y disfrute de la naturaleza y la cultura son hoy objetivos de gran importancia al momento de tomar la decisión de concretar un viaje de turismo, dejando de lado destinos tradicionales como las playas o los grandes centros urbanos. Surge así el turismo de

intereses especiales, que se nutre directamente del patrimonio natural y cultural que pueden ofrecer los diferentes destinos del mundo.

### Motivaciones y Turismo

Diversos investigadores han postulado distintas teorías que explican las motivaciones que tienen las personas para viajar. Así para autores como McIntoch y Goeldner (1990) las razones para que los turistas viajen puede clasificarse en cuatro categorías de motivadores: 1) Físicas (descanso, salud, deporte y placer), 2) Culturales (conocer nuevas culturas y entornos), 3) Interpersonales (gente nueva, visita a familiares y amigos), y 4) De estatus y prestigio (desarrollo personal, deseo de reconocimiento). Por otra parte Vogeler y Hernández (2000), dividen las motivaciones viajeras en seis grupos que son los siguientes: 1) Razones culturales, educativas y profesionales (conocer culturas, arte, idiomas), 2) Razones étnicas (regreso al origen, motivos sentimentales), 3) Razones deportivas (asistencia a manifestaciones deportivas o práctica de deportes), 4) Razones físicas (descanso, reposo, salud), 5) Razones sociológicas (conocer mundo, viajes de estudio, lunas de miel), 6) Razones religiosas (peregrinaciones, visitas a lugares religiosos). En el turismo, la motivación es el inicio del proceso de consumo turístico y se estimula a partir de un complejo conjunto de influencias económicas, sociales, psicológicas, culturales, políticas y ambientales. El propósito y motivación de un viaje es un concepto que parece explicarse por sí mismo y que no es lo mismo que las razones subyacentes para viajar. Estas razones parecen encubiertas y reflejan deseos y necesidades de los individuos. Como la clave de la comprensión de la motivación turística es estudiar el viaje como algo que satisface una necesidad y un deseo (Mill y Morrison, 1992).

Resulta difícil conocer las motivaciones verdaderas de los turistas ya que, en ocasiones, el propio turista no quiere o no puede reflexionar sobre sus motivaciones, mientras que otras veces no puede o no quiere expresarlas (Dann, 1981). John Crompton (1979) identifica nueve motivos en la selección del destino de vacaciones de las cuales siete pueden clasificarse como psicosociales (huida del entorno habitual, exploración y evaluación del yo, relajación, prestigio, regresión, ensalzamiento de la niñez, relaciones y facilidad para la interacción social), mientras que las dos restantes serían culturales (novedad y educación). Otros autores hablan de la motivación turística como un conjunto de necesidades personales que van desde el deseo de escapar del entorno cotidiano a la necesidad de ampliar horizontes, la diversión e incluso la autorrealización personal (Isho-Ahola, 1980; Krippendorf, 1987;

Schmidhauser, 1989) y Álvarez, 1994). Albert (1998) habla del concepto de necesidad viajera de forma equiparable con la motivación. La describe como un conjunto de necesidades donde subyacen aspectos psicológicos como la necesidad de descanso físico y mental (romper con la rutina diaria, disfrutar del ocio), actividad física y deportiva, relacionarse, conocer gente, hacer negocios o contactos profesionales, recrearse en la naturaleza, conocer culturas diferentes, cuidarse el cuerpo, autorrealización espiritual y otras nuevas que aparecen día a día en la sociedad moderna. Según Esteban (1996), los turistas pueden clasificarse en función de las motivaciones generales (físicas, culturales, interpersonales, sociales o de prestigio) dando lugar a cuatro perfiles psicográficos o de estilos de vida. En la revisión teórica sobre el tema, realizada por Graham Dann se distinguen entre motivaciones intrínsecas, relacionadas con factores psicológicos (de personalidad, gustos, etc.), con el propósito del viaje y con la experiencia turística, por su parte se tienen las motivaciones extrínsecas que se relacionan con los factores sociales y demográficos, así

como la relación entre el ocio y el trabajo. En la Tabla 1 se resumen las perspectivas que fueron identificadas por Dann (1981) sobre el estudio de la motivación turística.

Tabla 1: Perspectivas de la Motivación Turística

Viaje como respuesta a una carencia	El viaje se presenta como algo nuevo o diferente que no se puede conseguir en la vida cotidiana.
Atracción del destino como respuesta a factores de motivación de empuje	Distinción entre necesidades y deseos (factores de empuje) y aquellos que se forman por la percepción del destino (factores de atracción).
Motivación como una fantasía	Los turistas pueden estar motivados por realizar actividades no aceptadas culturalmente en su lugar de origen.
Motivación por el propósito	Algunos turistas se motivan por la actividad que van a realizar (visitar amigos, por ejemplo).
Motivación según tipologías	Los diferentes tipos de personalidad pueden influir en la motivación del viaje.
Motivación y experiencia turística	Los turistas pueden estar motivados por tener experiencias diferentes a las de su entorno habitual.
Motivación como autodefinición y significado	La forma en la que los turistas definen las situaciones y responden a ellas es una buena manera de entender sus motivaciones.

Fuente: Elaboración de Raquel Huete, basada en Dann, 1981.

Cabe destacar el segundo punto del cuadro en el que el concepto de motivación ha sido clasificado en dos grandes categorías o fuerzas: la necesidad de escape y la necesidad de búsqueda (Dann, 1977, 1981). Los visitantes viajan bien porque son empujados por motivos o variables internas o bien porque son atraídos por los atributos de los lugares. Los factores de empuje (push factors) están relacionados con aspectos internos y emocionales, como el deseo de escapar, de descansar y relajarse, de aventura o de interacción social. Los factores de atracción (pull factors) están conectados con aspectos externos, cognitivos y de situación, como los atractivos del lugar, las infraestructuras recreativas, o los escenarios culturales y naturales. La OMT (2008) también ofrece una clasificación de las motivaciones de viajes y divide a los turistas según el motivo que lo lleva a viajar en nueve grupos diferentes: 1) Vacaciones, recreo y ocio, 2) Visitas a familiares y amigos, 3) Educación y formación, 4) Salud y atención médica, 5) Religión/peregrinaciones, 6) Compras, 7) Tránsito, 8) Otros motivos, 9) Negocios y motivos profesionales.

### Objetivos de Investigación

#### Objetivo General

Explorar y caracterizar las principales motivaciones del turista de intereses especiales a partir de un estudio empírico que permita obtener resultados concluyentes que entreguen información para la toma de decisiones de los agentes de la industria del turismo.

#### Objetivos Específicos

Determinar un listado de las principales motivaciones que poseen los turistas que concurren a la zona para poder cuantificarlas y segmentarlas. Generar una clasificación por motivaciones y perfiles de consumidores para poder obtener una segmentación y resultados profundos respecto a las variables que los impulsan. Generar resultados concluyentes respecto a los principales motivadores con el fin de entregar recomendaciones y sugerencias útiles para la toma de decisión de la industria turística.

## **METODOLOGÍA**

La metodología utilizada para esta investigación consistió en 2 fases. La primera parte de carácter exploratorio, utilizándose 13 entrevistas en profundidad a expertos en el área del turismo y 30 entrevistas estructuradas a turistas a partir de las diferentes categorías de motivación indagadas en la revisión bibliográfica. Esta información preliminar fue analizada a través de la construcción de categorías que sentaron las bases para la segunda parte del estudio. La segunda etapa cuyo objetivo fue obtener resultados concluyentes, fue de carácter cuantitativo a través de modelos multivariados de análisis en investigación de mercados. Utilizó como herramienta un cuestionario estructurado con preguntas cerradas aplicado de forma presencial a un total de 210 turistas de la Zona del Litoral Central de Chile (Algarrobo, El Quisco e Isla Negra), donde actualmente se ha desarrollado con fuerza el TIE. El tipo de muestreo utilizado es de tipo No Probabilístico (por conveniencia) e incluyó personas de 18 hasta 66 años de edad. Respecto al género el 54% de la muestra son mujeres y el 46% corresponde a hombres.

## **RESULTADOS**

Para lograr los objetivos planteados inicialmente, los resultados fueron obtenidos en tres etapas. En la primera se realiza un análisis factorial para lograr reducir la cantidad total de motivaciones consultadas y en la segunda etapa se busca agrupar por tipo de consumidor de turismo realizando un análisis de conglomerados. Finalmente en una tercera fase son analizadas las actividades que desarrollan los turistas con mayor frecuencia en la zona.

### Análisis Factorial

Con un total de 203 datos (se eliminaron 7 encuestas no válidas e incompletas) y 17 indicadores de motivación, se realizó un análisis factorial de componentes principales, en donde se obtienen un total de seis factores que consiguen explicar un 61,156% de la varianza de los datos originales (Tabla 2).

Tabla 2: Matriz Análisis Factorial Motivaciones

<b>Matriz de Componentes Rotados</b>						
	1	2	3	4	5	6
Visitar monumentos históricos	0.788	0.182	0.006	-0.047	-0.024	0.204
Motivaciones Culturales	0.780	0.092	-0.055	0.207	-0.033	-0.219
Por visitar lugares y pueblos típicos	0.724	0.151	0.009	0.209	-0.038	-0.124
Aventurarse a nuevas experiencias	0.560	-0.116	0.200	0.266	0.072	0.289
Disfrutar de la gastronomía	0.495	-0.014	0.218	-0.170	0.187	0.070
Buscar la tranquilidad y descanso	0.016	0.812	0.053	-0.136	0.056	0.191
Disfrutar de la Naturaleza	0.239	0.762	0.121	0.001	0.171	-0.091
Escapar de las tensiones, poder relajarse	-0.058	0.663	-0.016	0.092	-0.011	0.151
Por salud y vida sana	0.164	0.552	0.037	0.163	-0.244	-0.228
Motivado por los paisajes y belleza	0.251	0.486	-0.052	0.398	0.301	-0.396
Juntarse o visitar a familia y amigos	-0.185	-0.063	0.720	0.175	-0.165	0.170
Practicar algún deporte	0.241	0.108	0.650	-0.122	-0.058	-0.103
Poder llevar a cabo sus hobbies	0.132	0.111	0.649	0.131	0.315	-0.067
Motivaciones Climáticas	0.061	0.048	0.125	0.686	-0.171	0.256
Motivado por el ambiente que se genera	0.179	0.039	0.015	0.669	0.334	-0.091
Opción accesible de viaje	0.087	0.133	-0.032	0.120	0.812	0.043
Disfrutar momentos de ocio	0.005	0.041	0.002	0.060	0.040	0.891

Fuente: Elaboración Propia.

Para verificar que es un modelo adecuado se realizan diferentes análisis, los resultados son expresados en la Tabla 3

Tabla 3: Índices de Confiabilidad y Validez del Modelo de Motivaciones

<b>Índices</b>	<b>Valores</b>
Alfa Cronbach	0.708
KMO	0.714
Sig.	0.000
Determinante	0.027

Fuente: Elaboración Propia

Luego de obtener las saturaciones de los Motivos en cada factor, es decir en la componente en la cual tiene la mayor participación, se procede a identificar cada uno de estos seis factores. Estos son determinados de la siguiente forma:

Factor 1: “*Aventuras Culturales y Gastronómicas*”. Visitar monumentos históricos, Motivaciones Culturales, Visitar lugares y pueblos típicos, Aventurarse a nuevas experiencias y conocer sitios nuevos, Disfrutar de la Gastronomía.

Factor 2: “*Descanso y Salud Natural*”. Buscar la tranquilidad y el descanso, Disfrutar de la naturaleza, Escapar de las tensiones y poder relajarse, Por salud y vida sana, Motivado por los paisajes y belleza del lugar.

Factor 3: “*Recreación*”. Juntarse o Visitar a familias y amigos, Practicar algún deporte, Poder llevar a cabo sus hobbies o actividades favoritas.

Factor 4: “*Ambiental*”. Motivado por el ambiente que se genera en la comuna, Motivaciones Climáticas.

Factor 5: “*Economía*”. Opción económicamente accesible de viaje.

Factor 6: “*Ocio*”. Disfrutar de momentos de ocio en días libres.

En la Tabla 4 son presentados los resultados en términos de promedios. Estos resultados equivalen a las elecciones correspondientes a las preferencias de los encuestados, que van desde nada importante hasta muy importante, una escala Likert que va desde el 1 al 5 (1= Nada Importante, 2=Poco Importante, 3=Más o Menos Importante, 4= Importante y 5= Muy Importante).

Tabla 4: Promedios Totales de la Muestra Por las Preferencias de Cada Motivo

Factor	Motivaciones	Promedio
Descanso y Salud Natural	Escapar de las tensiones, poder relajarse	4.80
Descanso y Salud Natural	Buscar la tranquilidad y descanso	4.72
Descanso y Salud Natural	Disfrutar de la Naturaleza	4.55
Ocio	Disfrutar momentos de ocio	4.33
Descanso y Salud Natural	Motivado por los paisajes y belleza	4.27
Descanso y Salud Natural	Por salud y vida sana	4.12
Economía	Opción accesible de viaje	3.98
Ambiental	Motivado por el ambiente que se genera	3.64
Aventuras Culturales y Gastronómicas	Aventurarse a nuevas experiencias	3.62
Ambiental	Motivaciones Climáticas	3.47
Recreación	Poder llevar a cabo sus hobbies	3.45
Aventuras Culturales y Gastronómicas	Disfrutar de la gastronomía	3.44
Recreación	Juntarse o visitar a familia y amigos	3.25
Aventuras Culturales y Gastronómicas	Por visitar lugares y pueblos típicos	3.24
Aventuras Culturales y Gastronómicas	Motivaciones Culturales	3.08
Aventuras Culturales y Gastronómicas	Visitar monumentos históricos	2.90
Recreación	Practicar algún deporte	2.62

Fuente: *Elaboración Propia.*

De los resultados es posible apreciar que los motivos preferidos hacen referencia al factor “Descanso y Salud Natural”. Con respecto a los motivos menos preferidos es posible destacar que sólo dos motivaciones tienen promedios bajo la nota 3.0 (visitar monumentos históricos y practicar algún deporte), además cabe señalar que la peor votación la obtuvo “Motivaciones Religiosas” con promedio 1.69. Este motivo fue eliminado del análisis debido a su poca representatividad. De todas formas de estas 17 motivaciones finales cabe mencionar que en términos generales las motivaciones fueron consideradas con un rango alto de importancia.

### Análisis de Conglomerado

En la segunda etapa se procede a determinar los conglomerados de personas que formarán parte en cada grupo, con el fin de clasificar a los turistas según tipo de motivación. El método utilizado para conformar los diferentes segmentos, es el procedimiento Conglomerados de K medias, ésta es una técnica multivariante que permite agrupar los casos de un archivo de datos en función del parecido o similitud existente entre ellos. Este método de agrupación de casos se basa en las distancias existentes entre ellos en un conjunto de variables. Cada una de las 203 personas fue asignada a uno de los tres conglomerados (Tabla 5).

Tabla 5: Conglomerado en Base a Turistas

Número de caso	Conglomerado	Distancia
1	3	2.798
2	1	1.331
3	3	2.338
4	2	1.884
5	3	2.661
.	.	.
.	.	.
.	.	.
200	1	2.440
201	3	1.575
202	3	1.526
203	3	2.511

Fuente: Elaboración Propia.

Finalmente se tiene la siguiente distribución de personas, expresadas en la Tabla 6

Tabla 6: Total de Personas Por Conglomerado

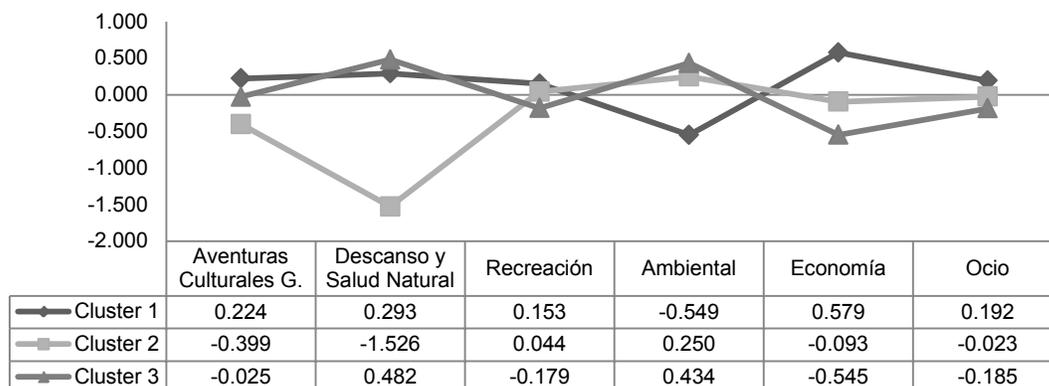
Conglomerado	Cantidad (personas)
1	82
2	41
3	80

Fuente: Elaboración Propia.

Se puede observar que los conglomerados 1 y 3 poseen una cantidad similar de turistas, además doblan la cantidad de personas que integran el segundo conglomerado. Luego de tener los tres casos conformados por sus respectivos integrantes, se procede a determinar las características de cada cluster. Para esto se muestra el Figura 1, que muestra la media de los valores de cada factor por conglomerado (valor de la media igual a 0), tal como lo hace Niefer (2005) en su investigación para la identificación y denominación de los conglomerados.

*Cluster 1:* Obtiene valores sobre la media para cinco de los seis factores (Aventura Cultural, Descanso y Salud Natural, Recreación, Economía y Ocio), con lo que se puede decir que a este tipo de turistas son motivados por estas cinco componentes. En cuanto al factor Ambiental se ubican por debajo de la media. Las características recién mencionadas conllevan a denominar al Cluster 1 con el nombre de “*Entusiastas, importando que el lugar sea económicamente accesible*”. Es decir, son turistas motivados por la gran mayoría de actividades; tanto culturales, recreacionales, poder descansar y disfrutar del ocio. Incluso sin importar el ambiente que exista en la zona, ni como sea el lugar, sin embargo, para este grupo es muy importante que el lugar sea económicamente accesible para ellos.

Figura 1: Conglomerados y Factores Motivacionales



Fuente: Elaboración Propia.

*Cluster 2:* Como se observa en la figura anterior, se tienen valores por debajo de la media para el factor Aventuras Culturales y Gastronómicas y muy por debajo de la media al factor Descanso y Salud Natural, por su parte los otros cuatro factores se posicionan cercanos a la media, dos por debajo (Economía y Ocio) y dos por sobre de ésta (Recreación y Ambiental). Los valores obtenidos hacen que se denomine a este tipo de visitantes como “*Vividores, que disfrutan del ambiente y actividades del lugar*”, es decir son personas que se encuentran motivados por el ambiente y clima del lugar y que buscan realizar actividades de recreación en conjunto con amigos o familiares, además no les interesa ir a la zona a descansar, si no que les gusta pasarlo bien.

*Cluster 3:* Alcanza valores por sobre la media en los factores Descanso y Salud Natural y Ambiental, mientras que en los factores correspondientes a Aventuras Culturales y Gastronómicas, Recreación, Economía y Ocio posee valores bajo la media. Finalmente se denomina a este grupo como “*Tranquilos, que buscan el descanso en un ambiente natural*”, es decir, este último conglomerado de personas, está integrado por personas interesadas en descansar en medios naturales con belleza paisajística y escaparse de la ciudad para tener una vida saludable.

Luego de obtener los tres conglomerados que representan las características comunes de los tres tipos de encuestados, se procede a compararlos con la muestra general. La composición socio económica y demográfica de cada conglomerado fue analizada por medio de tres variables; el sexo, la edad y el total de ingresos familiares. Lo anterior, con el fin de apreciar las diferencias existentes entre cada cluster y entre el conglomerado y la muestra general. En cuanto a la composición del sexo por cada cluster se obtuvo que los conglomerados uno y tres son conformados por la misma cantidad de hombres y mujeres en términos de porcentaje y poseen características similares a la composición de la muestra general. Por su parte el segundo conglomerado difiere bastante de los otros dos y de la muestra general, en este caso existe una pequeña predominancia de hombres en su conformación.

Con respecto a la conformación por rango etáreo, los resultados obtenidos indican que el cluster uno destaca en su conformación por personas que tienen rangos entre 26 - 35 y 46 - 55 años. Además se observa que no existen personas de 66 y más años. Por su parte el conglomerado dos destaca el considerable aumento en términos de proporciones de las personas menores a 26 años y la disminución de encuestados que tienen entre 26 y 35 años. Finalmente el tercer conglomerado destaca su alza en personas de rangos entre 26 - 35 y más de 65 años.

Tras el análisis se logró establecer que el conglomerado uno destaca por su gran porcentaje de personas pertenecientes al rango menor de \$600,000, en cuanto a la comparación de este grupo con la muestra general se puede observar que se mantiene el porcentaje de ingreso mensual entre \$600,001 y \$1,700,000. En relación al segundo cluster se puede apreciar un aumento con respecto a la muestra en el rango menor de \$600,000 y más de 1,700,001. Con respecto al tercer conglomerado, se puede observar que existe un aumento en la composición de personas que pertenecen al rango de ingresos familiares de entre \$600,000 - \$1,700,000. Los resultados obtenidos respecto a la compañía con que viajan los turistas se puede establecer tras el análisis de los resultados, que el primer conglomerado se compone de personas que viajan principalmente con la pareja o con la familia, el segundo grupo aumentan los casos, con respecto a la muestra general, de personas que visitan la zona acompañados de solos, en pareja y principalmente con amigos. Por último se logró apreciar que en el tercer cluster aumenta el porcentaje de personas que viaja en familia y disminuyó el porcentaje de las demás componentes. Finalmente son resumidos los conglomerados de la siguiente manera:

C1: Grupo compuesto por ambos sexos con predominancia de mujeres. Las edades de estas personas van desde los 26 a los 55 años principalmente, por lo tanto son personas en edades activas que quieren desarrollar diversas actividades. Sin embargo para ellos es muy importante que el lugar esté “al alcance de la mano” en términos económicos. Principalmente porque son personas que tienen hijos y por ende tienen otro tipo de responsabilidades de primer orden, además porque es el grupo que se compone en mayor porcentaje por personas que tienen ingresos menores a los \$600,000 pesos.

C2: Conglomerado compuesto por ambos sexos en prácticamente el mismo porcentaje, son principalmente jóvenes menores a 26 años, los cuales en su carácter de juventud buscan divertirse en la zona y les es muy importante que existan diversos panoramas para poder entretenerse. Este segmento no se preocupa de lo económico, debido a que principalmente o son jóvenes que están trabajando y no tienen mayores responsabilidades o porque viven con sus padres que ganan sobre \$1,700,000 pesos. Viajan a la zona en un alto porcentaje (41%) con su pareja o amigos y un 51% viaja en familia (es el grupo con menor porcentaje en términos de viaje con familia). Además cabe destacar que es el grupo compuesto por menos personas (aproximadamente la mitad de personas en comparación al primer y tercer grupo).

C3: Grupo compuesto por ambos sexos con predominancia femenina. En cuanto a las edades de este segmento van principalmente desde los 26 años hacia arriba, de manera similar al primer grupo (26 a 55), sin embargo en éste destaca la composición de personas mayores de 66 años. Este conjunto al igual que el primero está conformado por personas que viajan junto a sus familias principalmente (66%, es el segmento con mayor porcentaje en este ítem de los tres grupos), la diferencia es que éstos prefieren no realizar muchas actividades, más bien quieren descansar en el ambiente natural que la zona puede ofrecer. La mayor cantidad de personas que conforman el grupo tienen un ingreso familiar mensual entre \$600,001 y \$1,700,000 pesos.

## CONCLUSIONES

A partir de este estudio se puede concluir que la principal motivación que tienen las personas en el marco del turismo de intereses espaciales para viajar a la zona denominada como litoral central, son motivaciones denominadas como de “Descanso y Salud Natural”, es decir lo que buscan las personas es poder escaparse de la monotonía para lograr relajarse y descansar de las tensiones generadas por la estresante vida laboral y por la constante rutina. Es por esto que buscan disfrutar de los paisajes y la belleza del entorno natural, optando por una vida sana que es posible encontrar gracias a la tranquilidad que brinda el sector costero. Otras motivaciones de gran

importancia para poder lograr visitar las comunas durante estadías cortas de entre uno a tres días, son que los balnearios sean “Económicamente Accesibles” y que las personas puedan vivir momentos de “Ocio”, es decir que no se tenga algún trabajo por delante o algún otro tipo de obligación.

Una de las principales recomendaciones de esta investigación es enfocarse en la promoción de actividades dirigidas o centradas en la familia. Como se pudo apreciar en los resultados la mayor cantidad de la muestra viaja a la zona con sus familias, y por ende buscan panoramas familiares los fines de semanas de temporada baja, para que desde el menor de sus integrantes hasta el mayor, pueda divertirse. En segundo punto, es aumentar la oferta de actividades turísticas guiadas. Esto debido a que uno de los tipos de turismo de intereses especiales más preferidos por las personas es el Turismo Natural. Además, dentro de los atractivos turísticos más importantes se encuentran visitar Santuarios de la Naturaleza y Quebradas y Embalses (primer y tercera opción de un total de dieciséis). Una tercera recomendación corresponde a aumentar también la oferta en actividades culturales abiertas a todo público. Se pudo observar que la realización de Actividades Culturales, espontáneamente fue la actividad más mencionada por los visitantes: festivales, música, arte, teatro y exposiciones abiertas a todo público, ya sea en plazas, playa o anfiteatros. Además, se destaca que en varias ocasiones se mencionó que la única actividad cultural que existe en la zona es la casa de Pablo Neruda en Isla Negra.

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## CLIMA ORGANIZACIONAL EN LAS UNIDADES DE VENTA DE LAS TIENDAS DEL ISSSTE DEL MUNICIPIO DE DURANGO

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### RESUMEN

*El clima organizacional es un tema de gran importancia en las organizaciones, ya que contribuye al logro de los objetivos en una organización. Evaluando el clima organizacional se puede conocer cuál es la percepción que tienen los trabajadores sobre la entidad en la que laboran. Los objetivos de la presente son evaluar las dimensiones del clima organizacional: estructura, recompensa, relaciones e identidad, en las unidades de venta de las tiendas del Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado (ISSSTE) del municipio de Durango, e identificar cual es la dimensión mejor evaluada, cual resulta con menor aceptación, que unidad de venta percibe mejor el clima organizacional y que correlación tienen las dimensiones entre sí. La investigación es de tipo descriptivo, se entrevistó al total de la población de las unidades de venta, en todos sus niveles. Se concluye que los trabajadores en las dimensiones evaluadas perciben de manera positiva cada una de ellas, así mismo la dimensión mejor evaluada es la dimensión de identidad y la de menor aceptación pero no negativa es la de relaciones. La unidad de venta que mejor percibe el clima organizacional es la N° 2, y por último se concluye que las dimensiones entre sí tienen un alto grado de correlación.*

**PALABRAS CLAVE:** clima organizacional, estructura, recompensa, relaciones, identidad.

## ORGANIZATIONAL CLIMATE IN THE SELLING UNITS STORES OF THE ISSSTE IN DURANGO CITY

### ABSTRACT

*The organizational climate is a topic of great importance in organizations, as it contributes to the achievement of objectives in an organization. In assessing the organizational climate, we can get to know what the worker's perception is about the organization in which they work. The objective of this study is to assess the organizational climate dimensions: structure, rewards, relationships and identity in the selling units stores of the Institute of Security and Social Services for State Workers (ISSSTE) in the city of Durango. Also, identify which dimension is better evaluated, which one has less acceptance, which selling unit perceives a better organizational climate, and the correlation with each other dimensions. This research is descriptive, the total population of selling units were interviewed at all levels. We conclude that workers perceive each evaluated dimension positively; also, the highest evaluation is the dimension of identity, and the lower acceptance dimension, but not negative, is relationships. The selling unit that perceives a better organizational climate is No. 2. Finally, we can conclude that the dimensions together have a high degree of correlation.*

**JEL:** M12

**KEY WORDS:** organizational climate, structure, rewards, relationships, identity.

## **INTRODUCCIÓN**

En la actualidad las organizaciones se enfrentan a diversas complejidades por la competencia que existe entre las mismas, por tal motivo es necesario que mantengan un clima organizacional positivo debido a que las relaciones humanas y el ambiente laboral son de gran importancia para alcanzar un buen nivel de desempeño en los trabajadores y de esta manera lograr los objetivos organizacionales y ser competitivos. Goncalves (2000) menciona que el clima organizacional dentro de las instituciones se refleja en las estructuras organizacionales, tamaño de la organización, modos de comunicación y estilo de liderazgo. Ahora bien, quien intente intervenir en una organización para mejorar el clima de la misma, debe partir de que es un constructo que utilizamos para referirnos de diferentes dimensiones de la organización. Es sobre esas dimensiones sobre las que deberemos dirigir nuestra intervención para mejorar el clima (Gairín, 1996).

## **REVISIÓN LITERARIA**

De acuerdo con Brunet (2004) el concepto de clima organizacional fue introducido por primera vez en la psicología industrial, por Gorman, en el año de 1960. Denison (1991) menciona que la expresión de clima organizacional también se encuentra en las investigaciones realizadas por, Halpin y Croft (1963), Litwin y Stringer (1978), Tagiuri y Litwin (1968), Likert (1967). Al respecto se menciona que no es un concepto reciente, ha sido motivo de múltiples investigaciones, pero a pesar de ello sigue teniendo un lugar para la discusión y la búsqueda de nuevos conocimientos. Tagiuri y Litwin (1968) expresan que: El clima organizacional es una cualidad relativamente permanente del ambiente interno de una organización que: (a) experimentan sus miembros, (b) influye en su comportamiento y (c) se puede describir en función de los valores de un conjunto particular de características (o actitudes) de la organización.

Como lo manifiestan Navarro y Santillán (2007) el éxito de una empresa depende de la manera como sus empleados perciben el clima organizacional; es decir si los integrantes de la empresa consideran que el clima es positivo o negativo obedece a las percepciones de los mismos. Cuando suelen valorarlo como adecuado, cálido o positivo, es porque consideran que éste permite y ofrece posibilidades para el desarrollo del desempeño laboral, aportando estabilidad e integración entre sus actividades en la organización y sus necesidades personales. Sin embargo, el clima organizacional también puede ser percibido como negativo por parte de los empleados cuando ellos observan un desequilibrio entre sus necesidades, la estructura y los procedimientos de la misma.

Litwin y Stinger (1978) reflexionaron sobre el tema, considerando que el contexto y la estructura de una organización influyen en el clima organizacional, y éste a su vez impacta en el comportamiento de sus miembros. Midiendo la percepción y la conducta de los trabajadores de una organización puede darse una retroalimentación que permita a la organización operar cambios que mejoren la satisfacción y desempeño de sus empleados.

## **METODOLOGÍA**

La presente investigación es de modalidad descriptiva, indica el desempeño del personal consultado en la organización estudiada, partiendo de la revisión de las variables contenidas en el modelo de clima organizacional expuesto por Litwin y Stringer (1978). El diseño que se utilizó en esta investigación es el no experimental que en general se diferencia del experimental, en que las variables no se manipulan porque ya han sucedido Del Tronco (2005). La población objeto de estudio, queda definida por el total de los trabajadores y está constituida por 76 individuos, según la información obtenida de la gerencia de la organización objeto de estudio, se realizó un censo ver tabla 1, donde se indica la composición de la población.

Tabla 1: Composición de la Población

Nº	Unidad de venta	Trabajadores
1	Semicentro comercial No. 79	27
2	Tienda No. 38	14
3	Bodega Súper isste No. 226	35
	Población total	76

*Composición de la población. La población objeto de estudio, queda definida por el total de los trabajadores y está constituida por 76 individuos, según la información obtenida de la gerencia de la organización objeto de estudio.*

El criterio de confiabilidad del instrumento, se determinó en la presente investigación, por el coeficiente de Alfa Cronbach, donde se obtuvo una confiabilidad= 0.935

## RESULTADOS

### Dimensión Estructura

En esta dimensión los elementos que se evalúan, son la normatividad, las reglas, el orden, la cantidad de trámites, el ritmo de trabajo y el material necesario para realizar el trabajo, se muestra en el promedio general que el 82% de los trabajadores están de acuerdo o muy de acuerdo con la dimensión estructura. De la antigüedad de los trabajadores se percibe que la mayoría de ellos tienen más de cinco años trabajando en la organización por lo cual este porcentaje coincide con la estructura organizacional así como sus deberes y responsabilidades.

### Dimensión Recompensa

Con respecto a la dimensión recompensa que es definida como la percepción que se tiene acerca de lo adecuado de la recompensa que se recibe por la correcta realización de su trabajo, nos indica que el 70% de los trabajadores están de acuerdo en esta dimensión lo que quiere decir que, a la mayoría de los trabajadores les parece adecuado el mecanismo de recompensa en la organización. Y que respecto al jefe inmediato la mayoría está de acuerdo con que muestra interés en el resultado de las tareas y reconoce el esfuerzo de los trabajadores. Bajo este contexto, cabe destacar que las actitudes de recompensas y comportamiento del jefe inmediato hacia el personal propicia mayor compromiso del trabajador, así mismo los entrevistados están conformes con que la institución ha contribuido en su desarrollo profesional.

### Dimensión Relaciones

En relación al comportamiento en esta dimensión donde los principales elementos evaluados son en primer término, la relación entre los trabajadores, y en segundo término, el liderazgo del jefe inmediato, por el hecho de que aquí se califica, sí el líder tiene capacidad para dirigir proyectos, motivar, sí es imparcial, sí hay respeto con los compañeros y brinda respaldo en las actividades

encomendadas, la dimensión relaciones es la que consta de más interrogantes, y la que más peso tiene por el hecho de que, como se ha visto anteriormente el clima organizacional es el ambiente que se genera dentro de una organización.

### Dimensión Identidad

La dimensión con mejor evaluación es identidad, que se ha definido como el sentido de pertenencia a la organización, lo que significa que el individuo se reconoce como un integrante importante que contribuye en el logro de los objetivos institucionales y que en general tiene la sensación de compartir los objetivos personales con los de la organización, en esta última dimensión, a través de los resultados que anteriormente se presentan, se evidencia que un 93% de los trabajadores, opino que aspectos como: me siento parte de esta institución , me siento comprometido a presentar propuestas para mejorar mi trabajo , considero importante mi trabajo , la realización de mis actividades tiene un impacto en la institución y contribuye con el logro de los objetivos de la misma así como, disfruto en trabajar dentro de esta institución , están bien determinados en el quehacer cotidiano de sus funciones y demuestra que en las unidades de venta de tiendas del ISSSTE del municipio de Durango se comparte una misma identidad entre los individuos que componen la organización y no existen marcadas diferencias de opiniones en cuanto a la identidad existente en la organización objeto de estudio.

En la tabla 2. Se puede observar que al calcular el Coeficiente de correlación Rho de Spearman las dimensiones tienen una fuerte correlación entre sí a un nivel de significancia de 0,01 (bilateral), así mismo se describen las relaciones que existen entre sí en cada una de las dimensiones. La primer relación que se analiza es la que se da entre la dimensión estructura y recompensa, que presenta una correlación de .728 al igual que la correlación entre estructura y relaciones, esto quiere decir que existe un alto grado de influencia entre las dimensiones antes mencionadas, y que de la estructura dependen las recompensas y las relaciones en la organización. La siguiente relación analizada es la que se da entre la estructura y la identidad donde se obtiene un valor de .504 en el coeficiente de correlación que aunque no es tan alto como los anteriores, muestra que la estructura influye también en la identidad que tienen los trabajadores dentro de la organización objeto de estudio. Para continuar con el análisis de la tabla anterior se procede con la dimensión recompensa y la dimensión relaciones, dando como valor .754 siendo este el valor más alto que presenta la tabla antes mencionada y significando que las recompensas influyen en alto grado con las relaciones que se dan entre los trabajadores de la institución.

Tabla 2: Correlación Rho Spearman

Dimensión	Estructura.	Recompensa	Relaciones.	Identidad.
Estructura	1	.728**	.728**	.504**
Recompensa	.728**	1	.754**	.469**
Relaciones	.728**	.754**	1	.514**
Identidad.	.504**	.469**	.514**	1

\*\* La correlación es significativa al nivel 0,01 (bilateral). La tabla muestra las correlaciones de cada una de las dimensiones con el resto de las mismas por medio de la correlación de Spearman, la correlación siempre debe ser de uno o menor. Entre más se acerque el resultado de  $r$  a la unidad, más fuerte será la relación que existe entre las dos variables, así mismo, cuando se aleje de la unidad menor será la fuerza que ejerce una variable sobre otra.

## CONCLUSIONES

En la dimensión estructura, el personal de esta organización, opina, que sus funciones y responsabilidades están claramente definidas, que los procedimientos, la normatividad vigente, la cantidad de registros así como la información plasmada en ellos facilitan el desempeño, las normas de disciplina las consideran que son adecuadas; así mismo consideran que existe un orden, que los ritmos de trabajo son adecuados y que el personal puede opinar para mejorar los procedimientos y se les permite poner en práctica lo que consideran más adecuado. De igual forma para el personal, la organización otorga los materiales suficientes para la realización y desarrollo de sus actividades laborales, aunque consideran que se podría mejorar. En cuanto a la dimensión recompensa, los factores motivacionales empleados por las unidades de venta de tiendas del ISSSTE, muestra que la mayoría de los trabajadores opina que la organización ha contribuido y brinda capacitación de manera justa para elevar el desarrollo de los mismos. En la dimensión relaciones, se concluye que se cuenta con mecanismos de comunicación fluida de parte de los trabajadores y por lo general comunican la información clara y precisa, donde la mayoría trabaja con espíritu de equipo, con alta integración, desarrollando relaciones armónicas y constructivas entre los miembros de la organización, y para poder entender como son las relaciones interpersonales entre los trabajadores es importante tener en cuenta que un grupo es un número de personas que interactúan entre sí, se identifican sociológicamente, y se sienten miembros del mismo. Esto propicia que los equipos sean eficaces, es decir, que logren ideas innovadoras, alcancen sus metas y se adapten al cambio; sus miembros están altamente comprometidos tanto con el equipo como con las metas de la organización. Por lo tanto, son altamente estimados por los directivos y se reconocen y recompensan sus resultados.

Así mismo, los resultados obtenidos del análisis de la dimensión identidad, permiten concluir que el personal de la organización objeto de estudio, conoce los objetivos de ésta y a la vez están comprometidos con los mismos, se sienten parte importante dentro de ella y disfrutan su trabajo, se esfuerzan para realizar de la mejor manera su trabajo y por ende mejorar día con día la calidad del mismo; ya que específicamente la identidad es la totalidad de los patrones repetitivos del comportamiento individual y de relaciones, que todos juntos reflejan el significado no reconocido de la vida organizacional. La identidad organizacional está influenciada por el pensamiento consciente: la forma en que se relacionan los individuos en el trabajo está en principio motivada por pensamientos y sentimientos inconscientes, su nacimiento depende de la transferencia de emociones que se da bajo la estructura organizacional. Por último cabe mencionar que dentro de la presente investigación se pudo observar que en general el clima organizacional en las unidades de venta analizadas se percibe un clima organizacional positivo es decir que existe un ambiente aceptable de trabajo y esto contribuye al logro de los objetivos organizacionales.

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# MODELO DE SATISFACCIÓN DE LOS ESTUDIANTES POR MEDIO DE ECUACIONES ESTRUCTURALES

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## RESUMEN

*La satisfacción del cliente es una variable importante para la gestión del servicio de las diferentes entidades, instituciones y empresas en general; sin embargo, comúnmente es medida con metodologías que no tienen en cuenta primero que, desde el punto de vista estadístico, es una variable sujeta a errores de medida; y segundo, la posible interrelación de las variables que la determinan. Por lo tanto, se requiere de una metodología que permita descomponer el concepto en dimensiones del servicio y estas a su vez en indicadores. La metodología empleada es la modelización mediante sistemas de regresión estructural, tomando como base para su especificación, consideraciones teóricas y variables latentes detectadas por medio de un análisis factorial. Los resultados del modelo presentado en este informe, permiten una mejor comprensión de una estructura sencilla de la satisfacción de los estudiantes de primer semestre de la Escuela de Derecho y plantea una línea base de análisis para este concepto.*

**PALABRAS CLAVE:** Nivel de satisfacción, ecuaciones estructurales, regresiones estructurales, análisis factorial, dimensión del servicio, variable latente.

## STUDENT SATISFATION MODEL BY STRUCTURAL EQUATIONS

### ABSTRACT

*Customer satisfaction is an important service for the management of the various institutions and companies in general variable, however, is commonly measured with methods that do not consider first that, from a statistical point of view, is a variable subject to measurement errors , and second, the possible interrelationship of the variables that determine it. Therefore, it requires a methodology that can decompose the dimensions of service concept and these in turn on indicators. The methodology is the modeling of structural systems using regression basis for its specification , theoretical considerations and latent variables identified by factor analysis . The model results presented in this report allow a better understanding of a simple structure satisfying the first semester students of the Law School and raises a base line for this concept analysis.*

**KEYWORDS:** Satisfaction level, structural equation, structural regression, factor analysis, dimension of service, latent variable.

### INTRODUCCIÓN

En la actualidad, y tomado como base tanto la dinámica comercial como la homogeneidad en la oferta de valor de productos y servicios, se hace necesario identificar la estructura de interacción de las diferentes dimensiones del servicio, con el fin de caracterizar el concepto de satisfacción de

los clientes y poder ofrecer beneficios y valores agregados diferentes a los de las entidades competidoras. Dado que la dinámica de la prestación de servicios funciona en torno a procesos interrelacionados y no a dimensiones independientes, para entender el concepto de satisfacción con la calidad del servicio, es importante analizar la interacción entre los componentes que definen dicho concepto. Por tal motivo, la estructura analizada parte de la identificación, por medio de un análisis factorial exploratorio, de los componentes o variables latentes que resumen la información de los indicadores de servicio. Las variables latentes extraídas del análisis factorial, corresponden a las dimensiones sobre las cuales se plantea la hipótesis de interrelación.

La metodología utilizada para este análisis son los modelos de ecuaciones estructurales, realizando un análisis factorial confirmatorio y de regresión estructural. El propósito de este trabajo, permite una mejor comprensión de la compleja estructura de la satisfacción de los estudiantes, explicando la correlación entre las variables latentes (variables no observables directamente) y la asociación entre cada una de ellas con sus correspondientes variables observadas, para establecer un modelo estructural y un modelo de medición de ellas.

### Base de datos

Se construyó un cuestionario semiestructurado de aplicación personal, que consta de preguntas cerradas de selección múltiple con calificación con escala de recorrido de 1 a 5. La base de datos utilizada en este trabajo, proviene de las calificaciones dadas por los clientes a los indicadores de servicio de la sección de calidad de servicio. De esta forma, se cuenta con las respuestas de 99 estudiantes para 19 indicadores de servicio y una variable de nivel de satisfacción general. Por lo tanto, en total se tienen 20 preguntas (19 indicadores de servicio + la variables de satisfacción general).

### Variables Del Modelo

- $\eta$  1 = Estudiantes
- $\eta$  2 = Aspectos académicos
- $\eta$  3 = Docentes
- $\eta$  4 = Tecnología e infraestructura
- $\eta$  5 = Bienestar estudiantil
- $\eta$  6 = Satisfacción
- y1 = Puntualidad y asistencia de los docentes a clase
- y2 = Metodologías didácticas
- y3 = Evaluaciones de los docentes
- y4 = Exigencia académica
- y5 = Cantidad, capacidad y calidad de las aulas
- y6 = Conexión Internet
- y7 = Salas de sistemas y de estudio
- y8 = Características generales de la Biblioteca
- y9 = Ambiente académico de la Universidad
- y10 = Acompañamiento académico
- y11 = Proceso inducción
- y12 = Presencia de directivos
- y13 = Acoplamiento con el grupo de estudiantes
- y14 = Servicios de la cafetería
- y15 = Servicio médico
- y16 = Actividades adicionales de Bienestar

y17 = Asistencia a clase por parte de los estudiantes  
y18 = Compromiso de los estudiantes con el programa académico  
y19 = Cumplimiento actividades académicas de los estudiantes  
y20 = Satisfacción general

### Análisis Factorial Exploratorio

Como primer paso para modelar utilizando este método, se realiza un análisis factorial exploratorio

para determinar si es posible explicar las variables independientes existentes en un número menor de variables latentes, partiendo de la hipótesis de que debe existir una interdependencia entre la satisfacción producida por los indicadores de servicio evaluados. Se asume que estas correlaciones son medidas de un mismo concepto. De esta forma, se procede con el análisis y se escoge la extracción de 5 factores que tiene un porcentaje de varianza explicada de 70% y su interpretación se ajusta de mejor manera a los conocimientos teóricos de las dimensiones que subyacen la satisfacción del estudiante. De acuerdo a las ponderaciones de cada una de las variables, cada uno de los factores puede ser interpretado de la siguiente manera:

Factor 1: Aspectos académicos. Las variables de mayor ponderación corresponden a ambiente académico de la Universidad, acompañamiento académico suministrado al estudiante, proceso de inducción, presencia de los Directivos, acoplamiento a los compañeros del curso.

Factor 2: Estudiantes. Las variables de mayor ponderación corresponden a asistencia a clase por parte de los estudiantes, compromiso de los estudiantes con el programa académico y cumplimiento de las responsabilidades académicas y administrativas de los estudiantes.

Factor 3: Docentes. Las variables de mayor ponderación corresponden a puntualidad y asistencia a las clases de los docentes, las formas de evaluaciones y las metodologías del docente y exigencia académica y conocimiento de los docentes en las diferentes materias.

Factor 4: Tecnología e infraestructura. Las variables de mayor ponderación corresponden a las metodologías didácticas y usos de aulas virtuales empleadas en las materias, conexión a internet de la Universidad, cantidad, capacidad y calidad de las aulas de clase de la Universidad, cantidad y calidad de las salas de sistemas y salas de estudio y las características generales de la Biblioteca.

Factor 5: Bienestar. Las variables de mayor ponderación corresponden a servicios prestados por las Cafeterías de la Universidad, servicio médico ofrecido por la Universidad y actividades adicionales de bienestar universitario.

Modelo De Regresión Estructural

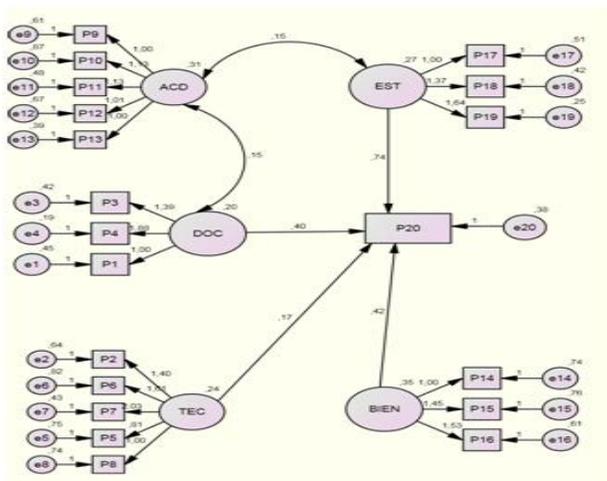


Tabla 1: Estadísticas Descriptivas De Las Preguntas Realizadas

Número	Ítem	NS/ND	Malo	Bastante	Buena	Excelente
P1	Los docentes muestran puntualidad y asistencia a las	1.01%	6.06%	42.42%	39.39%	11.11%
P2	Las metodologías didácticas y usos de aulas	6.06%	16.16%	25.25%	42.42%	10.10%
P3	Las formas de evaluaciones y las metodologías	1.01%	4.04%	22.22%	39.39%	33.33%
P4	Exigencia académica y conocimiento de los docentes	2.02%	5.05%	12.12%	39.39%	41.41%
P5	Cantidad, capacidad y calidad de las aulas de clase	2.02%	9.09%	21.21%	46.46%	21.21%
P6	Conexión a Internet de la Universidad (Velocidad y	13.13%	29.29%	21.21%	27.27%	9.09%
P7	Cantidad y calidad de las salas de sistemas y salas de	11.11%	15.15%	23.23%	37.37%	13.13%
P8	Características generales de la Biblioteca	2.02%	6.06%	18.18%	36.36%	37.37%
P9	Ambiente académico que pronuncia la Universidad	4.04%	3.03%	19.19%	40.40%	33.33%
P10	Acompañamiento académico realizado por la	10.10%	6.06%	22.22%	41.41%	20.20%
P11	Inducción realizada al programa académico y la	3.03%	6.06%	15.15%	43.43%	32.32%
P12	Presencia de los directivos del programa en su	5.05%	7.07%	22.22%	44.44%	21.21%
P13	Grado en el que se identifica con el grupo de	2.02%	6.06%	20.20%	51.52%	20.20%
P14	Servicios prestados por las Cafeterías de la	3.03%	11.11%	22.22%	39.39%	24.24%
P15	Servicio médico ofrecido por la Universidad	11.11%	3.03%	14.14%	41.41%	30.30%
P16	Actividades adicionales de bienestar universitario	9.09%	10.10%	23.23%	35.35%	22.22%
P17	Asistencia a clase por parte de los estudiantes	2.02%	5.05%	28.28%	46.46%	18.18%
P18	Compromiso de los estudiantes con el programa	3.03%	8.08%	25.25%	45.45%	18.18%
P19	Cumplimiento de responsabilidades académicas y	3.03%	9.09%	13.13%	51.52%	23.23%

## CONCLUSIONES

La aplicación de modelos de ecuaciones estructurales, permitió identificar una estructura de interrelación de variables latentes subyacente al concepto de satisfacción de los estudiantes.

El modelo evaluado muestra por un lado, una relación positiva de las cinco dimensiones de servicio (Ambiente académico, Estudiantes, Docentes, Tecnología-Infraestructura y Bienestar) con el nivel de satisfacción general.

La dimensión que mayor efecto tiene sobre la satisfacción de los estudiantes, es el factor denominado Estudiantes (asistencia a clase por parte de los estudiantes, compromiso de los estudiantes con el programa académico y cumplimiento de las responsabilidades académicas y administrativas de los estudiantes).

Esta situación se debe, posiblemente, a que en un mercado competitivo donde la oferta de productos es similar, los Aspectos Académicos (ambiente, acompañamiento, presencia de directivos, acoplamiento) y las propias responsabilidades de los estudiantes (asistencia a clase por parte de los estudiantes, compromiso de los estudiantes con el programa académico y cumplimiento de las responsabilidades académicas y administrativas de los estudiantes), se traducen en la calidad de la atención prestada a las necesidades de los estudiantes, convirtiéndose en un atributo diferencial que influye en la percepción de ellos sobre el servicio ofrecido por la Universidad.

El factor que menos pesa en la satisfacción, para los estudiantes de Derecho de primer semestre es el factor Tecnología e infraestructura de la Universidad.

Observando la tabla de estadística descriptiva (Tabla 1) de los resultados obtenidos de las variables, se pueden observar las calificaciones de las preguntas en cada una de las modalidades.

En general la satisfacción de los estudiantes de primer semestre de la Escuela de Derecho se resume de la siguiente manera: el 5.05 %, se encuentra bastante insatisfecho, el 17.17% se encuentra mediante satisfecho, mientras que el 77.77% se encuentra muy satisfecho.

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# **POLÍTICA DE FIJACIÓN DE PRECIOS: UNA NUEVA METODOLOGÍA BASADA EN LA ESTRUCTURA DE COSTOS-COMPETENCIA DE LA EMPRESA**

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## **RESUMEN**

*En este artículo se presenta una revisión teórica de los diferentes enfoques utilizados por las empresas para fijar el precio final de sus productos, mostrando los alcances y limitaciones de cada una ellas. Además, se presenta una nueva metodología para fijar precios basado tanto en la competencia como en los costos, tomando en cuenta la estructura de costos de la propia empresa frente al precio observado de sus principales competidores para estimar un precio sugerido. Lo anterior se realiza mediante un esquema de ponderaciones que nos permite asignar un peso apropiado a los principales competidores dentro del mercado objetivo al que va dirigido el producto de la empresa y un peso a la propia estructura de costos de la empresa.*

**PALABRAS CLAVES:** Fijación de precios, estrategia de precios, estructura de costos, competencia.

## **PRICING POLICY: A NEW METHODOLOGY BASED ON COST-COMPETITIVE STRUCTURE OF THE COMPANY**

### **ABSTRACT**

*This paper presents a theoretical review of the different approaches used by companies to set price of their products, showing the scope and limitations of each of them. It also presents a new methodology to set prices based on both competition and on costs, taking into account the cost structure of the company against the observed price of its main competitors for a suggested price estimate. This is done using a weighting scheme that allows us to assign an appropriate weight to the main competitors in the target market you are targeting the product of the company and a weight to the cost structure of the company.*

**JEL:** D40, L11, M29

**KEYWORDS:** Pricing, price strategies, cost structure, competition.

### **INTRODUCCIÓN**

En el común de los libros de texto de economía se plantea que el principal objetivo de las empresas es la maximización de beneficios. Una buena política de fijación de precios contribuye a que se alcance esta meta y que se logre la lealtad del cliente. La fijación de precios se vuelve entonces un elemento clave para determinar la rentabilidad de un negocio; sin embargo, si el precio es demasiado alto provocará una reducción de la cantidad demandada y la consecuente pérdida de market share o incluso llevar a la empresa a quedarse fuera del mercado; si el precio es muy bajo, el volumen de ventas podría no generar el ingreso suficiente para cubrir los costos

asociados a la empresa o bien, cubrirlos, pero sin lograr el objetivo tan anhelado de la maximización de beneficios. En términos de mercadotecnia, el precio es el único elemento dentro del mix del marketing que produce ingresos; todos los demás elementos del mix del marketing representan costos para la empresa (Kotler y Armstrong, 2010). Siguiendo a Churchill y Peter (1998), el precio juega dos papeles primordiales dentro del mix del marketing:

*Da los incentivos para que la compra de un producto o servicio se efectúe y, de ser así, establece cuánto del producto o servicio los consumidores o empresas comprarán.*

*Influye en determinar si los productos del marketing serán lo suficientemente rentables.*

En este artículo se presenta una metodología para fijar precios basado tanto en la competencia, como en los costos, tomando en cuenta la estructura de costos de la propia empresa frente al precio observado de sus principales competidores para establecer un precio sugerido. Lo anterior es realizado mediante un esquema de ponderaciones que nos permite asignar un peso apropiado a los principales competidores dentro del mercado objetivo al que va dirigido el producto de la empresa, y un peso a la propia estructura de costos de la empresa. El trabajo está estructurado de la siguiente manera: una sección de revisión de literatura en la que se presentan los cuatro principales enfoques metodológicos utilizados por las empresas para establecer el precio de sus productos, esto para analizar, a nivel teórico y práctico, los principales alcances y limitaciones de cada una de ellos. A continuación, se presenta la propuesta metodológica para fijar precios basado en las estructuras de costo-competencia de la empresa. Posteriormente, en la sección de resultados se presenta un ejemplo práctico para estimar precios para una cafetería, específicamente para la bebida capuchino caliente. Finalmente, la última sección contiene las conclusiones en las que se resumen las principales características de la metodología propuesta.

## REVISIÓN DE LITERATURA

Existen al menos cuatro enfoques metodológicos que usan las empresas para fijar los precios de sus productos o servicios: fijación de precios basados en costos, fijación de precios orientado a beneficios, fijación de precios basado en valor y fijación de precios basados en la competencia.

*La fijación de precios basado en costos:* es el método más utilizado por las empresas para obtener sus precios (Kerin et al, 2007, Nagle et al, 2010). Este método toma en cuenta los costos totales de la empresa, que incluyen tanto los costos fijos como los variables. Para la obtención del precio basado en este enfoque, se calcula el costo unitario de producción del bien o servicio y se le agrega un markup sobre dicho costo con la finalidad de obtener el precio de venta. Este markup puede ser expresado como un porcentaje sobre los costos o como un porcentaje del precio de venta. Si llamamos  $CU$  a los costos unitarios de producción,  $CV$  a los costos variables y  $CF$  a los costos fijos, podemos obtener los costos unitarios de la siguiente manera:

$$CU = CV + \frac{CF}{\text{Unidades Vendidas}} \quad (1)$$

De esta forma, si lo que la empresa desea es obtener un precio que le genere un margen de utilidad sobre sus costos, el precio se fijaría de la siguiente manera:

$$P = CU + (CU * \pi_d) = CU * (1 + \pi_d) \quad (2)$$

Si lo que se desea es un beneficio como porcentaje del precio de venta, el precio sería entonces:

$$P = \frac{CU}{(1-\pi_d)} \quad (3)$$

Donde  $P$  es el precio obtenido y  $\pi_d$  es el margen en porcentaje de beneficio deseado.

Una de las principales limitaciones de esta metodología es que no considera el efecto que el precio tiene sobre la demanda de los consumidores (Churchill & Peter, 1998). Bajo esta técnica, se podría fijar un precio que cubra los costos de la empresa y el margen deseado para obtener los anhelados beneficios, pero que sea tan alto que los compradores (a gran parte de ellos) prefieran comprar productos sustitutos a los principales competidores. Otro problema con esta metodología es la dificultad en la práctica de determinar adecuadamente los costos unitarios de producción, ya que estos dependen del número de unidades vendidas del producto. Como mencionan Nagle et al. (2010), un incremento de precios para “cubrir” costos fijos altos reduce las ventas futuras y causa que los costos unitarios se incrementen aún más, esto nos llevará a una “espiral de muerte” de fijación de precios basados en costos en la que los costos fijos se distribuirán en cada vez menos unidades de producto llevando a una constante escalada en el precio. Otra manera en que las empresas pueden lograr establecer sus precios es mediante

*La fijación de precios orientada a beneficios:* esta metodología permite a la empresa encontrar un equilibrio entre sus costos y los ingresos esperados. A diferencia del costo más margen como porcentaje del precio de venta (ecuación (3)), bajo este enfoque, la empresa se fija un beneficio objetivo en términos monetarios para un periodo determinado. El precio, bajo esta metodología, se obtiene como sigue:

$$\pi = IT - CT \quad (4)$$

$$\pi = (P * Q) - [(CV * Q) + CF] \quad (5)$$

Despejando  $P$  tendemos:

$$P = \frac{\pi + CF}{Q} + CV \quad (6)$$

Donde  $\pi$  son los beneficios objetivos de la empresa en términos monetarios,  $IT$  son los ingresos totales y  $CT$  son los costos totales. El planteamiento del beneficio deseado por la empresa también puede ser expresado en términos del rendimiento deseado sobre la inversión que realiza, un modo de medir este rendimiento es a través del ROI (rendimiento sobre la inversión). El ROI es un valor expresado en porcentaje que nos permite evaluar que tan eficiente es el gasto que se está haciendo o que planea realizar, por ejemplo, si el ROI fuera del 20% significaría que por cada peso invertido en el proyecto se obtienen 20 centavos adicionales como rendimiento. Para efectos de la determinación de precios, no es necesario estimar el ROI, sino definir (de manera arbitraria) el ROI que la empresa desea obtener, por lo que el precio se obtendría de la siguiente manera:

$$P_{ROI} = CU + \left( \frac{ROI * \text{capital invertido}}{\text{Ventas Unitarias}} \right) \quad (7)$$

Claramente, al igual que la fijación de precios basada en costos, las técnicas para establecer precios orientada a beneficios dependen de estimar adecuadamente la demanda del producto, lo que podría llevar a la empresa, como ya vimos, a establecer estrategias de fijación de precios que generen ciclos que dañen su rentabilidad.

*La fijación de precios basados en valor* : considera como principal determinante del precio la percepción que los consumidores tienen sobre el valor de un bien o servicio al momento del intercambio. Este valor es visto por los consumidores como la diferencia entre los beneficios que ellos aprecian del producto y los costos percibidos para realizar la transacción. Lo que sugiere este enfoque es buscar lo que los consumidores esperan o están dispuestos a pagar por un producto y el rango de precios que ellos consideran aceptables para adquirirlo, para esto, se parte de un precio de referencia, es decir, el precio que los compradores usan para comparar el precio al que se ofrece el producto y a partir de este estimar el mayor o menor valor que el producto de la empresa pueda ofrecer con respecto al de sus competidores.

Nagle et al. (2010) presentan una metodología para estimar el valor económico de un bien o servicio en el que se parte de un valor de referencia el cual es definido como el precio de un producto de la competencia que el consumidor ve como la mejor alternativa con respecto al producto de la propia empresa, a lo que se le agrega un valor de diferenciación para obtener el valor económico total y, finalmente, el precio.

En general, la fijación de precios basados en valor es el “ideal” para la fijación de precios, ya que le permite a la empresa darle al consumidor exactamente lo que él desea. Sin embargo, a nivel práctico, es muy complicado encontrar cual es el precio de referencia que utilizan los consumidores para comparar un producto, sobre todo cuando la empresa se encuentra inmersa en una estructura de mercado en la que hay más de un competidor cercano y con productos relativamente diferenciados. En la medida en que la empresa pueda encontrar un equilibrio entre lo que hace bien y cuanto lo valora el consumidor, la fijación de precios basada en valor será adecuada.

*La fijación de precios basados en la competencia* : consiste en observar los precios de los competidores y decidir, con base en los objetivos de ventas de la empresa y a la estructura de mercado en la que se encuentre; fijar un precio que guarde una relación con el precio de dichos competidores, por lo que la decisión estribará en establecer un precio por debajo, igual o superior al de la competencia. A nivel práctico, las empresas, para establecer precios mediante estos objetivos, realizan un benchmarking para identificar el precio de mercado de su producto. En sentido estricto, podríamos decir que bajo esta metodología la empresa se vuelve precio aceptante, lo que sería adecuado si se encontrara dentro de una estructura de mercado muy cercana a la *competencia perfecta* o bien, dentro de una estructura *oligopólica* en la que existe una empresa líder y una serie de competidores cuasi-competitivos dentro de los cuales se encuentra la propia empresa.

El suponerse que la empresa debe de ser precio aceptante al fijar sus precios es uno de los principales conceptos erróneos al utilizar esta metodología a nivel práctico, ya que existen muchas empresas, sobre todo en el sector servicios, que se encuentran en una estructura de mercado de *competencia monopolística*, en la que si bien el número de competidores es relativamente grande, existe la posibilidad de diferenciación de producto, lo que debe de llevar a una estrategia de fijación de precios proactiva y no seguidora, aun tomando en consideración a sus competidores. Otra limitación del enfoque de fijación de precios basados en la competencia

es el que no incluya la estructura de costos a la que se enfrenta la empresa, si sus costos son demasiado altos con respecto al de sus competidores, la empresa podría no ser capaz de fijar un precio por debajo (o incluso igual) al de estos y poder sobrevivir en el mercado.

## **METODOLOGÍA**

Las decisiones sobre qué, cuánto y cómo producir están irremediablemente ligadas a los costos de las empresas, además, gran parte de las ventajas competitivas de una empresa se reflejan en la estructura de costos que posee. Una apropiada y rentable metodología para fijar precios requiere de alguna manera tomar en cuenta los costos en los que la empresa incurre. Por otro lado, en la medida en que los segmentos de mercado a los que se dirige la firma se encuentran inmersos en una significativa o fuerte competencia, es necesario no pasar desapercibidos los precios a los cuales los competidores ofrecen los productos que los consumidores podrían considerar como sustitutos cercanos al de la empresa.

La metodología de fijación de precios basados en la estructura de costos-competencia de la empresa se ha desarrollado con la intención de combinar los costos en los que incurre la empresa al elaborar su producto y los precios a los que sus principales competidores ofrecen bienes y servicios sustitutos cercanos. Los costos que se tomarán en cuenta para esto son sólo aquellos que determinen el impacto sobre los beneficios de una decisión sobre los precios, es decir, usando la terminología presentada por Nagle et al. (2010), sólo se tomarán en cuenta aquellos costos que son evitables. Estos costos evitables serán la base sobre la cual la empresa fijará un margen deseado de rentabilidad sobre ellos.

Si no existiera competencia dentro del mercado objetivo al que se dirige la empresa, este markup podría arrojar el precio final al que la empresa fijaría su precio. La diferencia entre este margen y el utilizado en la metodología de fijación de precios basado en costos presentada en la sección anterior, es que este no toma en cuenta los costos unitarios de producción, sino sólo los costos relevantes para la fijación de precios, de alguna manera, por tanto, es un costo de producción que pretende ser utilizado como un margen de rentabilidad más que como un margen de utilidad, lo que le permitiría a la empresa un control más apropiado de sus costos relevantes al fijar precios (véase la sección de resultados).

No obstante, muchas empresas se encuentran inmersas en estructuras de mercado muy cercanas a la competencia perfecta o, más probablemente, dentro de una estructura de mercado de competencia monopolística (para una explicación de las diferentes estructuras de mercado puede verse Mas-Colell et al., 1995 y Varian, 1998). Dada estas circunstancias, es necesario tomar en cuenta el precio al que los principales competidores de la empresa ofrecen sus productos.

De esta manera, la fijación de precios basado en la estructura de costos-competencia pondera el peso que tienen los costos y el markup deseado por la empresa, frente a los precios a los cuales venden sus productos los competidores cercanos, de esta forma, en la medida en que existan “muchos” competidores dentro del mercado objetivo, la ponderación se acercará cada vez más a uno (y el peso asignado a los costos se acercará a cero), en el límite, cuando la ponderación asignada a los competidores sea uno, el precio que fijará la empresa simplemente será un promedio ponderado de los precios de todos los competidores, lo que nos llevará, de alguna manera, a que la empresa se vuelva precio aceptante y su precio sea muy cercano al de una estructura de mercado de competencia perfecta. Por otro lado, en la medida en que la empresa tenga “pocos” competidores, la ponderación asignada a ellos se acercará a cero y por ende, el peso asignado a los propios costos tenderá a uno, de nuevo, en el límite cuando no existan

competidores dentro del mercado objetivo de la empresa, el peso asignado a los costos será de uno, lo que nos llevaría a una aproximación de fijación de precios dentro de una estructura de mercado monopólica.

El precio basado en la estructura de costos-competencia se calcularía entonces de la siguiente manera:

$$P_s = w_1 * P_{Cm} + w_2 * \left[ \sum_{i=1}^n P_i^c * \theta_i \right]$$

s.a.

(8)

$$w_1 + w_2 = 1 \quad y \quad \sum \theta_i = 1$$

Donde  $P_s$  es el precio final sugerido;  $P_{Cm}$  es el precio basado en costos relevantes al que la empresa vendería su producto para mantener el margen de rentabilidad deseado;  $w_1$  y  $w_2$  son los pesos (importancia) asignados al precio obtenido basado en costos y los precios de los principales competidores respectivamente;  $P_i^c$  es el precio de venta observado del competidor  $i$  y finalmente,  $\theta_i$  es la importancia (peso) asignada al competidor  $i$  con respecto a los demás competidores cercanos.

Note en la ecuación (8) una vez asignadas las ponderaciones adecuadas tanto para la estructura de costos como para la de mercado, si los competidores bajan sus precios con la finalidad de incrementar su market share y, posiblemente, dando inicio a una guerra de precios, nuestra empresa podría reaccionar bajando también sus precios; sin embargo, el peso asignado a la estructura de costos reflejada en  $P_{Cm}$  sólo le permitirá seguir bajando sus precios en la medida en que sus ventajas competitivas de costos se lo permitan, por lo que dicha estructura reflejada en el precio sugerido generará los incentivos para no entrar en una guerra de precios que mermaría los beneficios de la empresa. De manera análoga, si la estructura de costos de la empresa es baja (lo cual podría reflejar una ventaja competitiva en la medida que sea sostenible y no alcanzable por los competidores) la empresa podrá reaccionar a una baja en los precios de los competidores con una disminución igual a sus precios sin perder beneficios.

Otra ventaja que presenta esta nueva metodología, es que no depende de estimar la demanda, esto debido a que la definición de “costos unitarios” está basada sólo en los costos relevantes de producir una unidad adicional más del producto, lo que nos lleva a un enfoque mucho más cercano a los costos marginales y no a los costos medios. Además, de alguna manera, al tomar en cuenta los precios promedios de los principales competidores, podríamos asumir que de manera implícita se está teniendo en cuenta las características de los consumidores. Finalmente, hemos definido  $P_s$  como un precio final sugerido y no como un precio final de venta, para permitir al área de fijación de precio tener un margen adicional para tomar en cuenta ciertas valoraciones que los consumidores tengan sobre el producto o la marca de la empresa que podrían llevar a reducir o aumentar el precio final de venta con respecto al precio sugerido.

## RESULTADOS

A manera de resultado, y con la finalidad de poder comprender mejor la ecuación (8), se ha desarrollado un sencillo ejemplo para determinar el precio sugerido para la venta de una bebida en una cafetería: *capuchino caliente*. La estructura de costos marginales (costos evitables) de un

capuchino podría ser muy similar a la mostrada en la Tabla 1. En ella podemos observar el costo de producción en el que se incurre al preparar una bebida capuchino caliente de, digamos 12 onzas, desglosados por la contribución que cada uno de los insumos tiene sobre los costos totales de la bebida. Los precios y los costos monetarios están expresados en pesos mexicanos. La columna (1) dentro de la tabla nos muestra los insumos necesarios para la preparación de la bebida; columna (2) nos indica el precio al que se adquieren cada una de las unidades de compra de estos insumos (columna (3)); columna (4) y (5) nos muestran las cantidades y medidas unitarias relativas a la bebida; columna (6) y (7) indican la cantidad y medida unitarias usadas en la preparación de la bebida y, finalmente, la columna (8) nos muestra el costo con que contribuye cada insumo en específico del total de la bebida, el cual es obtenido de la división de (2)/(4) multiplicado por (6).

Tabla 1: Costos de producción de un capuchino caliente

Insumos (1)	Precio de la unidad de Compra (2)	Unidad de Compra (3)	Cantidad de unidades por la unidad de Compra (4)	Unidades de la unidad de compra (5)	Cantidad Usada (6)	Unidad de la Cantidad (7)	Costo de la unidad Utilizada (8)
Café Regular	\$ 250.00	Kg	1000	gr.	14.00	gr	\$ 3.50
Agua	\$ 20.00	Lts	20000	ml.	30.00	ml	\$ 0.03
Leche	\$ 14.00	Lts	1000	ml.	320.00	ml	\$ 4.48
Vaso	\$ 927.00	Paquete	1000	pz	1.0	pz	\$ 0.93
Tapa	\$ 506.00	Paquete	1000	pz	1.0	pz	\$ 0.51
Servilleta	\$ 84.90	Paquete	2000	pz	2.0	pz	\$ 0.08
Cucharas	\$ 11.00	Paquete	50	pz	1.0	pz	\$ 0.22
Azúcar Ligth	\$ 189.00	Caja	1500	pz	1.0	pz	\$ 0.13
<b>Costo total</b>							<b>\$ 10.25</b>

En esta tabla se presenta la posible estructura de costos de producción en la que se incurre para la preparación de una bebida capuchino caliente, la columna (1) nos muestra los insumos necesarios para la preparación de la bebida; columna (2) nos indica el precio al que se adquieren cada una de las unidades de compra de estos insumos (columna (3)); columna (4) y (5) nos muestran las cantidades y medidas unitarias relativas a la bebida; columna (6) y (7) indican la cantidad y medida unitarias usadas en la preparación de la bebida y, finalmente, la columna (8) nos muestra el costo con que contribuye cada insumo en específico del total de la bebida, el cual es obtenido de la división de (2)/(4) multiplicado por (6).

Como podemos apreciar en la Tabla 1 el costo marginal de producir un capuchino adicional es de \$10.25, estos costos evitables son los que nos servirán de referencia para obtener el precio basado en costos  $P_{Cm}$  en la ecuación (8), de esta manera, si el margen de rentabilidad deseado por la empresa fuera de 65%, lo que la llevaría a tener sus costos de producción promedio en un margen del 35%,  $P_{Cm}$  sería igual a \$29.28 ( $\$10.25/0.35$ ), es decir, si nuestra empresa deseara un margen de rentabilidad del 65% y deseara fijar el precio de su producto basado en costos, el precio establecido sería de \$29.28 por capuchino.

El siguiente paso para establecer un precio es definir el esquema de ponderaciones para  $w_1$  y  $w_2$ , es decir, definir la importancia que la empresa debe de dar a su propia estructura de costos frente a la estructura de mercado en la que se encuentra inmersa. Una profunda investigación de mercado nos ayudaría a estructurar las ponderaciones de manera adecuada. Para nuestro ejemplo, asignaremos un valor de 0.3  $w_1$  y de 0.7 para  $w_2$ . Asignados estos valores, lo que nos resta es observar a través de un benchmarking, el precio al que los principales competidores con los que se enfrenta la empresa ofrecen sus productos ( $P_i^c$ ) y la importancia relativa que cada uno de ellos tiene dentro del mercado ( $\theta_i$ ). Para esto, supondremos que dentro del mercado objetivo de la empresa sólo existen dos principales competidores (piense en una plaza comercial en la que están establecidas tres cafeterías incluyendo la de la empresa), los precios a los que estos competidores ofrecen sus capuchino son  $P_1^c = \$35$  y  $P_2^c = \$32$ , la importancia relativa correspondiente a cada uno de estos competidores dentro del mercado es de  $\theta_1 = 0.65$  y de  $\theta_2 = 0.35$ , esto porque se

considera que el competidor uno tiene un posicionamiento de marca más fuerte con respecto al competidor dos. De esta forma, el precio basado en la estructura de costos-competencia se calcularía de la siguiente manera:

$$P_s = 0.3 * \$29.28 + 0.7 * [(35 * 0.65) + (32 * 0.35)]$$
$$P_s = \$32.55$$

(9)

El precio sugerido al que la empresa podría vender el capuchino es de \$32.55. Para este ejemplo, el precio sugerido por la metodología queda por encima del precio basado en costos (\$29.28), lo que podría darle un pequeño margen a la empresa para establecer su precio final por debajo de los \$32.55, lo que no necesariamente llevaría a la empresa a una guerra de precios insostenibles, puesto que esta baja de precio está sustentada por su propio margen de rentabilidad.

## CONCLUSIONES

En este trabajo se presentó una nueva metodología que puede ser usada por las empresas para establecer el precio de venta de sus productos y que está sustentada, a nivel teórico, en el enfoque de fijación de precios basados en la competencia. Sin embargo, permite a la empresa tomar en cuenta su propia estructura de costos al establecer sus precios, lo que, como mencionamos en el artículo, es una de las principales limitantes teóricas y prácticas cuando usamos el enfoque de fijación de precios basado en la competencia. Se argumentó además que uno de los principales conceptos erróneos al usar el enfoque de fijación de precios basado en la competencia es suponer que la empresa deba de ser precio aceptante, ya que existen muchas empresas, sobre todo en el sector servicios, que se encuentran en una estructura de mercado de *competencia monopolística*, en la que si bien el número de competidores es relativamente grande, existe la posibilidad de diferenciación de producto, lo que debería de llevar a una estrategia de fijación de precios proactiva y no seguidora, aun tomando en consideración a sus competidores.

La metodología aquí presentada, la cual hemos llamado *fijación de precios basado en la estructura de costos-competencia*, pondera el peso que tiene los costos y el markup deseado por la empresa, frente a los precios a los cuales venden sus productos los competidores cercanos. Además, por la forma en que se han redefinido los costos unitarios dentro de este método, nuestro enfoque nos permite acercarnos más al concepto de costo marginal dentro de la toma de decisiones en vez de los costos medios. La metodología promete dar una mucho más adecuada descripción de la relación competitiva entre la empresa y la estructura de mercado en la que se encuentra inmersa, permitiendo al tomador de decisiones utilizar de manera más adecuada la información del mercado con la que cuenta para, finalmente fijar el precio de sus productos.

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# LA INDUSTRIA DEL BACANORA, COMO PROPUESTA DE DESARROLLO ENDOGENO EN LA REGION DE DENOMINACION DE ORIGEN

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## RESUMEN

*En el presente trabajo, se detalla la situación actual de la industria del Bacanora en el Estado de Sonora, bebida espirituosa típica de la región, de alta graduación alcohólica, es elaborada a base del vegetal denominado científicamente *Agave Angustifolia* Haw. En el cual, se analizaron a los actores directos e indirectos de la cadena de suministro, identificando las fortalezas y áreas de oportunidad que presenta esta actividad, con el objetivo de diseñar una propuesta de una cadena de valor eficiente que permita el repunte de la misma. Se realizó una investigación bibliográfica, entrevistas de profundidad, visitas de campo en las vinatas de aquellos empresarios que contaran con caracterizas formalidad en cada uno de los procesos, así como entrevistas semi estructuradas a instituciones gubernamentales y centros de investigación que se dedican a impulsar el desarrollo endogeno de la región mediante de esta actividad.*

**PALABRAS CLAVES:** Bacanora, Cadena de Suministro y Valor

## BACANORA'S INDUSTRY, AS A PROPOSAL OF ENDOGENOUS DEVELOPMENT IN THE ORIGIN'S DENOMINATION REGION

### ABSTRACT

*This research is intended to detail the Bacanora's industry current situation in the state of Sonora. A typical region's spirit drink, of high alcohol content, is elaborated with a vegetal scientifically named *Agave Angustifolia* Haw. In the study, direct and indirect actors are analyzed, identifying the strengths and the opportunities' areas this activity exhibits, with the purpose of designing a proposal of an efficient value chain that allows the upturn of it. They were realized bibliographical research, profound interviews, field visits to the rustic breweries of the businessmen that had a defined formal process, as well as semi-structured interviews to government officers and investigation centers dedicated to promote the endogenous development of the region through this activity.*

**JEL:** L.16. L26 L.66

**KEY WORDS:** Bacanora, Supply Chain and Value

### INTRODUCCIÓN

El bacanora es una bebida espirituosa derivada del procesamiento y destilación del *Agave Angustifolia*, cuya industria tradicional se desarrolla en treinta y cinco municipios de la sierra en el estado de Sonora, México, la cual está conformada por los todos los actores que participan en la producción, distribución, comercialización y demás actividades, socioeconómicas y culturales vinculadas al aprovechamiento de la misma. La presente propuesta se orienta a la búsqueda de

alternativas económicas para la sierra sonorese, cuyas actividades productivas tradicionales corresponden cada vez menos con la disposición de recursos naturales, y las necesidades básicas de sus habitantes (empleo, ingreso educación, salud, alimentación y vivienda), agudizando las condiciones de pobreza y marginación. Desde otra perspectiva, la industria del bacanora constituye una alternativa a las necesidades de empleo e ingreso para los habitantes de la sierra sonorese, de hecho, está ampliamente documentado que ante la imposibilidad de obtener medios de subsistencia suficientes de su participación en el patrón de acumulación tradicional, los habitantes de esta localidad optan por complementar su ingreso en diversas labores de corte campesino, entre las que destaca como un símbolo de sus tradiciones la elaboración y comercialización de bacanora.

Para dar sentido y orientación al presente trabajo de investigación, fue necesario plantearse las siguientes hipótesis:

*H1: El entorno de una industria caracterizada por la informalidad, dificulta a este grupo de empresas trascender de una especie de espiral que profundiza la discontinuidad en sus procesos productivos.*

*H2: La desorganización de los actores económicos y la desarticulación de sus unidades de negocios dificultan su eslabonamiento y la eficiencia en los procesos de creación de valor y con ello, la posibilidad de apalancar procesos de desarrollo local sustentable en el Área de Denominación de Origen del Bacanora.*

El trabajo está organizado como de la siguiente manera: en la sección de revisión de literatura se encontrará información puntual y precisa sobre los esquemas de desarrollo local, desarrollo endógeno y cadenas de valor. Asimismo, se hace una revisión de las contribuciones que existen de la literatura actual y el cómo abonan al tema de la industria del bacanora; del mismo modo, el presente trabajo de investigación contribuirá a enriquecer aún más el campo literario objeto de estudio. Posteriormente, en la sección de metodología se presentan aspectos relevantes en cuanto a la operatividad de las variables que son estudiadas y analizadas, a partir de un cuestionario estructurado y aplicado a una muestra representativa del total empresarios identificados dentro de los eslabones de la cadena en el estado de Sonora, para identificar sus procesos de producción. Seguidamente, se presentan los resultados de la investigación con base al estudio descriptivo. Finalmente, se presentan las conclusiones, propuestas y las futuras líneas de investigación derivadas del presente trabajo de investigación.

## **REVISIÓN DE LA LITERATURA**

El enfoque de desarrollo local pone énfasis en varias dimensiones, que trascienden el ámbito economicista, con el cual se abordaban anteriormente las explicaciones sobre el proceso de Desarrollo Económico. El desarrollo local se ha ido nutriendo de diferentes corrientes teóricas que han determinado una explicación aproximada sobre dicha cuestión, que tiene como característica una visión ecléctica sobre el análisis, la interpretación y potencialización de los actuales procesos de desarrollo. Son múltiples los factores que motivan emprender un proceso de desarrollo local (Llorens *et al*, 2002); sin embargo, para la realización de esta investigación, se coincide con la posición de Vázquez Barquero (1999), quien señala que este proceso obedece a la crisis o pérdida del dinamismo de un sistema productivo tradicional; así como a la aparición de nuevas oportunidades de mercado. Vázquez Barquero (1999), identifica tres dimensiones territoriales de carácter endógeno, que sustentan y potencian el desarrollo local dentro de un ámbito territorial específico, éstas son: Dimensión endógena de carácter económico, Dimensión endógena de carácter sociocultural y Dimensión endógena de carácter político.

## METODOLOGIA

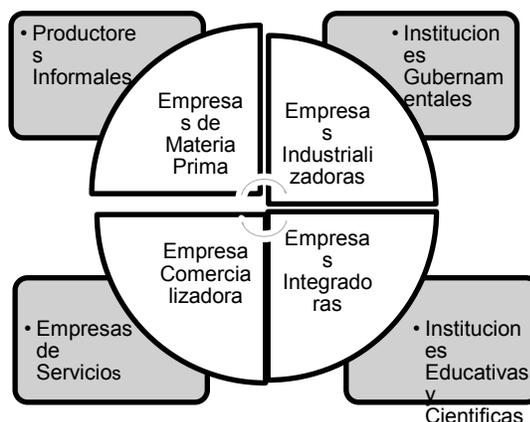
La investigación exploratoria, se desarrolla con el objetivo de proporcionar una visión general del tipo de aproximación, diseñada de manera No Experimental, considerada del tipo transversal-causal y tiene la unidad de medida de veinte y una empresas que en la actualidad, cuentan con algunas características de las empresas formales. 1er grupo Actores Directos: Empresas productoras de materia prima, Empresas Industrializadoras o Transformadoras, Empresas Comercializadoras y Empresas Integradoras. Y el segundo grupo son los actores indirectos, que se consideran a todas aquellas instituciones que de alguna manera han coadyuvado al desarrollo de la industria como son: universidades, centros de investigación e instituciones gubernamentales.

## RESULTADOS

Para la presentación de los resultados de esta investigación, se presentan en dos fases: la primera se hace un estudio de cada uno de los actores de los eslabones participantes de la industria. Y la segunda se realiza un análisis de los procesos de producción del bacanora.

### 1) Actores Directos de la Cadena de Abastecimiento.

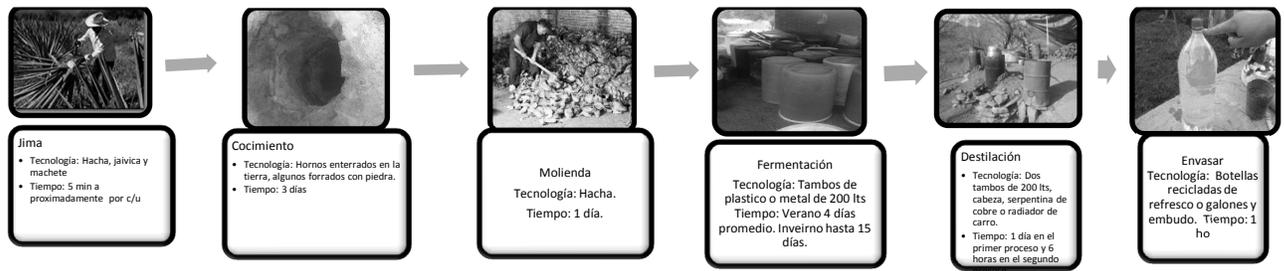
Figura 1: Estructura de la Cadena de Abastecimiento de la Industria del Bacanora



Fuente: Elaboración propia.

En la figura anterior, se muestra todos los actores de la cadena productiva de la industria, tanto directos como indirectos. 2. Segunda Fase de Resultados. A continuación se detalla el proceso de producción tradicional a proceso semi industrial del bacanora. Como se detalla en la figura 2, el proceso de artesanal del bacanora, se compone de seis fases primordiales.

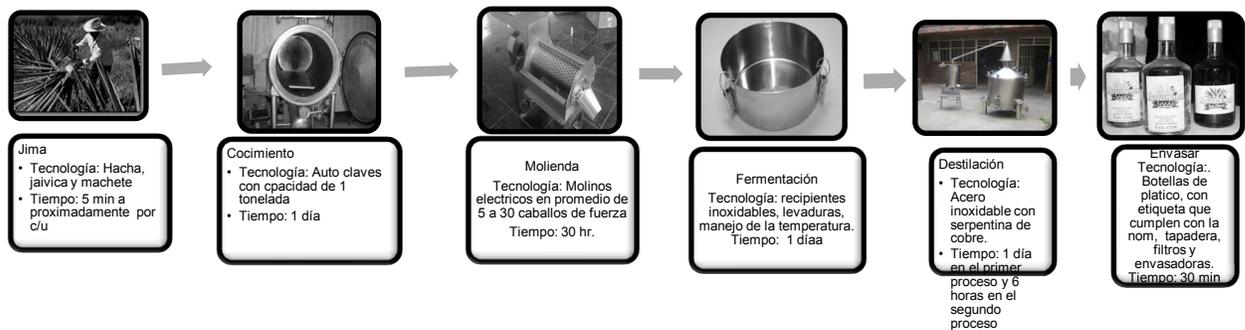
Figura 2: Proceso de Elaboración Artesanal del Bacanora



Fuente: Elaboración propia, en base a la información proporcionada por los productores.

Un cambio el proceso de industrialización que se detalla en la figura 2, se muestra la producción más industrializada, utilizando herramientas que le permiten ahorrar tiempo, recursos y por ende, elevar la productividad.

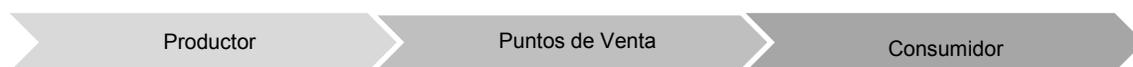
Figura 3: Proceso de Elaboración Semi Industrial del Bacanora



Fuente: Elaboración propia, en base a la información proporcionada por los productores.

Como se detalla en la figura anterior, el proceso del bacanora se puede reducir de 20 días a 5 días, con la incorporación de equipo y técnicas apegadas a la NOMB, lo que permite elevar su productividad y reducir sus costos.. Están generando productos con 32 grados hasta 48 grados de alcohol. Los canales de comercialización han cambiado de manera clandestina e informal a cierto grado de formalidad, debido a que los empresarios cuentan con licencia para producir, trasladar y comercializar bacanora sólo en el municipio de origen, como se detalla en la figura 4.

Figura 4: Canal de Distribución en el Municipio de Origen



Fuente: Elaboración propia, en base a la información proporcionada por la dirección de Alcoholes.

Es decir, sólo podrán distribuirlo en su municipio, o bien si desean exportarlo, pero si pretenden ampliar mercados, el empresario realiza estrategias de venta con restaurantes, bares, distribuidores con la finalidad de utilizar la licencia de éstos. Es importante señalar, que el empresario puede distribuir el directamente su producto en otro lugar de manera directa, pero para lo cual debe de adquirir otra licencia que les permita la comercialización de bebidas alcohólicas, con un consto de 450,000 pesos y el permiso de traslado de 30,000 pesos y en la actualidad solamente tres empresas cuentan con esos permisos. En la tabla 2, se hace un comparativo de la industria del bacanora tradicional, el semi industrializado, el mezcal y el tequila, analizando sus procesos de producción, organización y tecnología.

Tabla 2: el Bacanora y su Proceso de Producción Frente a Otros Mezcales y Regiones

Concepto	Bacanora Tradicional	Bacanora (Artesanal)	Bacanora semi industrial	Tradicional (Mezcal)	Tecnificado (Tequila)
Materia Prima	Agave silvestre recolectado	Agave silvestre recolectado	Agave silvestre y cultivado	Agave cultivado	Cultivo apoyado en selección genética
Cocción	“tatema” de piñas en hornos rudimentario, subterráneos.	“tatema” de piña en hornos rudimentario, subterráneos.	Cocimiento en hornos de autoclave y mampostería.	Cocimiento en hornos de mampostería.	Cocimiento en autoclave, para procesos altamente tecnificados
Molienda	Molienda y desfibrado con mazos o palos de madera.	Molienda y desfibrado en Molino.	Desfibrado del agave cocido con molinos mecánicos y eléctricos (pequeña capacidad)	Desfibrado en molinos mecánicos o tahonas jaladas por bestias	Desfibrado del agave cocido con molinos mecánicos y eléctricos
Fermentación	En barriles rudimentarios de metal (u otros material) con capacidad de 200 litros	En barriles rudimentarios de metal (u otros material) con capacidad de 200 litros	En recipientes cilíndricos de acero inoxidable sellados de alta capacidad. Uso natural de levaduras y control de temperatura	En recipientes cilíndricos o tinas de madera fabricadas expofeso. Uso controlado de levaduras.	En recipientes cilíndricos de acero inoxidable sellados de alta capacidad. Uso controlado de levaduras y cepas.
Destilación	Barriles metálicos, “sombbrero y serpentina” de cobre rudimentarios. calentado a leña	Barriles metálicos, “sombbrero y serpentina” de cobre rudimentarios. calentado a leña	Alambiques de cobre o acero inoxidable con poca capacidad, con uso de leña.	Alambiques de cobre con poca capacidad, con uso de gas.	Alambiques de cobre o acero de gran capacidad, con uso de gas
Escala de la producción	Baja escala destinada a mercado informal y autoconsumo	Baja escala destinada al mercado formal, Bares, Restaurantes)	Baja escala destinada al mercado formal, (Bares, Restaurantes y en poca escala a la exportación)	Mediana escala orientada a un mercado de mayor cobertura.	Alta escala, orientada a un mercado nacional y de exportación.
Vinculación tecnológica	Con esporádica vinculación al sector de ciencia y tecnología	Con incipiente vinculación al sector de ciencia y tecnología	Con incipiente vinculación al sector de ciencia y tecnología	Con relativa vinculación al sector de ciencia y tecnología.	Alta vinculación al sector de ciencia y tecnología

Rendimientos	Rendimientos: 15 a 18 kgs. de agave por litro de mezcal.	Rendimientos: 10 a 15 kgs. de agave por litro de mezcal.	Rendimientos: 8 a 10 kgs. de agave por litro de mezcal.	Rendimientos: 6 a 10 kilogramos de agave por litro de mezcal.	Rendimientos de 6 kilogramos de agave por litro de mezcal
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Fuente Salazar Vidal ( 2004) en base a Lenart Blomberg, 2000 y observación de campo en 2013.

## CONCLUSIONES

La industria de bacanora ha crecido, comprada con la industria artesanal de hace 5 o 10 años, el empresario desgraciadamente hasta hoy, ha generado la conciencia de que se acabaron tanto ellos como cambios climáticos la materia prima y no se puede crecer sin ella, además, entendieron que para que esta industria sea sustentable se debe de cuidar y fomentar con prácticas apegadas a la NOM del bacanora, cuidar las prácticas y procesos de fabricación, realizar alianzas estratégicas con los miembros de la cadena que les permita generar una relación ganar – ganar y por ende, eficientar sus productividad para generar un desarrollo endógeno en sus comunidades. Aceptar la hipótesis de que la informalidad no les permite acceder a recursos financieros y/o capacitación para poder crecer, es así que de tres empresas formales que existían hace cinco años, en la actualidad existen 21 empresas con una identificación clara de su participación en la cadena de suministro y 10 empresas más que se están incorporando a este proceso de formalidad, que la informalidad si les dificulta trascender de una especie de espiral que profundiza la discontinuidad en sus procesos productivos. Se ha comprobado que la desorganización de los actores económicos y la desarticulación de sus unidades de negocios dificultan su eslabonamiento y la eficiencia en los procesos de creación de valor. Sin embargo, al empresario le falta comprender que se puede obtener un producto con altos estándares de calidad y productividad sin sacrificar nuestras tradiciones, que si realmente se quiere participar en mercados tan exigentes como lo es la exportación, deben de saber utilizar sus fortalezas y generar una capacidad de industrialización.

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# DESARROLLO TECNOLÓGICO DE DETECTOR DE CO/HUMO CON PROTOCOLO INALÁMBRICO DE COMUNICACIÓN i4

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## RESUMEN

*Esta investigación analiza con un diseño cuantitativo experimental el desarrollo tecnológico de detector de Co/humo con protocolo inalámbrico de comunicación i4 en la industria electrónica de México. Para el planteamiento del desarrollo tecnológico, se utilizó la metodología del Plan de Desarrollo del Producto (PDP). Para el desarrollo de los prototipos se utilizó la Metodología del Prototipado Rápido (MPR). Esta metodología se concentró en las fases de definición del problema y la definición de las pruebas funcionales. Para realizar el desarrollo tecnológico se realizaron tres diferentes corridas. La corrida piloto de ingeniería; la corrida piloto de manufactura y; la corrida piloto de aprobación. Para el análisis de las corridas, se utilizó la evaluación del proceso de ensamble de SMD, el bill de materiales, el programa de corrida en línea y las pruebas de ingeniería de diseño. Para el análisis de los estudios de confiabilidad y reproducibilidad se utilizó el paquete estadístico MiniTab. Este paquete de análisis estadístico permitió realizar diseños de experimentos, evaluar el control estadístico del funcionamiento del equipo y su consecuente validación. El presente estudio provee apoyo empírico para las empresas y los investigadores en el desarrollo tecnológico y la innovación. Este proyecto se llevo a cabo a través del apoyo de Conacyt en México. Uno de los elementos fundamentales fue el de desarrollar innovación abierta.*

**PALABRAS CLAVE:** Desarrollo tecnológico, prototipos, productos electrónicos.

## TECHNOLOGICAL DEVELOPMENT OF SMOKE/CO DETECTOR WITH i4 WIRELESS COMMUNICATION PROTOCOL

### ABSTRACT

This research analyzes with a quantitative experimental design the technological development of a smoke/CO detector with wireless communication protocol of i4 in the electronics industry in Mexico. The approach for the technological development, was the methodology of Product Development Plan (PDP). For the development of the prototypes we used the Rapid Prototyping Methodology (MPR). This methodology is focused on the phases of problem definition and the phase of definition of the functional tests. For the technological development were used three different runs. The engineering pilot run, the manufacturing and pilot run and, the approval pilot run. For the analysis of every runs, we used the assessment SMD assembly process, the bill of materials, the online program run, and the design engineering tests. For the analysis of the reliability and reproducibility studies we used the MiniTab package. These statistical analyses allowed create the design of experiments, statistical control evaluation of the equipment

performance and its subsequent validation. This study provides empirical support for businesses and researchers in technological development and innovation. This project was carried out through the support of CONACYT in Mexico. One of the key elements was the development of open innovation.

**KEYWORDS:** Innovación, Gestión Tecnológica, Objetivos de la empresa.

**JEL:** O31, O32, L21

## INTRODUCCIÓN

El presente estudio tiene como objetivo, el de plantear temas de discusión que eventualmente conduzcan al desarrollo e implantación de estrategias efectivas para fortalecer la innovación en las empresas y fortalecer la vinculación con las instituciones de educación superior en México. Una de las conclusiones de este trabajo, es el de superar el reto de la falta de articulación entre los actores del sistema de innovación. Una de las grandes incógnitas de la tecnología se encuentra en su evolución, en su desarrollo, su importancia radica en la dirección en que las tendencias de la técnica y la tecnología tomarán a futuro y la preocupación del hombre, si ese cambio o transformación lo podrá controlar a voluntad o simplemente tendrá que aceptarlo tal cual fuere su desarrollo de manera autónoma. Cuando se aborda la administración de operaciones existen varias vertientes. En cuanto a la innovación, la mayoría de los investigadores y teóricos están de acuerdo en que la innovación se basa en las ideas creativas como los elementos básicos.

La creatividad, se puede pensar en cómo tener la capacidad o el poder de ser imaginativo, novedoso y original. Por lo tanto, la innovación organizacional es la implementación exitosa de ideas creativas dentro de una organización. Dentro de esta definición, las ideas en cuestión pueden ser cualquier cosa, desde ideas para nuevos productos, procesos o servicios en línea de la organización de las empresas, a las ideas de los nuevos procedimientos o políticas que tengan aplicación dentro de la propia organización. Y el término "aplicación" es muy crítico, que abarca los elementos de desarrollo de nuevas ideas y la puesta en uso. El Consejo Nacional de Ciencia y Tecnología (CONACYT), apoya a las empresas en el programa de estímulos a la investigación, desarrollo tecnológico e innovación. Proyectos que por su trascendencia e impacto tecnológico son considerados de alto nivel científico y tecnológico. Dicha trascendencia debe ir más allá de simplemente mejorar un producto o proceso. La innovación debe considerar aportar algo nuevo al mercado y las necesidades de las empresas y en este punto no solo basta ser creativo, se debe ser innovador. Esta parece ser la diferencia clave entre la innovación y la creatividad, aunque algunas definiciones anteriores de la innovación son prácticamente idénticas a las de la creatividad. No existe ninguna mención del componente de aplicación en la definición de la innovación. Por ejemplo, Drucker (1985) define la innovación sistemática simplemente como la "búsqueda intencionada y organizada para los cambios", mientras que Zahman, Duncan y Hobeck (1973) lo definen como "una idea, práctica o material de un artefacto percibido como nuevo por una unidad competente de la adopción y que es parte de su planeación estratégica".

Uno de los elementos fundamentales en System Sensor de México sobre planeación estratégica es la innovación. La innovación en empresas de vanguardia, es más que tan sólo un ideal, la innovación es una forma de vida. Todos los días, se trabaja con el objetivo de diseñar nuevos productos que aprovechan las más innovadoras tecnologías de la manera más ingeniosa. Productos cuya instalación sea más fácil y su operación más eficiente; productos que les brinden a los clientes el más alto nivel de confiabilidad. El nuevo paradigma de la innovación es la innovación abierta, término acuñado en la Universidad de Berkeley. La innovación abierta es el

uso intencional de conocimiento generado dentro y fuera de la organización, para acelerar la innovación en la empresa y ampliar la penetración en los mercados. Este paradigma supone que las empresas pueden y deben usar tanto las ideas generadas internamente, como aquellas provenientes del entorno, además de utilizar caminos para llegar al mercado.

Este paradigma supone que las empresas pueden y deben usar tanto las ideas generadas internamente, como aquellas provenientes del entorno, además de utilizar caminos para llegar al mercado. Uno de los factores que han conducido al desgaste de la innovación cerrada es la movilidad y disponibilidad de recursos humanos con conocimientos y habilidades de investigación. Como resultado de ello, se producen una gran cantidad de conocimientos fuera de los laboratorios de investigación de las grandes empresas.

La posibilidad de desarrollar ideas y tecnologías fuera de la empresa en forma de spin offs o mediante acuerdos de vinculación está creciendo. Otro aspecto importante dentro de la administración de operaciones, es la colaboración cada vez más cercana que entablan las empresas con las instituciones de educación superior y los centros de investigación y desarrollo tecnológico, para activar la transferencia de tecnología que brinde insumos a la innovación. En este proyecto se utilizó la vinculación con el ITESM en apoyo a las actividades de asesoría y consultoría del proyecto, así como en el impulso al desarrollo de recursos humanos especializados. Esta investigación se presenta organizada como sigue. En la sección de revisión literaria, una discusión de la literatura relevante es presentada. En este apartado se clarifica la innovación, se aborda el constructo de la innovación tecnológica y su relación con el desarrollo tecnológico. Finalmente, en esta sección se relata la historia del nacimiento de los detectores de humo. Se presenta y justifica la metodología utilizada para generar el desarrollo tecnológico innovador. Los resultados obtenidos se presentan describiendo las características del desarrollo tecnológico. El apartado de conclusiones presenta la discusión crítica de los resultados obtenidos.

## REVISIÓN DE LITERATURA

La mayoría de las definiciones de innovación incluyen el "desarrollo e implementación" de la nueva dimensión de las ideas. Van de Ven (1986), es bastante explícito sobre el papel tanto del individuo y de la organización al describir la innovación como el desarrollo e implementación de nuevas ideas por personas que se involucran en transacciones con otras personas dentro de un orden institucional. La innovación también se ha definido como "la exitosa producción, asimilación y explotación de la novedad en los ámbitos económico y social, ofreciendo nuevas soluciones a los problemas y por lo que es posible para satisfacer las necesidades tanto de las personas" (Comisión Europea, 1995).

Kanter (1983) define la innovación como un proceso de traer alguna idea para resolver problemas nuevos en uso. El mismo autor señala que la innovación es la generación, la aceptación y la aplicación de nuevas ideas, procesos, productos o servicios. Damanpour (1991) define la innovación como un medio de cambio de una organización, ya sea como respuesta a los cambios en su entorno interno y externo o como una actividad preventiva para influir en que el medio ambiente. La innovación también se ha definido como la adopción de una idea o de la conducta, ya sea perteneciente a un dispositivo, sistema, procedimiento, política, programa, producto (Aiken y Hage, 1971; Daft, 1982; Zaltman, Duncan, y Holbeck, 1973).

La innovación no puede entenderse sin una cuidadosa atención a los contextos personales, organizativos, tecnológicos y ambientales en las que se desarrolla (Tomastzky y Fleischer, 1990). Recientemente, sin embargo, ha habido cierta convergencia entre los estudiosos de innovación que se indica en tres vertientes: la primera, que no puede haber una teoría de la innovación, ya

que cuanto más aprendemos, más nos damos cuenta de que "el todo" queda fuera de nuestro alcance. La segunda establece que existen varias teorías adecuadas, circunscritas de la innovación, pero que se aplica en diferentes condiciones y una tercera que considera que el esfuerzo investigador debe estar dirigida a la determinación de las contingencias que determinan cuándo se aplican diversas teorías de innovación en tecnología (Abrahamson, 1991; Eveland, 1991, Mohr, 1987; Poole y Van de Ven, 1989; Tomatzky y Fleischer, 1990, Van de Ven y Rogers, 1988). Una de las grandes incógnitas de la tecnología se encuentra en su evolución, en su desarrollo, su importancia radica en la dirección en que las tendencias de la técnica y la tecnología tomarán a futuro y la preocupación del hombre, si ese cambio o transformación lo podrá controlar a voluntad o simplemente tendrá que aceptarlo tal cual fuere su desarrollo de manera autónoma. Este asunto ha presentado a lo largo del tiempo diversas posturas para su análisis, las cuales serán señaladas a continuación, pero no estarán agotadas, solamente servirán de sustento para estructurar el planteamiento que se mantiene a lo largo del trabajo.

Una primera postura plantea la división entre desarrollo tecnológico interno (endógeno) que se refiere según Quintanilla (1991) a la mejora de la eficiencia de un proceso, la fiabilidad de los artefactos, dispositivos, partes, etcétera, o al funcionamiento en términos generales de la maquinaria como mecanismo eficiente. Este planteamiento considera a la tecnología exenta de carga valorativa, ajena al proceso de implantación entre usuario y proceso tecnológico. Su función es ser cada vez más útil a partir de los propios parámetros del proceso (Blanco, 2008). Esta categoría sería de corte instrumentalista, de mejora continua, de diálogo ingenieril, de carencia cultural y social. En otro sentido estaría el desarrollo tecnológico externo (exógeno) que apela a su implantación, uso y consumo, pero incluyendo al usuario, y abarca factores sociológicos, económicos, culturales, sociales y hasta demográficos. En este último sentido, la lista sería larga ya que se incluirían tantos ámbitos como implicaciones tiene la tecnología (Blanco, 2008). El desarrollo tecnológico también puede ser analizado por ser acumulativo, es decir, los avances en este sentido podrán ser poco significativos pero alineados en cierta dirección que permitirá acumularse o agruparse alrededor de un cierto campo tecnológico específico. Su contraparte será el desarrollo a saltos, "el salto a la oscuridad" que señala Schumpeter (1975), este cambio en el desarrollo tecnológico se encuentra motivado en la mayoría de las ocasiones por el progreso técnico, la innovación, la invención, el diseño, la adaptación, entre otros.

Para Schumpeter (1995), la forma básica de la innovación es cualitativa y discontinua, es un cambio que surge desde adentro de los sistemas establecidos (desarrollo endógeno), pero que desplaza el punto de equilibrio anterior (exógeno) y trata de establecer uno nuevo que no tiene comparación con el anterior. En este sentido es compartido el desarrollo tecnológico tanto endógeno como exógeno. Comparten atributos que permite implantar nuevo conocimiento a lo ya existente y de ahí derivar un nuevo proceso técnico.

Quintanilla (1991), afirma que existe una lógica del desarrollo tecnológico, el cual se regula por "el imperativo de innovación constante". Esto quiere decir que la innovación no es un accidente en la historia de la técnica, sino una constante. el desarrollo tecnológico implica por un lado, una sucesión de conocimientos alineados de tal manera que se pase de uno a otro de forma racional, lógica y natural. Por el otro, el desarrollo tecnológico obedece a cambios bruscos, discontinuos, saltos, los avances son de carácter cualitativo ya que son internos y desplaza al conocimiento anterior para implantar un nuevo conocimiento vigente. La diferencia entre técnica y tecnología es que la técnica avanza gracias a la sucesión de procesos y conocimientos encadenados, mientras que la tecnología cambia cualitativamente por saltos y por nuevo conocimiento, no necesariamente acumulado.

Precisamente estos cambios en tecnología son los que exigen revoluciones tecnológicas en diferentes industrias y empresas. Una de las industrias que registra constantes desarrollos innovadores es la de la detección de incendios y alarmas contra incendio. Desde el primer gran incendio en Roma en el año 64 D.C., hasta los incidentes actuales que son notificados a diario en los medios de comunicación, la humanidad ha sufrido innumerables incendios. Las consecuencias y reacciones, independientemente de los cuantiosos daños personales y materiales, ha sido generar métodos y tecnología para evitarlos, detectarlos y combatirlos. Un hito significativo de la detección es el gran incendio en Londres en el año 1666, en el que la ciudad adoptó un ‘código completo de regulaciones sobre edificios’, mediante el cual se intentó prevenir las posibles causas que causaron la catástrofe. Fue a partir de ese momento, cuando surgieron los primeros detectores contra incendios; estos fueron utilizando los avances tecnológicos del momento para evolucionar y convertirse en los elementos que conocemos actualmente.

En 1902 George Andrew Darby, ingeniero eléctrico de Birmingham, Inglaterra, patentó el indicador eléctrico de calor y la alarma de incendios. El aparato indicaba cualquier cambio de temperatura en el lugar en donde estaba colocado. Funcionaba mediante un circuito eléctrico que se cerraba si la temperatura superaba un límite, haciendo sonar una alarma. Básicamente es el principio de funcionamiento de los termostatos. Desde 1980, la evolución de los sistemas de incendio ha estado ligada a los avances en los micro controladores. Actualmente, gracias a las nuevas capacidades de estos componentes, se pueden diseñar sistemas de detección contra incendio más pequeños, fiables y con mucha más funcionalidad que sus predecesores. Tradicionalmente los sistemas de detección son diseñados de manera independiente para cada tipo de gas, así como de manera independiente en cuanto a los mecanismos de alerta. Los sistemas de calefacción que utilizan gas, los calentadores de agua y otros sistemas de combustión en edificios, centros comerciales, cines, etc., están propensos a ser mal calibrados o a la variación de la calidad del mismo gas que puede ser de mayor cantidad de BTU's, lo que puede dar origen a la generación del monóxido de carbono. El monóxido de carbono es un gas incoloro e inodoro y en altas concentraciones es mortal para la vida humana.

Los detectores de humo y de monóxido de carbono (CO) son dispositivos que tienen como función principal detectar, alertar y favorecer la emisión de señales de sonido y luminosas que permitan salvar las vidas de las personas que pudieran estar siendo intoxicadas con el gas. El problema de estos dispositivos en el mercado, es que la gente decide comprar e instalar solo uno, corriendo riesgos al no poseer la doble detección. Otros de los aspectos, es el de asegurar el adecuado funcionamiento de un mecanismo dual y que posea comunicación inalámbrica con paneles de control, que puedan avisar del riesgo que se presenta ante la presencia de CO y humo. De acuerdo con el marco teórico presentado aquí, este estudio presenta las siguientes preguntas de investigación:

*¿Las capacidades tecnológicas actuales permiten desarrollar un detector de humo y de monóxido de carbono de comunicación i4?*

*¿Las capacidades tecnológicas actuales permitirán desarrollar prototipos de detector de humo y de monóxido de carbono con comunicación i4?*

Una de las dificultades más importantes que tienen que superar las empresas en sus procesos de innovación tecnológica es ajustar sus proyectos a las expectativas del mercado. Existe una combinación muy valiosa de experiencia, conocimientos y liderazgo en México, los cuales no han sido resaltados por estas organizaciones en beneficio de la competitividad e innovación tecnológica en México.

## METODOLOGIA

Esta investigación aplicada es de campo y utiliza un diseño experimental para el desarrollo de prototipos funcionales de detectores de humo y monóxido de carbono con protocolo de comunicación i4. La información obtenida se generó a partir del proyecto de innovación tecnológica apoyado por Conacyt en la empresa System Sensor del Estado de Chihuahua, México y perteneciente al corporativo Honeywell.

Esta propuesta representa innovar en el ámbito más importante de la detección de incendios, los sistemas “inteligentes” al integrar la comunicación i4 inalámbrica. Esto es, redes de detectores cuyos componentes entablan una comunicación bidireccional inalámbrica con el panel de control, analizan entornos complejos, ajustan sus propios niveles de sensibilidad, y toman decisiones “educadas” basándose en la información almacenada. Conforme a los elementos planteados, se estableció el siguiente objetivo general:

- a) *Diseñar y desarrollar detector innovador de CO/humo con protocolo inalámbrico de comunicación i4 a nivel prototipo, para aumentar su posicionamiento en el mercado.*

Este proyecto utilizó la Metodología de Prototipado Rápido, MPR, la cual está orientada al desarrollo de prototipos y fuertemente apoyada en tecnología de Bases de Datos y herramientas visuales para Desarrollo Orientado a Componentes. En MPR se concentró un gran esfuerzo en dos fases fundamentales: la definición del problema que se va a abordar y en la ejecución de las pruebas, donde además se potenció el uso de lenguajes de cuarta generación utilizados como lenguajes de consulta para verificar la estructura y funcionalidad del prototipo desarrollado, asegurándose de que su diseño responde a las definiciones especificadas. Un prototipo es un modelo inicial de lo que al final se corresponderá con el modelo definitivo y sus procedimientos asociados. Este prototipo se someterá a pruebas para comprobar su funcionalidad, de las que surgirán modificaciones que darán origen a un segundo prototipo, versión mejorada y posiblemente ampliada del primero, el cual se volverá a probar, repitiéndose sucesivamente el proceso hasta alcanzar el prototipo definitivo.

Para el análisis de los estudios de confiabilidad y reproducibilidad se utilizó el paquete estadístico MiniTab. Este paquete de análisis estadístico permitió realizar diseños de experimentos, evaluar el control estadístico del funcionamiento del equipo y su consecuente validación. Las fases son descritas en el diagrama y son ampliadas posteriormente. Fase 1: Definición de especificaciones Esta primera fase tiene por objeto auditar la información de relativa al problema, con el fin de recabar todos los datos necesarios para su resolución. Fase 2: Diseño Conceptual El objetivo de esta fase es construir un modelo de información que refleje el esquema conceptual del prototipo. Es muy importante que este modelo esté lo más ajustado posible a la realidad para que el diseño posterior pueda cumplir con sus objetivos. Fase 3: Desarrollo del Prototipo Como su nombre indica, esta fase tiene por objeto la construcción del primer prototipo operativo de la Aplicación. Fase 4: Pruebas del Usuario En esta fase se realizaron todas las pruebas necesarias para validar el prototipo desarrollado en la fase anterior. Fase 5: Implantación En esta fase se ejecutaron el Plan de Formación y se llevó a cabo el proceso de migración al entorno de ejecución real de la aplicación. Una vez completada la migración, se realizaron las pruebas finales y se llevaron a cabo las actividades correctivas finales, revisándose de paso toda la documentación del proyecto. Fase 6: Auditoría y Seguimiento Se identificaron parámetros de rendimiento, compromisos de uso / respuesta, verificar la calidad global de la aplicación y efectuar las medidas correctivas oportunas.

## RESULTADOS

En ésta sección, se presentan a detalle los resultados obtenidos. El propósito de este proyecto fue el de diseñar y desarrollar tecnología innovadora de detectores de humo/CO<sub>2</sub> con protocolo de comunicación inalámbrica i4. El primer paso fue el de la investigación y experimentación de las especificaciones funcionales y de diseño. Dicho proceso permitió establecer las características mecánicas a través del proceso de análisis de modos de falla. El segundo paso fue la determinación de los requerimientos para lograr el protocolo de comunicación i4. Se diseñó la tablilla electrónica de control y se procedió a realizar las corridas piloto para el análisis de fallas. A la vez se diseñó el equipo de prueba y laboratorio para desarrollar la capacidad tecnológica de análisis de confiabilidad y validez de productos con protocolo de comunicación i4. Uno de los aspectos fundamentales del desarrollo tecnológico actual fue realizar innovación abierta. La innovación abierta permite a las empresas aprovechar las capacidades de investigadores y estudiantes de las instituciones de educación superior.

Este proyecto se llevó a cabo mediante innovación abierta. Estudiantes de nivel Maestría fueron incorporados al proyecto y participaron activamente en las actividades de innovación del desarrollo tecnológico de detector de humo/CO<sub>2</sub>. De la misma manera, se contribuyó a formar recursos humanos especializados de nivel de licenciatura. Estudiantes de Ingeniería en Mecatrónica participaron en las actividades de apoyo al departamento de diseño. De esta manera, se fortaleció la innovación abierta al llevar a cabo acuerdos de redes de colaboración con las instituciones de educación superior en México. La participación de investigadores, docentes y estudiantes en este caso, por parte del ITESM, representó una contribución a la formación de recursos humanos y al fortalecimiento de las capacidades profesionales, tanto de la IES como de los miembros de nuestra empresa.

El tercer paso consistió en evaluar el desempeño y validación del sistema de desarrollo tecnológico del detector de humo/CO<sub>2</sub>. Para ello, se realizaron estudios de funcionabilidad del detector de humo/CO<sub>2</sub> y pruebas piloto de funcionalidad, reproducibilidad y repetitibilidad del producto. Las pruebas realizadas permitieron determinar la alta confiabilidad del producto. Una vez desarrollado el producto tecnológico de detectores de humo/CO<sub>2</sub> con protocolo de comunicación i4, se puede determinar de la inversión inicial de 2.7 millones de pesos, producirá un beneficio de \$31 millones de pesos al año. Por lo que considerando un periodo de tres años y una tasa de descuento del 9%, el valor presente neto será:

$$VPN = 31MM / (1 + .09) + 31MM / (1 + .09)^2 + 31MM / (1 + .09)^3 - 2.7MM = 75.78MM$$

Este análisis permite determinar que las empresas que dedican esfuerzos a la investigación y a la innovación alcanzan beneficios altamente competitivos. En los tiempos actuales, en que las tecnologías se renuevan cada vez más rápido, la innovación es la herramienta fundamental de supervivencia económica de las organizaciones. Uno de los indicadores financieros más adecuados para determinar la factibilidad de un proyecto lo representa el retorno de la inversión (ROI). De acuerdo a los beneficios estimados de \$31MM; utilizando una tasa de descuento del 9% y una inversión inicial de \$2.7 MM. El análisis de este indicador, conforme a las proyecciones establecidas en la evaluación económica, es presentado a continuación:  $ROI = 31MM / 1.09 / 2.7 = 1055\%$  Considerando la inversión inicial y los beneficios esperados se puede considerar este proyecto como altamente redituable. Por tanto, el periodo de recuperación de la inversión de acuerdo a la inversión realizada que será de 2.7 millones de pesos y un beneficio esperado anual de \$31 millones de pesos, se puede calcular de la siguiente manera:  $P = 2.7 / 31 =$

.087 Esto nos indica que el periodo de recuperación de la inversión es de 32 días, lo que lo convierte en altamente redituable.

## CONCLUSIONES

El presente estudio planteó el diseño y desarrollo tecnológico de un detector de humo/CO<sub>2</sub> con protocolo de comunicación inalámbrica i4. El objetivo se alcanzó, diseñando un detector con las características que demanda un mercado cada vez más cambiante. Destacar la gran capacidad técnica-tecnológica de los ingenieros y desarrolladores mexicanos es completamente válido. México desde hace tiempo se ha convertido en un referente en cuanto a innovación de procesos y productos.

Desafortunadamente, muchos de los esfuerzos y éxitos de las empresas se quedan guardados en los escritorios, archiveros y equipo de cómputo de las empresas. Este trabajo pretende alentar los procesos de transferencia de tecnología para la innovación. Actualmente, los programas institucionales como los que maneja Conacyt en México para estimular la innovación son gratificantes. El objetivo de divulgar este proyecto, es de motivar a las empresas con elementos concretos para que dentro de nuestro sistema de innovación, encuentren caminos para vincularse y concreten con éxito sus proyectos de innovación tecnológica. Para sostener la competitividad, las empresas de México deben mejorar constantemente su desempeño teniendo muy claro que el mercado es el mundo y no solo el país o la región donde se encuentran. Por tanto, la estrategia de innovación es una parte esencial y obligada de la planeación estratégica de un negocio. En la actualidad, la acumulación de ventajas con base en la innovación es un requisito indispensable para el posicionamiento en el mercado y para escalar posiciones en la escala global. Las instituciones de educación superior deberán desarrollar un rol más proactivo en su relación con la industria, el planteamiento es puntual para las IES: matrimonio o divorcio.

Si pretenden involucrarse en el proceso de innovación y maximizar los resultados de investigación y desarrollo en beneficio del aparato productivo y de la sociedad en general, entonces deberán optar por el matrimonio. Como tal requiere de establecer relaciones y constante comunicación. Si se opta por el divorcio, las IES seguirán sin alcanzar la competitividad educativa que exigen los tiempos actuales. La falta de competitividad es el principal problema que afecta a México, lo cual se refleja en que nuestro sistema de innovación no está suficientemente consolidado para ser el motor de la productividad y del crecimiento de la economía nacional. Por ello, se debe buscar conjuntar los esfuerzos de las empresas, de las instituciones de educación superior y del gobierno para coordinar acciones, que contribuyan a impulsar el dinamismo a nuestro sistema de innovación y asegurar un crecimiento económico sustentable en todo el país.

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## **BIOGRAFÍAS**

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“Proyecto apoyado por la Convocatoria de Proyectos de Investigación, de Desarrollo o de Innovación Tecnológica del CONACYT”

# DESARROLLO DEL LIDERAZGO EN TIEMPOS DE CAMBIO RADICALES

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## RESUMEN

*Esta investigación analiza con un diseño mixto el desarrollo del liderazgo en tiempos de cambios radicales en las empresas de manufactura en México. El diseño cuantitativo incluyó el estudio de la cultura organizacional. Dicho contexto sirvió de base para las entrevistas individuales que representa la parte cualitativa del estudio. Este estudio utilizó un alcance fenomenológico para la parte cualitativa y el instrumento de Cameron y Quinn para la evaluación de la cultura organizacional en sus dos dimensiones, para la parte cuantitativa. Para el análisis de las entrevistas se utilizó un proceso de codificación mediante el software nVivo. Para la evaluación cuantitativa, se evaluaron seis categorías, los cuales representan atributos de una cultura. Cada uno de los atributos fue analizado a través de la prueba de Chi cuadrada a fin de determinar su significancia. Los resultados de esta investigación demuestran y confirman la naturaleza integral e interdependiente de los conceptos clave que se utilizan como fundamentos teóricos para el estudio de las influencias de la cultura organizacional y el entorno operativo en el desarrollo del liderazgo. Las implicaciones prácticas de los resultados son sujetas a discusión. Las oportunidades para futuras investigaciones y las limitaciones del estudio son presentadas.*

**PALABRAS CLAVE:** Liderazgo, desarrollo organizacional, cambio organizacional.

## LEADERSHIP DEVELOPMENT DURING RADICAL ORGANIZATIONAL CHANGE

### ABSTRACT

*This research analyzes with a mixed design the leadership development during radical organizational changes in manufactures companies in Mexico. The quantitative design includes the analysis of the organizational culture. This context provided the basis for individual interviews representing the qualitative part of the study. This study used a phenomenological scope for the qualitative design and for the quantitative design, the instrument of Cameron and Quinn for assessing organizational culture in its two dimensions. For the analysis of the interviews we used a coding process using the software NVivo. For the quantitative evaluation, we evaluated six categories, which represent attributes of a culture. Each of the attributes was analyzed using Chi-square test to determine their significance. The results of this research demonstrated and confirmed the integral and interdependent nature of the key concepts that are used as theoretical foundations for the study of the influence of organizational culture and operating environment in the development of leadership. The practical implications of the results are subject to discussion. The opportunities for future research and the limitations of the study are presented.*

**KEYWORDS:** Leadership, Organizational culture, Human resources

**JEL:** M5, D23, M54

## INTRODUCCIÓN

Una parte importante de la responsabilidad de un líder es garantizar la existencia de una organización, que pueda llevar a cabo la misión y la estrategia de apoyo a la visión del líder (Bass, 1985). Buscando garantizar una sucesión efectiva de liderazgo, el mejor líder desarrolla individuos talentosos que pueden asumir roles de liderazgo en el futuro. Existen una variedad de factores que pueden afectar el éxito de las actividades de desarrollo de liderazgo. Este estudio se centra en dos de esos factores en el contexto organizacional, la cultura organizacional y la estrategia de negocio, o la respuesta de la empresa a su entorno operativo. El contexto cultural de la organización impulsa el lado humano de desarrollo de liderazgo, mientras que el entorno operativo impulsa el componente técnico de desarrollo de liderazgo. Durante décadas, los investigadores han observado que la gestión de la cultura de la organización es, o debería ser, la función principal del director o gerente de la empresa (Schein, 1985).

Varios autores han señalado el importante papel que el liderazgo transformacional tiene para conseguir un cambio organizacional (Bass, 1985; Burns, 1978; Sashkin y Rosenbach, 2001). Numerosos instrumentos se han desarrollado para clasificar y medir las características clave de la cultura organizacional (Cameron y Quinn, 1999; Cooke, 1997; Ridgway, 2001; Sashkin, 1995). Muchos también han tomado nota de la gestión de la cultura en la organización como un componente importante del desarrollo de los futuros líderes cuando se hace de una manera que refuerza y mejora los aspectos positivos de la cultura organizacional (Sashkin y Rosenbach, 2001; Vaughan y Weisman, 2003). Como líderes de las actividades de desarrollo del diseño para el liderazgo futuro, se debe tener en cuenta tanto la cultura, como la organización y el entorno operativo (Conger, 2004).

Los líderes se enfrentan a la tarea de asegurar que el diseño de un programa de desarrollo de liderazgo sea eficaz para producir futuros líderes exitosos, y esa responsabilidad incluye dar prioridad a los diversos factores en el proceso de desarrollo (Lord y Hall, 2005). Sin una clara comprensión de las implicaciones de sus prioridades en el proceso de desarrollo, los líderes actuales de la organización no podrán desarrollar con eficacia las nuevas generaciones de líderes que tengan el necesario equilibrio de la comprensión cultural y habilidades de liderazgo técnico.

Varios autores señalan el importante papel que juegan los líderes y gerentes en la definición y que afectan a la cultura deseada de la organización; sin embargo, los participantes en el proceso de desarrollo del liderazgo parecen tener claro el papel que deben tener como líderes en la formación de esa cultura, y lo que la cultura debe ser (Sashkin y Rosenbach, 2001; Schein, 1985; Sharkey, 1999). Este estudio pretende analizar la relación entre el liderazgo y la cultura organizacional en las pymes en Ciudad Juárez, Chihuahua, México. Esta investigación se presenta organizada como sigue. En la sección de revisión literaria, una discusión de la literatura relevante es presentada. En este apartado se clarifica el liderazgo y la cultura organizacional. Se aborda el papel de los líderes en el establecimiento del clima organizacional y se presenta la discusión teórica del líder y su influencia en el desarrollo de los empleados. Se presenta y justifica la metodología utilizada para determinar la influencia del comportamiento del líder en el desarrollo de los recursos humanos. Los resultados obtenidos se presentan realizando por una parte las pruebas estadísticas y su

significancia estadística. Por otra parte, en la parte cualitativa se destacan los elementos fundamentales de las entrevistas. El apartado de conclusiones presenta la discusión crítica de los resultados obtenidos, las limitaciones del estudio y las recomendaciones para futuras investigaciones.

## REVISIÓN DE LITERATURA

Generalmente se utiliza la palabra líder para designar a quien destaca en una área, en una empresa, en una comunidad (Hernández, Gallarzo y Espinoza, 2011). Para que un líder pueda conseguir las metas y los objetivos de cualquier proyecto, lo primero que debe hacer, es cultivar las características que le garanticen una empatía entre él y sus seguidores (Hernández et. al, 2011). Las grandes corporaciones, universidades y centros de investigación y desarrollo, identifican el perfil del líder actual como multidimensional; sin embargo, frecuentemente solo eligen aquellos con un liderazgo parcial, es decir, que reflejan competencia en una sola dimensión, no en todas las que se requiere. Dotlich y Cairo (2006), abordan este interesante enfoque y afirman que un líder completo, tal como lo demandan las organizaciones actuales, necesita identificar sus talentos naturales y saber lo que está mayormente predispuesto. Drucker (1996), afirma que el liderazgo tiene que surgir de la responsabilidad. El buen liderazgo no lo demuestran los logros del líder, sino lo que pasa después que éste abandona el escenario. El liderazgo es hacer cosas, considerar el liderazgo y dirección por separado no tiene ningún sentido. Investigaciones de expertos actuales tienden a señalar que el liderazgo es un proceso educativo que pueden usarlo los colaboradores que deseen transformarse (Sternberg, 2003). Para reforzar la hipótesis de que el talento no lo es todo, sino que el liderazgo es un proceso que se puede enseñar y desarrollar, accesible a todo colaborador que manifieste el deseo de aprenderlo y realice esfuerzos comprometidos para tal fin, se puede mencionar el efecto “Pígalión”. Merton (1948), establece que es el proceso mediante el cual las creencias y expectativas de un individuo o grupo respecto a alguien, afectan su conducta a tal punto que se provoca en el individuo o grupo la confirmación de dichas expectativas.

Rickards (1999), comenta que al principio, en la mitología, los líderes eran semejantes a dioses inspirados por ellos, o incluso dioses que desempeñaban cierto drama terrenal. Agrega, durante la mayor parte de la civilización documentada, el liderazgo se aceptaba ampliamente como un don concedido por Dios, que enaltecía a los pocos escogidos. Weber (1977), clasifica en tres categorías las formas de dominación legítima: autoridad legal, autoridad tradicional y autoridad carismática. El autor considera el carisma como la cualidad que pasa por extraordinaria de una personalidad, por cuya virtud se le considera en posesión de fuerzas sobrenaturales o sobrehumanas.

McClelland (1975), establece que repetidamente se ha descubierto que los líderes no son tanto nacidos, sino hechos. Generalmente, en los lugares en donde la gente siente que no hay mucho potencial de liderazgo, existe un gran potencial, incluso entre gente que nunca ha pensado en sí misma como líder, o intentado influenciar a otros de cualquier forma. Por su parte Conger y Kanungo (1988), afirman que existe una seria escasez de liderazgo en la industria. Los gerentes han sido entrenados y socializados para ser administrados, no líderes. Senge(1998), afirma que nuestra perspectiva tradicional de los líderes como personas especiales que marcan el rumbo, toman las decisiones cruciales y arregan a las tropas, está profundamente arraigada en una visión del mundo individualista y asistémica.

Los hermanos Boyett (1999), sostienen que probablemente el tema más popular en toda la literatura sobre el mundo de las empresas es el liderazgo. Tres cuartas partes de las empresas del

mundo, envían gente a tomar cursos de liderazgo. Sternberg (2003), comenta que para ser un líder eficaz, no se necesita ser un “líder nacido”, sino más bien poseer tres elementos: sabiduría, inteligencia y creatividad. Goleman y Daniel (2004), señalan que los líderes no nacen, se hacen. Durante los últimos años, muchos autores se han interesado en desarrollo del liderazgo en tiempos de cambio. La influencia que un líder puede ejercer en la cultura de una organización depende del tipo de líder del que se trate. Si es el fundador de la organización, si ejerce su labor en el marco de una organización ya consolidada, o si la organización atraviesa un periodo de crisis. El papel de los líderes en el establecimiento del clima y la visión de las organizaciones que dirigen es un concepto fundamental en la idea de liderazgo transformacional (Bass y Avolio, 1993; Burns, 2003). En uno de los elementos fundamentales de la cultura organizacional, los líderes se les advierte que la creación, gestión y desarrollo de la cultura es uno de los papeles más importantes de liderazgo (Schein, 1985). Del mismo modo, la comprensión de las ramificaciones culturales del cambio organizacional estratégico es fundamental para la implementación exitosa (Lorsch, 1986). Se deduce entonces, que la cultura organizacional y la implementación del cambio son conceptos inseparables para los líderes eficaces.

Algunos investigadores han establecido que las fuertes culturas organizacionales, pueden mejorar el proceso de cambio y hacer el cambio más efectivo, mientras que una débil cultura ni ayuda ni bloquea el cambio (Erdem y Satir, 2003; Lorsch, 1986). En muchos casos, la capacidad de una organización para responder a los cambios está directamente relacionada con su medible de desempeño. Una correlación que Kotter y Heskett (1992), destacan en el estudio de la relación entre la intensidad de la cultura organizacional y el desempeño de la organización.

Muchos otros investigadores y autores han observado posiciones coherentes con la perspectiva de Hatch (1997), que los líderes no pueden gestionar con eficacia la cultura como un objeto extraño, ya que son en realidad parte de la cultura y no fuera de ella. Por ejemplo, Johnson (2000) en un estudio de la cultura y la formación de la estrategia, recomienda una visión más amplia del contexto organizacional que incluye una sensibilidad hacia el papel de líder en la cultura en lugar de distanciarse de ella. Por el contrario, si el líder intenta gestionar e influir en la cultura, el desarrollo del liderazgo es una de las herramientas más importantes para lograr esa meta. Keiper (2002), llegó a la conclusión de que el liderazgo tiene un vínculo directo con la cultura de la organización, en el que el proceso de desarrollo del liderazgo resulta importante en el fortalecimiento de la cultura y en algunos casos, en el cambio de la cultura. Trice y Beyer (1991), examinaron el proceso de cambio cultural en las organizaciones y el papel de la dirección en ese cambio. Sugieren, en consonancia con otros autores (Keiper, 2002 ; Sharkey, 1999) que el proceso de desarrollo del liderazgo necesita un enfoque en la cultura de la organización con el fin de ser eficaces para lograr el cambio organizacional. De hecho, Trice y Beyer (1991) señalaron que la capacitación para los administradores de la cultura organizacional es necesaria para mantener la cultura existente. La cultura crea una dinámica dentro de la organización que se manifiesta como la adecuación entre las características individuales y diversas de la organización y sirve como manera de predecir la satisfacción, el rendimiento y la retención de los empleados. Esto se convierte en un factor importante en la identificación, el reclutamiento, y el desarrollo de futuros líderes.

El tema de la cultura organizacional es una amplia intersección de la teoría organizacional (Hatch, 1997), la sociología (Hofstede, 1998) y la antropología (Pettigrew, 1979), entre otras disciplinas. Los investigadores en este campo han estudiado las culturas de las organizaciones desde la perspectiva de la eficacia de la organización (Offer y Kennedy, 1982), a partir de la vista jerárquica (Schein, 1996) , y con frecuencia se han visto culturas organizacionales como una colección de subculturas únicas (Van Maanen, 1992). Un área importante de la investigación en

este campo ha sido el papel de liderazgo en la conformación o la gestión de la cultura (Hatch, 1997; Johnson, 2000).

El debate se ha centrado en si la gestión de la cultura es aún posible. A medida que más organizaciones se centran en el desarrollo del liderazgo en el contexto de su propia cultura, el énfasis en el desarrollo del liderazgo, el liderazgo transformacional, y la cultura organizacional como marcos interdependientes continúa ganando aceptación (Keiper, 2002; Sharkey, 1999; Trice y Beyer, 1991) . Los líderes con un sentido cultural aguda reconocen el papel que encaje cultural tiene en la contratación, la retención y el rendimiento (Kristof, 1996; Schneider, 1987).

Todos los sistemas cambian de alguna manera ya que reaccionan a los estímulos del medio ambiente en el que operan. Los investigadores en este campo tratan de comprender las formas en que las organizaciones interactúan con ciertos tipos de estímulos que se encuentran frecuentemente en un ambiente organizacional basada en el mercado (Rummler y Brache, 1995). Este estudio considera la afirmación de los investigadores, que la organización es un sistema complejo que reacciona a los cambios ambientales que pueden venir desde el exterior en términos de los cambios del mercado , la tecnología, o la demografía, o los cambios que puede provenir de los componentes internos que incluyen el liderazgo, la cultura y el desarrollo de liderazgo. Todos estos factores son entradas interdependientes en el sistema organizacional. Con el fin de comprender mejor la influencia de la cultura organizacional en un entorno operativo dinámico en el proceso de desarrollo de liderazgo, este estudio busca responder las siguientes preguntas de investigación:

1. ¿De qué manera las personas responsables de la creación y gestión de las actividades de desarrollo de liderazgo en una empresa entienden y consideran la cultura organizacional en el proceso de desarrollo del programa? Las empresas medianas han adquirido una creciente importancia a partir de la década de los setenta debido al papel que desempeña en la creación de empleo, la innovación económica, la generación de emprendedores, espíritu empresarial y el desarrollo económico a largo plazo (Fong, 2007).

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# CAPACITACIÓN: FACTORES QUE AFECTAN EL DESARROLLO DEL PERSONAL ADMINISTRATIVO EN UNA INSTITUCION DE EDUCACION SUPERIOR

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## RESUMEN

*Este estudio descriptivo se llevó a cabo en una Institución de educación superior en donde se buscó determinar los factores que afectan el desarrollo del personal administrativo en lo referente a la capacitación. Es un estudio cuantitativo, no-experimental, transversal o transeccional; ya que no se llevo a cabo una manipulación intencional de las variables, sino que se observo el fenómeno de la investigación tal y como se desenvuelve en su entorno natural y en un momento determinado. La población está compuesta por el personal administrativo arrojando un total de 142 personas, las cuales se consideraron para determinar la muestra objeto de estudio empleando el método de selección de muestreo probabilístico para obtener una muestra de 104 personas. El instrumento aplicado para la recolección de datos fue un cuestionario de 20 preguntas utilizando el escalamiento Likert para medir las variables con 5 opciones o alternativas que van desde totalmente de acuerdo hasta totalmente en desacuerdo. En este estudio se analizaron los factores que se consideraron de mayor importancia según una encuesta previa aplicada al personal, detectando así los de mayor impacto para que los empleados, a través de la capacitación, mejoren su posibilidad de ser personas más productivas y por ende mayor posibilidad de éxito de la institución.*

**PALABRAS CLAVE:** Capacitación, Personal

## FACTORS THAT AFFECT THE DEVELOPMENT OF ADMINISTRATIVE PERSONNEL WITH RESPECT TO TRAINNING IN AT UNIVERSITY

### ABSTRACT

*This descriptive study was realized in a higher learning institute attempting to determine the factors that affect the development of administrative personnel with respect to training. This is a quantitative, non-experimental, transversal or trans-sectional study since no intentional manipulation of the variables was carried out, but instead the researched phenomenon was observed as it develops in its natural surroundings and at a specified moment in time. The population is composed by the institute's administrative personnel providing a total of 142 persons, which are considered for determining the study's target sample using the probabilistic sampling selection method to obtain a sample of 104 persons. The instrument applied for data collection was a 20 question survey using the Likert scale to measure variables with five options*

*or alternatives that span from completely agree to completely disagree. In this study the factors analyzed were those considered of greater importance according to a previous survey applied to the personnel, thus detecting those of greater impact in order for the employees, through training, to improve their likelihood of being a more productive person y therefore the institute's greater likelihood of success.*

**KEYWORDS:** Training, Employees

## JUSTIFICACIÓN

Debido a la gran inquietud que existe por el personal administrativo en cuanto a la capacitación, y la inconformidad que existe por los cursos que se han impartido, surge el interés de detectar los factores que más afectan en el personal capacitado para desarrollarse adecuadamente en su lugar de trabajo y tener un sentido de pertenencia. La capacitación se debe ver como una oportunidad tanto para el trabajador como para la institución. Para el primero, adquirir más conocimientos sobre su área de trabajo y por ende desempeñarse de forma más eficiente y para la institución, porque conduce a una mayor actitud positiva, mejora el conocimiento del puesto a todos los niveles, maximiza los resultados, crea mejor imagen e incrementa la productividad y calidad del trabajo. El factor motivante para realizar esta investigación es fundamentalmente el beneficio que pueden obtener los empleados al realizar su trabajo con más conocimiento, satisfacción, motivación y que le pueda servir para seguir desarrollándose. Por otra parte, aportar a la institución mejores prácticas de desarrollo humano y con ello mantener un ambiente de trabajo donde todos los integrantes de la institución puedan desarrollarse de una manera productiva. Todo ello para lograr que verdaderamente impacte en la institución ya que de ellos depende el buen funcionamiento de la misma. El reconocer la importancia del elemento humano dentro de la organización crea un sentido de pertenencia logrando así un impacto considerable en el desempeño del personal. Estas acciones tienden a convencer a los empleados de la verdadera importancia de los programas de capacitación y desarrollo de recursos humanos. Frente a este escenario, es que nace el interés por llevar a cabo esta investigación para contribuir a impulsar la capacitación continua dentro de la institución.

## INTRODUCCIÓN

Sabido es que el factor humano es cimiento y motor de cualquier organización por lo que hay que darle la debida importancia ya que nos encontramos en una sociedad en donde el cambio se ha vuelto una constante y todos nos vemos afectados por el. Las acciones que tienden a convencer a los empleados de la verdadera importancia de los programas de desarrollo de recursos humanos es cuando los directivos proporcionan los recursos necesarios para la función de desarrollo de los mismos. Los esfuerzos que pueden desarrollar una Institución o empresa en las relaciones con sus empleados, también influyen en el programa de Desarrollo de Recursos Humanos. Los trabajadores desean sentir que la institución está interesada en ellos. La capacitación debe proporcionar los conocimientos teórico práctico a los trabajadores para mejorar el desempeño al realizar sus funciones en sus respectivos puestos. El interés básico para promover el cambio a través de la capacitación es porque la institución y sus recursos humanos pueden ser más productivos. Para ello, se requiere de un buen análisis de los cursos que se ofrecen para lograr cubrir las necesidades del personal administrativo y que estos realmente adquieran los conocimientos teórico-prácticos así como habilidades que contribuyan a un mejor desempeño en su trabajo y un mejor desarrollo de la institución.

## MARCO TEORICO

La capacitación se refiere a los métodos que se usan para proporcionar a los empleados nuevos y actuales las habilidades que requieren para desempeñar su trabajo. (Desler, Gary, 2001) Un diagnóstico de necesidades de capacitación no es simplemente la petición desordenada de un jefe o de sus subordinados acerca de lo que ellos creen necesitan para desempeñar su puesto de trabajo, ya que si la investigación de necesidades se hace con esa idea, se caerá en el error de “capacitar por capacitar”. Tampoco un diagnóstico es simplemente el listado de cursos a escoger entre los supervisores de la empresa. Un diagnóstico es: una estrategia para conocer la carencia en cuanto a conocimientos, aptitudes, actitudes y hábitos que el personal requiere satisfacer para poder desempeñarse efectivamente en un puesto. Por otra parte es el punto de partida o materia prima para la formulación del plan y los programas de capacitación. (Jesús Carlos Reza Trosino, 2006) Toda capacitación parte de una necesidad, por lo cual se tiene que analizar para poder identificar las necesidades a cubrir. El primer paso en el proceso de desarrollo de recursos humanos es pues detectar las necesidades específicas de capacitación y desarrollo. Para ello, se necesitan tres tipos de análisis: Análisis organizacional, análisis de tareas y análisis de la persona.

El análisis organizacional: examina toda la institución para detectar en donde se debe de llevar a cabo la capacitación y desarrollo. En el análisis de tareas en donde se realiza un estudio detallado del puesto para identificar las habilidades requeridas. El análisis de tareas es recomendable para determinar las necesidades de capacitación de los empleados que son nuevos en el puesto. Al realizar el análisis de tareas se deben de detectar dos factores principales: importancia y rendimiento. La importancia se relaciona con la relevancia de las tareas y el o los comportamientos específicos en un puesto en particular y con la frecuencia con que se desempeña. El rendimiento es la competencia de los empleados para desarrollar estas tareas.

El análisis de las personas gira en torno a dos preguntas: ¿A quién se necesita capacitar? Y ¿Qué clase de capacitación se necesita? En un análisis de persona primeramente se debe comparar el desempeño del empleado con la norma establecida. Si el desempeño del empleado esta por debajo de la norma, se necesita una investigación adicional para identificar los conocimientos y habilidades específicos que se requieren para un desempeño satisfactorio del puesto. Otras técnicas utilizadas pueden proporcionar información para el desarrollo de recursos humanos son las descripciones de puestos, los cuestionarios, informes de los supervisores, pruebas de conocimiento, etc. Una vez hecho el análisis de necesidades el siguiente paso es proceder al establecimiento de objetivos de la capacitación. En este punto se especifica en términos medibles y observables el desempeño que se espera tener de los empleados. El siguiente paso es la Capacitación. En este punto se seleccionan las técnicas reales de capacitación y se lleva a cabo el entrenamiento. Por último es la evaluación de la capacitación. En este punto se ve el desempeño que tiene la persona comparándolo con el anterior y con esto se evalúa la eficiencia del programa para poder llevar a cabo un buen desarrollo de recursos humanos que ayude a facilitar el cambio.

## **METODOLOGÍA**

### **Materiales y Métodos**

Se realizó un estudio descriptivo con un diseño de la investigación de tipo cuantitativo *No experimental* ya que no se llevo a cabo ninguna manipulación de las variables sino que se observo el fenómeno de la investigación tal y como se desenvuelve en su entorno natural. La investigación igualmente siguió los lineamientos de un *estudio Transversal o Transeccional*, en virtud de que la recopilación de información se hizo en un momento determinado.

El instrumento utilizado fue un cuestionario de 20 preguntas el cual fue aplicado a una muestra probabilística de 104 personas. Dicha cantidad se obtuvo a través de la fórmula que a continuación se muestra teniendo como universo un total de 142 personas que representan el personal administrativo con un nivel de confianza del 95%

$$n = \frac{z^2 pqN}{e^2(N-1) + z^2 pq}$$

En donde:

n = Es el tamaño de la población o universo

Z = Nivel de confianza (95%) en valores de z (1.96).

p = Proporción de los que poseen el atributo (50%)

q = Proporción de los que no poseen el atributo (50%)

e = Error de muestreo (0.05)

N = Población (142 trabajadores)

$$n = \frac{(1.96)^2 (.50) (.50) (142)}{(142-1) (.0025) + (1.96)^2 (0.5) (0.5)} \quad n = \frac{136.3768}{0.3525 + 0.9604} \quad n = \frac{136.3768}{1.3129} \quad n = 103.8$$

## RESULTADOS

El Análisis de los Datos Fue a Través de Excel. Obteniéndose los Siguietes Resultados de las Preguntas Más Representativas

Pregunta	promedio	
9	4.85576923	tomo los cursos porque me interesa aprender
17	4.58653846	los cursos de capacitación me ayudan a mejorar el ambiente de trabajo
15	4.54807692	la capacitación me ayuda a desarrollarme profesionalmente
3	4.52884615	los instructores están bien capacitados para impartir el curso
20	4.33333333	mi jefe me informa de la forma como ve mi desempeño después de la capacitación
6	4.17307692	Estoy dispuesto a capacitarme fuera de mi horario de trabajo
13	4.14423077	mi jefe reconoce mi mejor esfuerzo
14	4.05769231	El lugar donde se han impartido los cursos han sido adecuados
2	4	La capacitación me hace tener mayor compromiso con mi trabajo
18	3.98	Mis superiores me motivan a aplicar los conocimientos adquiridos
4	3.90384615	Aplico los conocimientos adquiridos en el curso en mi área de trabajo
10	3.61538462	Los cursos que he tomado han cubierto mi expectativa
1	3.58653846	La capacitación que he recibido ha sido adecuada para un mejor desempeño en el área de trabajo
7	3.27472527	Mi jefe respeta mi horario de capacitación
8	3.125	tomo los cursos porque necesito la constancia para poder aspirar a un ascenso
16	2.58653846	mis superiores toman en cuenta mi opinión para seleccionar los cursos de capacitación que contribuyan a mi desarrollo
19	2.50666667	mis jefes evalúan mi trabajo de acuerdo a los conocimientos adquiridos en la capacitación
11	2.49038462	mi jefe me apoya para asistir a los cursos
5	2.38846154	los cursos que se ofrecen son muy eventuales
12	2.20652174	mis superiores hacen una detección de necesidades para posteriormente ofrecer cursos que cubran dichas necesidades

El promedio de la motivación del personal para realizar su capacitación fue de 4.096153 de un máximo de 5. El personal administrativo evaluó a la administración en el proceso de detección de necesidades e impartición de cursos en un promedio de 3.64458 en relación a un máximo de 5.

## CONCLUSIÓN

La Administración no realiza un análisis organizacional, de tareas, ni de personas para realizar la detección de necesidades y de los cursos a impartir, propiciando una mala alineación entre los

objetivos a cumplir y los objetivos logrados. Los factores que más afectan en el Desarrollo del personal administrativo son:

- No existe un diagnóstico previo para la detección de las necesidades, ni de los cursos de capacitación a impartir.
- Los cursos que se ofrecen son eventuales
- El jefe inmediato ofrece poco apoyo para asistir a los cursos de capacitación
- Los jefes no evalúan adecuadamente el trabajo en función de la capacitación recibida

Los factores que más influyen en la productividad (éxito) son:

- Interés de la gente en capacitarse
- Los cursos de capacitación mejoran el ambiente de trabajo
- La capacitación los ayuda a desarrollarse profesionalmente
- La institución tiene personal muy capacitado para apoyar impartiendo cursos

## **RECOMENDACIONES**

La administración debe de actuar en forma proactiva e iniciar un programa de detección de necesidades, basado en el análisis organizacional, análisis de tareas y el análisis de personas. Y debe centrarse en los verdaderos objetivos de la capacitación para lograr el desarrollo del personal administrativo, ya que algunas instituciones o empresas consideran un gasto el impartir capacitación, sin conocer los grandes beneficios que ésta obtendrá al impartir un curso. Debe detectar antes de ofrecer cualquier curso las necesidades existentes en los diferentes departamentos y ofrecer cursos que cubran dichas necesidades, de lo contrario esto puede ser causa de conflictos y si no se resuelve en forma eficaz repercute en forma negativa impidiendo la consecución de los objetivos del equipo o del departamento. Programar la capacitación continua y que cubra las necesidades de los departamentos. Una vez tomado el curso y puesto en práctica el jefe debe hacer una evaluación de los resultados obtenidos con el objeto de ir mejorándolos cada vez y también para felicitar al personal si se ha visto una mejora en su trabajo.

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# IMPACTO DE LAS HERRAMIENTAS TECNOLÓGICAS EN LAS EMPRESAS DE TURISMO MÉDICO EN MEXICALI Y SU VALLE

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## RESUMEN

*El turismo se ha convertido en una de las principales fuentes de empleo a nivel mundial, 1 de cada 11 empleos son generados por actividades relacionados al turismo y genera el 9% del PIB a nivel global, uno de los principales motivos de visita, después del ocio y las vacaciones, es el turismo de salud. Entre los 10 principales emisores de turistas, están los Estados Unidos y Canadá en el lugar 3 y 7 respectivamente (OMT, 2013). Siendo estos países nuestros vecinos del norte y aunado al bajo costo que se tiene en este rubro en México, coloca a esta región con grandes oportunidades para la explotación del turismo médico. Las nuevas herramientas basadas en las TIC's, permiten la atracción de turistas con un costo más bajo y promover de manera más eficiente todos los servicios que ofrece el sector salud. El presente trabajo tiene como finalidad conocer el impacto que han tenido estas tecnologías y obtener las mejores prácticas, para proponer una estrategia que permita elevar el número de turistas de salud en Mexicali y su Valle.*

**PALABRAS CLAVES:** TIC's, Turismo, Estrategia

## IMPACT OF TECHNOLOGICAL TOOLS IN MEDICAL TOURISM COMPANIES IN MEXICALI AND ITS VALLEY

### ABSTRACT

*Tourism has become a major source of employment worldwide, 1 in 11 jobs are generated by tourism related activities and generate 9% of GDP globally, one of the main reasons for visiting, after leisure and holidays, is health tourism. Among the top 10 emitters of tourists, are the United States and Canada ranked 3rd and 7th, respectively (OTM, 2013). As these countries our northern neighbors and coupled with the low cost you have in this area in Mexico, puts this region with great opportunities for the exploitation of medical tourism. New tools based on information technology, allow attracting tourists with a lower cost and more efficiently promote all services offered by the health sector. The main objective of this work is to understand the impact that these technologies have and get the best practices to develop a strategy to increase the number of health tourists in Mexicali and its valley.*

**JEL:** L83, O14, I11, I15

**KEY WORDS:** Tic's, Tourism Strategy

## INTRODUCCIÓN

Actualmente el turismo a nivel mundial representa una de las principales actividades económicas, genera el 9 % del producto interno bruto a nivel global, 1 de cada 11 empleos y el 6% de las exportaciones mundiales (OMT, 2013), ha sido el motor de crecimiento de muchos países que le han apostado a la venta de sus atractivos naturales, culturales e históricos, y demás productos que puedan satisfacer la demanda de bienes y servicios por los visitantes. De acuerdo a la Cuenta Satélite de Turismo en México se define como turismo a el desplazamiento momentáneo que realizan las personas y comprende las acciones que efectúan durante sus viajes y estancia fuera de su entorno habitual (INEGI, 2003).

En México el turismo es uno de los pilares de la economía nacional, según datos de la INEGI en 2010, el turismo aportó el 8.6% del Producto Interno Bruto del país y es el principal destino de arribo de turistas internacionales en América Latina. El PIB turístico de México, es mayor que el PIB nacional de algunos países de América Latina como son: Cuba, Ecuador, Guatemala, Uruguay y Panamá. (INEGI I. N., 2012). Por lo cual es importante fomentar el desarrollo del mismo. Gracias a su situación geográfica privilegiada en Baja California el turismo se ha desarrollado de forma natural ya que comparte más de tres mil kilómetros de frontera con el país más poderoso del mundo, con dos de sus estados más ricos y progresistas, California y Arizona. El turismo es una actividad económica importante para esta zona, sin embargo el turismo médico y de salud representa un nicho de oportunidad en crecimiento, el cual genera una derrama económica de 86 millones de dólares (Cervantes, 2011), ya que diariamente cientos de pacientes norteamericanos y canadienses cruzan nuestra frontera para consultar a especialistas de la salud, adquirir medicinas y realizarse estudios y análisis de en laboratorios.

En un estudio realizado por la UABC donde se encuestó a 385 turistas de la tercera edad llamados “pájaros de la nieve” se logró identificar que un 61% de los encuestados visitan Los Algodones por cuestiones médicas, es decir que el principal motivo de su viaje es una consulta o compra de medicina (Luque & González, 2013). Sin embargo existen muchos más servicios de la salud representados por micro, pequeñas y medianas empresas, que todavía son desconocidos para nuestros visitantes y que requieren necesariamente una estrategia de Marketing para ofertar sus productos y servicios a los turistas médicos que ya visitan nuestra ciudad.

Actualmente las Tecnologías de la Información y Comunicación proporcionan una diversidad de herramientas en apoyo a las MiPymes. Estas herramientas tecnológicas propician el contacto directo con el cliente, ayudan a elevar la calidad en el servicio y por supuesto a promocionar sus productos y servicios con una mayor cobertura a bajos costos. Además tienen un impacto directo en la comunicación y la administración de su empresa. Las MiPymes del sector salud en esta región requieren visualizar a las TIC's como aliadas en su proceso de negocios. De acuerdo con SECTUR, empresas que eligen no hacer caso del fenómeno de las TIC's, o mirarlo como una actividad secundaria, se ponen a sí mismas en peligro porque sus competidores importantes seguramente si explotarán las oportunidades que ofrecen las TIC's para elevar su competitividad (SECTUR, 2008).

Considerando que los turistas médicos que visitan nuestra ciudad, provienen de países desarrollados y por consecuencia han tenido mayor contacto con las TIC's y para ellos su uso es cotidiano, es deseable que las MiPymes del sector salud al menos cuenten con una página informativa en internet que permita ser visible para los turistas médicos a la hora de elegir sus servicios médicos. Como lo advierte la consultora Marketing Exchange los negocios no pueden

permitirse ignorar las búsquedas móviles, de acuerdo con su estudio el 90% de los usuarios de smartphones usan internet en sus dispositivos móviles diariamente, de los cuales 68% utilizan un buscador para localizar productos, 42% adquieren un producto o servicio a través del Smartphone, 40% usó cupones para compras. Además de los usuarios que realizan búsquedas por internet en sus smartphones, el 97% de ellos busca negocios locales, el 67% de estas búsquedas están influidas por la geo localización o ubicaciones específicas. En lo que respecta a las acciones que llevan a cabo una vez realizada la búsqueda a nivel local, el 48% llamó al negocio, 17% escribió o leyó una crítica, 13% realizó una recomendación, 29% realizó una compra en la tienda física, 24% compró online, 51% visitó el negocio, 47% visitó la website, 11% añadió el negocio a su lista de favoritos y el 47% anotó direcciones. (Exchange, 2012).

Además de las páginas de internet otra estrategia de Marketing para ampliar la cobertura tanto del turismo en general como del turismo médico son las Redes Sociales. Estas no solo permiten el acercamiento de los clientes sino compartir experiencias y dar recomendaciones según su experiencia. De acuerdo con los datos analizados por LeadSift en los cuales se destaca el hecho de que más de un 55% de los usuarios han comenzado a seguir a una marca turística en Facebook después de su viaje. Además un 46% afirma haber publicado reseñas o comentarios en internet. El estudio habla de tres fases en el ciclo del viaje: una primera etapa de planificación, una segunda en la que se produce el viaje y una tercera que denomina luna de miel. En la primera de esas fases, cada vez más usuarios acuden a las redes sociales para decidir y planificar su viaje. Un 92% afirma que tiene en cuenta los consejos de sus amigos y familiares en la red, mientras que un 59% reconoce haber realizado publicaciones en redes sociales sobre sus futuras vacaciones. En la segunda fase, la del viaje propiamente dicho, cabe destacar que un 85% de los usuarios de smartphone hace uso de estos dispositivos durante el viaje.

Un 74% accede a las redes sociales y un 48% comparte videos o imágenes del mismo mientras está sucediendo. El ser capaz de identificar oportunidades de negocio localizando a los usuarios que están hablando de tu hotel y conectar con ellos facilita que publiquen buenas historias sobre su experiencia durante el viaje. Y por último, en esa tercera fase de luna de miel, el 76% de los usuarios comparte contenido sobre sus vacaciones en redes sociales. Además, el 55% ha seguido a algún hotel o marca turística en Facebook a raíz de su viaje (LeadSift, 2013). Sin duda alguna la recomendación respecto algún producto o servicio es una forma clara de marketing en donde se añade el valor agregado que le da en sí, el reconocimiento al producto o servicio de quien recomienda. Fomentar este tipo de marketing en el turismo médico no es una idea que se deba desechar.

El principal problema de las MiPymes del turismo médico en esta región es el desconocimiento de las herramientas TIC's y la falta de una estrategia de Marketing que les apoye en el uso de las mismas. La presente investigación tiene como propósito identificar los principales medios por los cuales los turistas médicos que visitan esta región, buscan y toman decisiones respecto a los servicios médicos que reciben, así como los medios que utilizan los microempresarios de la salud para ofertar sus servicios. Y con ello proponer las mejores estrategias de Marketing basadas en las TIC's y lograr elevar la cobertura de promoción de los servicios médicos que se brindan en la ciudad de Mexicali y su valle.

## **REVISIÓN LITERARIA**

### Turismo en Baja California

El estado de Baja California se localiza en la frontera noroeste de México, y colinda con los estados de Sonora, y Baja California Sur, y el estado de California en la frontera con los Estados Unidos, y con el océano pacífico y el mar de Cortez, lo que lo sitúa en un lugar privilegiado para el desarrollo de la actividad turística. El turismo en el estado se encuentra situado en la parte norte de la península, debido a que es donde se cuenta con la infraestructura necesaria para la captación de visitantes. De acuerdo al estudio realizado por el Plan de Mercadotecnia 2007-2013 de la Secretaría de Turismo en el cual se menciona que, en términos generales el promedio el 47% del turismo en Baja California es nacional y el 53% extranjero. Lo que es claro es que el 92.6% del turismo extranjero proviene de EEUU y 86.2% de este son residentes del estado de California, 22.4% de Los Ángeles y 20.6% de San Diego. Con cifras del 2% y fracción aparecen, las ciudades de Calexico, Riverside, El centro y Sacramento siendo las principales fuentes de turistas extranjeros para el estado. (SECTUR S. d., 2007).

Dentro de las estadísticas más interesantes que nos proporciona este Plan de Mercadotecnia nos menciona que 79.9% nos visitan en su automóvil 94.6% son turistas independientes, es decir, solo 5.4% lo hacen a través de un tour operador, 48.2% viajan (1-2 personas), 37.9% (3-4), 11.5% (5-10). El 62.7% del turista nacional pernocta mientras solo el 47.9% del extranjero lo hace en el destino. 77.7% del turismo extranjero ha visitado el destino antes, 22.3% son visitantes por primera ocasión, 76.5% extranjeros vinieron por recomendación, 7.6% por un mapa-folleto, 5.4% por Internet, 4.2% por medios electrónicos y solo 0.6% por prensa (SECTUR S. d., 2007).

#### El Corredor Turístico Tijuana, Playas de Rosarito y Ensenada

Las principales atracciones del corredor turístico Tijuana, Playas de Rosarito y Ensenada han evolucionado conforme a las nuevas demandas de los viajeros que arriban a la región, en un primer momento se trataba de turistas que buscaban atractivos que no estaban relacionados en forma directa con el medio natural. Ahora la oferta se ha diversificado y se basa en atractivos naturales y culturales así como en otras opciones que se encuentran en los alrededores. Las actividades turísticas del corredor turístico tienen como eje reactor sus recursos costeros y marinos. Las playas son uno de los principales atractivos y aunque no todas ofrecen las condiciones ideales, del clima y rasgos del oleaje para su uso como balneario, este litoral es muy buscado por los viajeros provenientes de latitudes más altas, pues entre otros aspectos el clima es más benigno.

Según las características de las playas las actividades realizadas pueden ir, desde el descanso hasta la práctica de deportes extremos. La mayoría de las playas del corredor se encuentran rodeadas de acantilados rocosos, de modo que su paisaje es una combinación de montaña, desierto y cuerpos de agua costeros. A lo anterior se suma una vegetación y una fauna singulares, lo que evidencia un equilibrio estético ampliamente usado para publicitar esta región; los asentamientos turísticos se han incrementado en los territorios que poseen paisajes excepcionales, en donde es bastante redituable invertir en fraccionamientos de lujo para turistas extranjeros. Los paisajes del corredor son apreciados de manera especial en los miradores ubicados en puntos estratégicos, sobre todo en acantilados.

La pesca deportiva es un importante atractivo para los paseantes, esta, se practica en playas de Tijuana, playas de Rosarito, La Salina, Ensenada y la Bufadora, que son puertos de altura con marinas de primer nivel o incluso embarcaderos rústicos con rampas de boteo y servicios básicos; además, se organizan torneos anuales para impulsarla. Por otro lado el avistamiento de fauna en su medio natural siempre se ha promocionado como un elemento que conquista a los visitantes.

En las costas bajacalifornianas es posible observar una gran diversidad de especies, algunas de ellas endémicas, pero el interés turístico se centra en los mamíferos marinos. Los Recursos culturales con que cuenta el corredor turístico se centran en las zonas urbanas y la mayoría son localidades recientes, por lo que hay pocos edificios históricos que promueven con fines turísticos; más bien lo que se publicita son equipamientos turísticos específicos y culturales, plazas de toros, instalaciones deportivas, marinas, infraestructura hotelera de lujo (como los spas), galerías de arte, artesanías, reconocida vida nocturna y su gastronomía, además de múltiples actividades programadas. En los principales centros urbanos del corredor se han implantado paseos peatonales turísticos para optimizar el tiempo de estadía de los turistas, en un lugar; como los que ofertan en Playas de Rosarito y Ensenada; se visitan los puntos más interesantes de la zona y la duración es de dos o tres horas; eventualmente pueden permanecer todo el día, según los intereses de cada turista. (Mares & Correa, 2008)

### La Ruta Del Vino

La Ruta del Vino de Baja California es un corredor discontinuo que va de norte a sur y atraviesa los municipios de Tecate, Tijuana y Ensenada. Esta ruta se compone de ocho valles: Tijuana, Tecate, Guadalupe, El Tule, Ojos Negros, Uruapan, Santo Tomás y San Vicente. El enoturismo, es uno de los segmentos turísticos que en los últimos años ha registrado mayor crecimiento; se ha visto favorecido por la conformación de la Ruta del Vino en el estado, la cual inició su desarrollo a partir del año 2000. El apoyo que desde entonces se ha mantenido por parte del gobierno y los empresarios involucrados, ha logrado que ésta se posicione como uno de los principales productos turísticos de Baja California. (Quiñónez, Bringas, & Barrios, 2011)

La puerta norte de la ruta del vino, inicia al norte en el pueblo mágico de Tecate, terminando en el puerto de Ensenada. Los principales atractivos son las vinícolas, que están situadas en sus valles. La mayor cantidad de productores de vino se localizan en el valle de Guadalupe. Rodeados por montañas y por grandes áreas de vid, ofrecen un atractivo único para el turismo rural. En la región se encuentran desde pequeños restaurantes campestres familiares, hasta refinada cocina regional e internacional, sin olvidar sitios para acampar, ranchos, centros artesanales, museos, hoteles boutique, cultura indígena y sitios naturales. Se estima que alrededor de 160 mil personas visitan la ruta del vino cada año, 30 mil durante las fiestas de La Vendimia y las restantes en recorridos por las casas vinícolas de los diferentes valles. A lo largo de la ruta del vino se cuenta con una oferta de hospedaje que no supera las 100 habitaciones, la mayoría en pequeños establecimientos, algunos de estos de la categoría denominada boutique.

Año tras año, en el mes de agosto los gobiernos estatal y municipal, conjuntamente con las principales casas productoras de vino de la región, organizan las fiestas de La Vendimia, cuya variedad de eventos (concursos de paellas, vinos, conciertos artísticos, entre otros) les ha valido reconocimiento internacional. A partir de 2011, la Secretaría de Turismo del estado, en coordinación con provino, fomento la realización de mayores eventos para promover las visitas a la ruta del vino: se logró un calendario de más de 100 eventos entre abril y noviembre (Quiñónez, Bringas, & Barrios, 2011).

### El Turismo en Mexicali, Su Valle y San Felipe

La actividad turística en el municipio de Mexicali esta diversificada a la del resto del estado. Los principales segmentos de mercado que se explotan son el turismo de negocios y el turismo

médico. El segmento de negocios ha crecido gracias al desarrollo de la industria maquiladora en la ciudad, siendo Mexicali una de las principales ciudades industriales del país, lo que atrae a diferentes turistas nacionales y extranjeros que visitan la ciudad con fines de trabajo, dejando una derrama económica importante.

El segmento de turismo médico se ha incrementado de forma significativa en los últimos años convirtiéndose la ciudad y su valle en un punto estratégico a nivel internacional para el desarrollo de este turismo, contando con tres puntos estratégicos para el turismo de retirados y los llamados Snow Birds provenientes de los países de Estados Unidos y Canadá, quienes nos visitan año con año para escapar de las heladas temperaturas de sus lugares de origen y disfrutar de las diferentes opciones médicas y de esparcimiento que ofrece este municipio. Los Algodones, es la comunidad más al norte de todo México, y de acuerdo a la investigación presentada Luque y González, esta comunidad es uno de los principales receptores de turismo médico en la región de Baja California, su ubicación geográfica, en la división entre Baja California y Arizona, hace que Los Algodones sea una opción muy atractiva para los visitantes del Norte de Estados Unidos y Canadá que desean atender su salud, principalmente por servicios de odontología. En la misma investigación se plasman que: Los Algodones se ha convertido en uno de los principales receptores de turismo médico en la región de Baja California con 1, 649,484 cruces fronterizos en 2011 de acuerdo a datos de la Secretaría de Turismo del Estado. Los visitantes mencionados visitan el lugar principalmente entre noviembre y marzo para alejarse de la intensa temporada invernal de sus lugares de residencia, instalando su residencia temporal esencialmente en Yuma, para cruzar hacia Los Algodones, en busca de los servicios dentales principalmente, seguido por optometristas, servicios médicos generales y farmacias (Luque & González, p.13).

Por su parte San Felipe es una pequeña y pintoresca ciudad perteneciente al Municipio de Mexicali, capital del estado de Baja California, que se encuentra ubicada estratégicamente a solo 120 millas al sur de la frontera con California, en los Estados Unidos. Esta cobijada por una hermosa Bahía de casi 20 kilómetros de extensión en el extremo norte del Mar de Cortez, en donde sus aguas son templadas y tranquilas durante casi todo el año y su clima es cálido y seco en el verano, por lo que sus nublados y lluvias son escasos. (COTUCO C. d., 2013). Siendo considerado como una de las comunidades de mayor atracción para el turismo de retirados, teniendo diferentes atractivos cercanos para el desarrollo de diversas actividades. Entre los principales atractivos de acuerdo al comité de turismo y convenciones de Mexicali son: Paseo al valle de los gigantes, pesca en el islote Konsag, visitar las pinturas rupestres en algunos de los cañones cercanos, y el alpinismo siendo la ciudad más cercana al Picacho del Diablo, la mayor elevación en toda la Baja California. Por su parte la ciudad de Mexicali, de acuerdo con la Secretaría de Turismo cuenta con la infraestructura necesaria para recibir a los turistas en la ciudad, cuenta con una oferta hotelera de 3,386 habitaciones con un promedio de ocupación anual 2007: 60.7% (SECTUR S. d., 2007).

### Turismo Médico

De acuerdo con la Secretaría de Turismo, el turismo médico está orientado a la vinculación del viaje, con la realización de intervenciones quirúrgicas, dentales o tratamientos médicos en países donde son más baratas. A diferencia del Turismo de la salud que va más enfocado a la recreación, a la relajación y esparcimiento relacionados con tratamientos alternativos, que ofrecen los Spas, los balnearios, para diversas dolencias reumatológicas, estrés, dermatológicas, tratamientos de belleza entre otros (SECTUR 2010). Baja California anualmente recibe a miles de turistas médicos, y de la salud que viajan a México para realizarse intervenciones quirúrgicas a precios bajos, en lugares confortables que ofrecen armonía para el proceso de recuperación. Las

principales ventajas que encuentran los pacientes en Baja California, son: la ubicación estratégica por la cercanía con California y los costos atractivos que son entre un 50% y un 80% más económicos que en Estados Unidos y Canadá, estas condiciones permiten al estado desarrollar turismo médico y de salud (SECTURE, 2008).

La infraestructura con la que cuenta Baja California para albergar a estos turistas, según los datos de la Secretaría de Turismo en Baja California del 2010, Tijuana tiene con 346 hospitales, 1,616 médicos generales, 284 médicos especialistas, 526 dentales, 332 laboratorios; Tecate con 7 hospitales, 36 médicos generales, 6 médicos especialistas, 17 dentales, 7 laboratorios; Rosarito cuenta con 10 hospitales, 53 médicos generales, 6 médicos especialistas, 20 dentales, 17 laboratorios; La ciudad de Ensenada con 14 hospitales, 515 médicos generales, 53 médicos especialistas, 85 dentales, 51 laboratorios; así mismo la capital del Estado Mexicali, cuenta con 42 hospitales, 347 médicos generales, 263 médicos especialistas, 357 dentales, 127 laboratorios (Turismo de Bistutí, 2013).

### TIC'S y el Turismo

Las tecnologías de información son todos aquellos dispositivos, herramientas, equipos y componentes electrónicos capaces de manipular información que soporten el desarrollo y crecimiento económico de cualquier tipo de organización (Gradados, 2004). La OECD define a las TIC's, como el conjunto de avances tecnológicos que proporcionan aquellos dispositivos que capturan, transmiten y despliegan datos e información electrónica y que apoyan el crecimiento y desarrollo económico de la industria y los servicios (OCDE, 2002). Las TIC's son excelentes aliadas para el desarrollo del nuevo Marketing, gracias a estas herramientas hemos pasado de la satisfacción puramente de las necesidades a la creación de deseos. De producir para vender (marketing masivo e indiferenciado), a crear valor para el cliente. De la venta y la gestión del producto, a la gestión de la relación con el cliente para mantener diálogo con él. De atender a clientes a la gestión de clientes. De la comunicación masiva a la comunicación centrada en la información, y la comunicación individualizada y emocional. De conquistar a los clientes al marketing de fidelización, que quiere mantener con el cliente relaciones de satisfacción, a largo plazo. De vender masivamente a la segmentación y personalización de la oferta (micromarketing o marketing one to one) (Kotler Philip, 2013). Actualmente existen múltiples tecnologías y aplicaciones, y empresas especializadas que diseñan e implementan estas herramientas TIC's a medida de las empresas. Algunas de estas herramientas son sistemas de información para gestionar toda la cadena de valor de la empresa incluyendo su último eslabón que es el conocimiento e investigación del mercado y la gestión de la relación de la empresa con sus clientes (Kotler Philip, 2013).

Una de las industrias más favorecidas por la evolución de las TIC 's en el Marketing, es el sector turístico que originalmente adoptó a los sistemas globalizadores (GDS) como las herramientas tecnológicas para la promoción de servicios turísticos, los cuales permitían la concentración de la información de diversos destinos en un sólo sistema centralizado. Con la aparición del internet se crearon sistemas idóneos para mostrar diferente información a los ojos del consumidor final, dándoles la posibilidad de reservar y comprar los servicios directamente. A partir de su desarrollo y su uso cada vez más frecuente, han surgido múltiples tecnologías y aplicaciones que han revolucionado el mercado del turismo en el mundo (SECTUR, 2008). De acuerdo con la Secretaría de Turismo, las herramientas más utilizadas por el sector turístico en México, son: Portales turísticos / Página web, acceso a internet vía el aparato televisor – web TV., sistemas de FrontDesk. Punto de ventas - Point of Sale, tarificador, sistemas administrativos (Back of the House Systems), sistemas de reservaciones (Central Reservation Systems), chapas electrónicas

vía tarjeta, radios de intercomunicación (walkie talkie), sistemas para administrar el historial de los clientes (Guest history), también conocidos como CRM (Customer Relationship Management).

Boleto electrónico –eTicket, TV Service, acceso del huésped a los servicios del hotel (alimentos y bebidas, lavandería, check-out, películas) a través de la TV instalada en su habitación. Yield Management, también denominada Revenue Management, se refiere al sistema de análisis de operaciones de compañías de aerolíneas, hoteles y renta de autos para controlar el precio y oferta de algún servicio con base en la demanda y su inventario, internet, correo electrónico, teléfono, conmutador, fax, comunicación telefónica vía satélite, video conferencia, redes de área local - local area network y sistemas globalizadores (GDS) SABRE, Worldspan, Apollo, Amadeus, etc.

## **METODOLOGÍA**

### Sujetos de Estudio

Se aplicarán 2 encuestas, una a las MiPymes del Sector salud y otra a los turistas médicos que visitan la ciudad de Mexicali y su Valle, en base a un catálogo proporcionado por la Secretaria de Turismo del Estado. Para las MiPymes del sector médico, se aplicará un instrumento de medición que permitirá evaluar el uso de la tecnología y, el impacto de estas en la atracción de turistas médicos. Se realizará un muestreo al azar. En lo que respecta a los turistas médicos se aplicará un instrumento de medición para conocer el grado de penetración que tienen las herramientas tecnológicas en los turistas, así como la forma en que seleccionan los servicios médicos que requieren. También se realizará una entrevista en profundidad a las 5 empresas turísticas de mayor tamaño en el municipio para conocer el impacto que han tenido las TIC's en su crecimiento.

## **MÉTODOS Y MATERIALES**

La aplicación de la encuesta se realizará en los meses de Noviembre 2013 a Enero de 2014. A un total de 385 turistas médicos y 85 empresas del sector salud y 5 Pymes que cuenten con un proyecto de Marketing probado, basado en las TIC'S. Las encuestas se aplicarán en sitio en lo que respecta a las MiPymes y en el cruce fronterizo a los turistas médicos. Una vez aplicadas las encuestas se utilizará el programa SPSS en su versión 20 para generar estadísticas y graficas de los resultados. Se analizarán los resultados y se realizará una descripción de los hallazgos para establecer propuestas que den respuesta a las necesidades de los sujetos encuestados. Y establecer una caracterización del uso de las tecnologías en las MiPymes de turismo médico en la región, respecto a las MiPymes dedicadas al sector médico se pretende identificar su grado de adopción de estas tecnologías en su proceso de Marketing.

## **RESULTADOS ESPERADOS**

Con el resultado de esta investigación se espera conocer, el uso e impacto que ha tenido las TIC's en la atracción de turistas médicos a la localidad. De igual forma se pretende distinguir las herramientas que más utilizan los turistas médicos que visitan Mexicali y su valle, para la selección de los servicios médicos que recibirán. Además se podrá identificar el grado de adopción de las tecnologías en las MiPymes de esta región. Con ello se pretende establecer un

modelo de Marketing basado en las TIC's, que responda a las necesidades de información de los turistas médicos que nos visitan. Se busca que al menos cada consultorio médico, hospitales, laboratorios, farmacias, y demás servicios médicos, se encuentren en un padrón electrónico que lo haga visible a los ojos de los turistas a la hora de seleccionar, o de buscar un servicio médico en esta región. Sin dejar a un lado las herramientas básicas de marketing como son: páginas de internet, correo electrónico, motores de búsqueda, redes sociales, canales de videos, herramientas de geo localización y software para comunicación en tiempo real.

Para ello es necesario involucrar a la Secretaría del Turismo del Estado y al Comité de Turismo y Convenciones, así como el Fidecomiso para la Promoción Turística del Municipio, para la creación de un centro tecnológico para el manejo de la comunidad turística del sector médico en el estado. Donde se utilice la tecnología necesaria y se agrupe por clúster a las empresas que brindan los servicios médicos en la región, pudiendo disipar las dudas del turista a la hora de planear su viaje, dirigirlo, una vez estando en la ciudad, y darle un seguimiento en sus próximas visitas así como brindarles alternativas de esparcimiento.

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# **FACTORES QUE INFLUYEN EN LA DECISIÓN DE COMPRA DE LOS CLIENTES A TRAVÉS DE LAS ESTRATEGIAS DE MARKETING CON REDES SOCIALES EN EL SECTOR HOTELERO**

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## **RESUMEN**

*El presente artículo tiene como objetivo identificar los factores del marketing en redes sociales que influyen en la decisión de compra de los clientes del sector hotelero de cuatro y cinco estrellas de la ciudad de Tijuana, Baja California, México. Asimismo, busca evaluar cada estrategia implementada con las características y contenidos de las redes sociales de los hoteles. Reconociendo la importancia que representa las redes sociales como medio de comunicación con los clientes, es de suma importancia que las empresas hoteleras utilicen eficientemente la herramienta de redes sociales, ya que este medio de comunicación está cambiando la forma de hacer marketing. En México el 75% de las organizaciones administran perfiles en redes sociales; un 69% realiza publicidad en redes digitales y aprovecha ese medio para intensificar la comunicación con sus clientes. En el estado de Baja California la utilización de las tecnologías es alta, pero el uso inadecuado de estas provoca que las empresas no tengan éxito, por lo que en el área de mercadotecnia digital las PYMES tienen mayor posibilidad y potencial de crecimiento, lo que conlleva a tener una gran necesidad en Baja California de explotar el área de marketing en redes sociales para incrementar el desarrollo de las organizaciones.*

**PALABRAS CLAVE:** Marketing, redes sociales, hoteles, canales de comunicación

## **FACTORS AFFECTING THE DECISION TO BUY FROM CUSTOMERS THROUGH MARKETING STRATEGIES WITH SOCIAL NETWORKS IN THE HOTEL SECTOR**

### **ABSTRACT**

This article aims to identify the factors of social media marketing that influence the buying decision of the customers in the luxury four and five star hotels in the city of Tijuana, Baja California, Mexico. It also seeks to evaluate each strategy implemented with the features and contents of social networking hotels. Recognizing the importance of representing social networks as a means of communication with customers is of utmost importance that hotel companies effectively use social networking tool, since this media is changing the way we do marketing. In Mexico 75% of organizations manage social media profiles, a 69% carry advertising on digital networks and uses this medium to enhance communication with their customers. In the state of Baja California the use of technology is high, but the misuse of these causes that companies do not succeed, so that in the digital marketing area are more likely SMEs and growth potential, leading to have a great need in Baja California to exploit the area of social media marketing to increase the development of organizations.

**JEL:** M3

**KEYWORDS:** Marketing, Social Networks, Hotels, Communication Channels

## INTRODUCCIÓN

Actualmente las redes sociales se han revelado como una de las formas más generalizadas, revolucionarias de intercambio y de relación, por su alcance y posibilidades en casi todos los sectores, como en el área de mercadotecnia donde ha aumentado considerablemente la utilización de redes sociales para la publicidad de los productos y/o servicios. Las empresas invierten cada día más en redes sociales debido a las ventajas que ofrece como estrategia de marketing, ya que permite obtener rentabilidad con una baja inversión, abarcando una gran cantidad de usuarios incluso mayor que la publicidad convencional como la televisión, la radio y el periódico, los cuales están limitados a cierta información que logran comunicar, mientras que las redes sociales la información se trasmite en tiempo real y logra ser más eficaz sabiéndolo utilizar adecuadamente.

Las redes sociales son una herramienta que pueden ayudar a las empresas a conocer qué valoran sus clientes, qué necesitan, por qué deciden comprar sus productos y/o servicios. En el caso particular de las empresas sujetos de análisis en la presente investigación, se encuentra el problema de que no utilizan en forma eficiente las redes sociales, por lo que se precisa necesario identificar qué factores influyen en la decisión de compra de los clientes a través de las redes sociales, las cuales puedan brindar la posibilidad de mejorar la atención y servicio a los clientes.

## REVISIÓN LITERARIA

Wiertz y De Ruyter (2007) citado por (Casaló, Flavián y Guinalú, 2012) definen a las redes sociales como incorporaciones online de consumidores que de manera colectiva producen y consumen contenidos de carácter comercial, lo cual representa motivación para participar en la red social de las empresas. Por lo tanto, el principal objetivo de las redes sociales de los hoteles debe ser generar el valor añadido que permita atraer al consumidor para obtener beneficios que se derivan en la participación en la red digital.

De acuerdo a Conde, Nel Schmidt, Covarrubias y Zavala (2011) las empresas del ramo turístico y de otros sectores, se han percatado del impacto que las redes sociales tienen sobre su negocio y de la influencia de las mismas en el mercado al que desean dirigirse, por lo que las empresas de servicio turístico deberían aprovechar las bondades de esta herramienta en donde pueden dar a conocer a sus clientes y seguidores las novedades y promociones del establecimiento o producto, además de tener la oportunidad del intercambio de información y opiniones a través de las redes sociales, las cuales sirven de pauta para que la organización las considere en el desarrollo de estrategias de marketing a través de ese medio.

Los indicadores que influyen en la decisión de compra de los clientes a través de las redes sociales, de acuerdo a Martínez e Izquierdo (2009) es la confianza y la gestión de la información; la confianza se adquiere, según los autores, mediante la privacidad y la seguridad de la red social. Otro indicador con base en Ruiz y Sanz (2006) es la motivación que se genera mediante la comodidad, el tiempo de respuesta, los precios de los servicios y la variedad en la red digital. De acuerdo a Rojas, Arango y Gallego (2009) el indicador de la confianza se obtiene con base en el aspecto de diseño de la red social como diseño atractivo, estructura de la información, tiempo de respuesta, privacidad y sensación de comodidad. De acuerdo a Martínez, Bernal y Mellinas (2012) las redes sociales deben especificar el número de estrellas del hotel, link con la página web del hotel, número de fotos y videos, servicio *wifi* y registro en google maps.

## METODOLOGÍA

Con base en la información proporcionada por la Secretaría de Turismo del Estado de Baja California (SECTURE) y la Asociación de Hoteles del Noroeste (ASHONO) en la ciudad de Tijuana son diecisiete hoteles de cuatro y cinco estrellas, los cuales en su totalidad han utilizado redes sociales durante los años 2012 y 2013. Los clientes sujetos de análisis en la presente investigación a quienes se les aplicó el instrumento de recolección de datos bajo la modalidad de encuesta, fueron huéspedes de dichos hoteles que utilizaron redes sociales. La población estimada de los hoteles sujetos de análisis fue de 320,426 huéspedes, la cual se obtuvo por el número total de habitaciones de cada hotel con una ocupación del cien por ciento en el mes de julio del año 2012, ya que el comportamiento de ocupación en los hoteles se comporta de forma similar con base en los indicadores obtenidos en el Sistema Nacional de Información Estadística del Sector Turismo de México (DATATUR). Para obtener el tamaño de la muestra de clientes a encuestar, se utilizó la fórmula de población conocida.

$$n = \frac{N Z_{\alpha/2}^2 P(1-P)}{(N-1)e^2 + Z_{\alpha/2}^2 P(1-P)}$$

(1)

Donde:

n = Tamaño de la muestra.

Z = Corresponde al nivel de confianza seleccionado (95%).

P = Proporción de una categoría de la variable.

e = Error estándar permitido ( $\pm 6\%$ ).

$$n = \frac{320,416 * (1.96^2) * 0.5 * (1 - 0.5)}{[320,416 - 1] * 0.06^2 + [1.96^2 * 0.5 * (1 - 0.5)]} = \frac{307,727.5264}{1154.4544} = 266.56 = 267$$

Con base en la fórmula de la muestra para población finita, se determinó aplicar 267 encuestas. En la tabla 1 se describe la distribución de la muestra en los hoteles de cuatro y cinco estrellas de la ciudad de Tijuana en el periodo 2012-2013.

Tabla 1: Distribución de la Muestra

Nombre del Hotel	No. de Habitaciones	Porcentaje	Cantidad (Datos continuos)	Cantidad (Datos discretos)
1 City Junior	134	5.19%	13.85	14
2 City Express	127	4.91%	13.12	13
3 Fiesta Inn Otay	142	5.50%	14.67	15
4 Holiday Inn	127	4.91%	13.12	13
5 Hacienda del Río	131	5.07%	13.54	14
6 La Mesa Inn	139	5.38%	14.36	14
7 Lausana	140	5.42%	14.47	14
8 Real del Río	105	4.06%	10.85	11
9 Principado	49	1.90%	5.06	5
10 Velario	45	1.74%	4.65	5
11 Grand Hotel Tijuana	422	16.33%	43.60	44

12	Camino Real Tijuana	263	10.18%	27.18	27
13	Lucerna	168	6.50%	17.36	17
14	Marriott Tijuana	209	8.09%	21.60	22
15	Palacio Azteca	201	7.78%	20.77	21
16	Pueblo Amigo Inn	106	4.10%	10.95	11
17	Real del Mar	76	2.94%	7.85	8
	Total	2584	100%	267.00	267

*En esta tabla se describe la distribución de la muestra en los hoteles de cuatro y cinco estrellas de la ciudad de Tijuana en el periodo (2012-2013). El total de encuestas aplicadas son 267 distribuidas de manera proporcional en base al número de habitaciones de cada hotel. Fuente: elaboración propia.*

## RESULTADOS

Hasta el momento la investigación se encuentra en el proceso de análisis de la información como resultado de la aplicación del instrumento de recolección de datos hacia los clientes de los hoteles sujetos de estudio. Paralelamente, se realiza un análisis cualitativo de cada una de las redes sociales de los hoteles, para determinar su eficiencia en tiempos de respuesta, entre otros factores considerados por los autores de la literatura citada. Los resultados finales se tienen planeados obtenerlos en el primer trimestre del año 2014.

## CONCLUSIONES

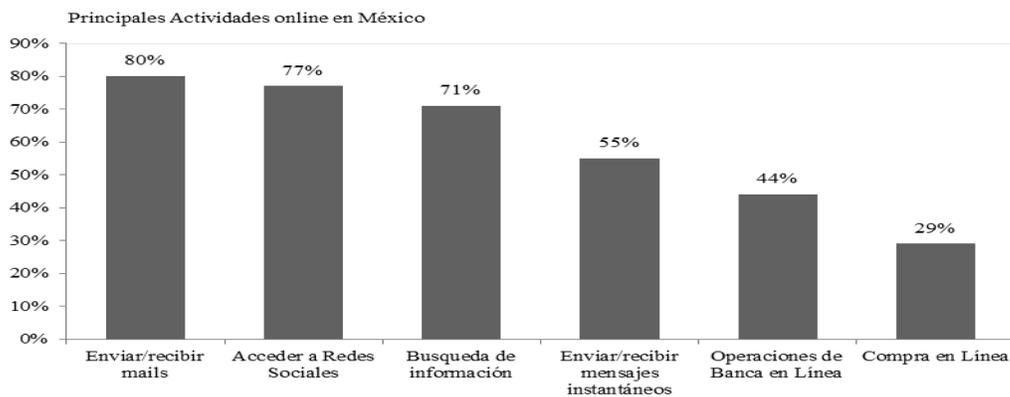
Con base en el análisis previo realizado a las redes sociales de los hoteles de cuatro y cinco estrellas de la ciudad de Tijuana, la mayoría de los hoteles no cuentan con un administrador de la red social, lo que trae como consecuencia la falta de actualización permanente de información. Dentro de las estrategias de análisis de las redes sociales de los hoteles objetos de estudio, se han realizado consultas sobre los servicios que ofrecen y se ha detectado que en la mayoría de los casos, el tiempo de respuesta es muy lento y otros incluso no respondieron. Se concluye por tanto, que de acuerdo al análisis previo de la información, los hoteles en su mayoría carecen de estrategias de marketing en sus redes sociales. A reserva de obtener el análisis completo de los datos recolectados, se detecta una gran oportunidad en este sector para el desarrollo e implementación de estrategias eficientes de marketing en las redes digitales, que permitan influir en la decisión de compra de los consumidores, a través de ofrecer una diversidad de productos y/o servicios que permitan interactuar con los clientes obteniendo una mejor satisfacción y de esa manera influyan en su decisión de compra

### Limitaciones

Las limitaciones que se han presentado en la presente investigación es la logística que se ha tenido que desarrollar para poder tener permiso y por ende acceso a los clientes de los hoteles objetos de estudio, lo que ha traducido en un largo tiempo invertido en esta tarea, pero que gracias a la ASHONO se ha podido lograr la aplicación del instrumento de recolección de datos.

## ANEXOS

Anexo 1: Principales Actividades Online en México



Lo importante de esta figura es que el 77% de los internautas mexicanos utilizan las redes sociales, por lo que la tendencia de los usuarios es la utilización de este medio de comunicación, el cual representa para los hoteles un área de oportunidad para llegar a sus clientes, conocerlos y satisfacerlos.

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# FACTORES DE CONTINGENCIA QUE INCIDEN EN LA PROFESIONALIZACIÓN DE LAS EMPRESAS FAMILIARES DEL SECTOR COMERCIO EN TIJUANA, B.C., MÉXICO

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## RESUMEN

*El presente trabajo contempla una investigación cuyo objetivo es analizar los factores de contingencias tales como el proceso de profesionalización, selección, liderazgo, capacitación y la cultura organizacional para determinar los factores que inciden en profesionalización de las empresas familiares del Sector Comercio de Tijuana, B.C., México. Es importante que la gestión de toda organización logre profesionalizarse, tomando en cuenta que prácticamente es a través de la contratación de directivos ajenos a la familia. Para medir los niveles de profesionalización se tomaron aquellos estados o condiciones organizativas proponiéndose el tamaño de la empresa, cantidad de empleados que laboran en ella, antigüedad, sexo, estudios universitarios y el sector de actividad con la finalidad de determinar el perfil del propietario por variables de contingencia. Se realizó el análisis estadístico de los datos, logrando como resultado presentar un esquema en el que se muestran los factores de contingencia que inciden directamente en la profesionalización.*

**PALABRAS CLAVES:** factores de contingencia, profesionalización, sector comercio

**JEL:** L21, L22,

## CONTINGENCY FACTORS THAT INFLUENCE THE PROFESSIONALISM OF FAMILY BUSINESS IN THE COMMERCE SECTOR OF TIJUANA, B.C., MÉXICO

### ABSTRACT

*This study includes an investigation aimed at analyzing contingency factors such as the professionalization process, selection, leadership, training and organizational culture to determine the factors affecting professionalization of family businesses within the commerce sector in Tijuana, BC, Mexico. It is important that the management of any organization to achieve professionalization, considering that practically it is possible through hiring non-family managers. To measure levels of professionalization took those proposing organizational conditions, the company size, number of employees working in it, old, sex, college and the business sector in order to determine the profile of the owner of variables contingency. We performed statistical analysis of the data, present a scheme that shows the contingency factors that directly affect the professionalization.*

**KEYWORDS:** Contingency Factors, Professionalization, Commerce Sector

**JEL:** L21, L22

## INTRODUCCIÓN

Las empresas familiares representan un rubro importante en la economía de México ya que el 90% de estas organizaciones son familiares y el 80% de los nuevos empleos en la última década han sido creados por las mismas (Urzúa, 2012). En un estudio que realiza (García 2011), en el que hace referencia de que en el país el 99% del total de las empresas que equivalen a unos cuatro millones, son catalogadas como micro, pequeñas y medianas empresas (OCDE, 2007; INEGI 2006). Según datos del INEGI (2009), en México existen 3, 724, 019 empresas familiares en todo el país, de los cuales 98.35% se concentran en comercio 49.9% (1, 858,550). La profesionalización en las empresas familiares, es el lograr que las actividades se lleven a cabo con criterios organizacionales de eficiencia para evaluar sus resultados, para que la toma de decisiones no este influenciada por juicios familiares, que no siempre están relacionadas con los de la empresa. Por lo tanto, es importante contar con un equipo directivo con experiencia y conocimientos en el manejo de la administración de las empresas.

El ámbito empresarial es cada vez más competitivo, los mercados son complejos y los consumidores son más exigentes, por lo cual en los contextos actuales en los que se desenvuelven las empresas están deben ser más competitivas, siendo de suma importancia el ser eficientes y obtener resultados. Por lo antes expuesto es importante que las empresas familiares busquen y logren profesionalizar su gestión empresarial, incorporando personal ajeno a la familia o profesionalizar su equipo directivo actual. Las empresas familiares van creciendo, llega un momento en que es difícil que la familia pueda ocupar los puestos claves y tener todos los requerimientos y competencias necesarias, para enfrentarse a los desafíos a los que se enfrenta, una manera de profesionalizar es a través de la capacitación ya sea interna o externa a los directivos familiares y no familiares. Por lo tanto es necesario que las empresas familiares cuenten con un plan estratégico, que deben conocer los empleados de la organización, para obtener los resultados esperados y lograr sobrevivir en los mercados actuales.

## REVISIÓN LITERARIA

### La Profesionalización de la Empresa Familiar

Existe un creciente interés de parte de las empresas familiares de cómo llevar a cabo la profesionalización, ya que la gran mayoría no sobrevive a una segunda generación. (Raposo, 2010). Es un hecho que una de las fallas de la empresa familiar se encuentra en dos aspectos que resultan fundamentales: la falta de una apropiada gestión de los recursos y su limitada capacidad para desarrollar estrategias competitivas. (Rueda, 2011), hace mención que se debe reconocer que los fundadores y empleados vinculados al entorno de la empresa familiar son en su gran mayoría trabajadores expertos en procesos operativos, la fuerte carencia en el aspecto administrativo empresarial se ha convertido en debilidad. Urzúa (2012), hace referencia a la empresa familiar como el ente económico donde la dirección general, así como los puestos claves para la toma de decisiones, son ocupados por personas con lazos consanguíneos que se pueden considerar dueños, parciales o totales de la empresa. En tanto que (Betancourt, Arcos, Torres y Olivares (2009), consideran que son una organización controlada y operada por dos o más miembros del grupo familiar con la intención que la empresa continúe en propiedad de la familia. Asimismo Roman (2009), menciona que una definición integral de empresa familiar establece que éstas son una

síntesis única de los siguientes elementos: a) control sobre la propiedad (15% o más) por parte de dos o más miembros de una familia o asociación de familias; b) influencia estratégica de los integrantes de la familia en la dirección de la empresa; c) interés por las buenas relaciones familiares; d) interés en la continuidad de la empresa de generación a generación (Poza, 2004).

Para esta investigación se tomó como base el modelo de articulación dinámica de Belausteguigoitia (2010), en donde la empresa familiar ilustra el balance y la articulación que deben existir entre la propiedad, la empresa y la familia. Ejemplificándose de la siguiente manera: La familia: Este círculo representa esencialmente a las personas que pertenecen al mismo grupo sanguíneo que controla la empresa, a los cónyuges e hijos, incluidas sus necesidades, aspiraciones e inquietudes. La familia, como sistema aspira a respaldar a cada uno de sus miembros y les brinda protección, cariño, seguridad, educación y recursos para su desarrollo. Empresa. Una de las fuentes de apoyo que tiene la familia es la empresa, pues, pues de ellas se obtienen recursos para financiar los gastos familiares. La empresa está constituida por las personas que trabajan en la organización (incluidos los miembros de la familia), sus instalaciones, productos y servicios. Por su parte, a empresa recibe el apoyo de la familia, pues algunos de sus miembros, en ella, ocupan puestos, invierten recursos y capitalizan sus relaciones. Propiedad: Belausteguigoitia (2010), para este punto hacer referencia de una definición de Williams (1992), la propiedad de una organización es un tema de orden legal. La propiedad de un bien da el derecho de usarlo para obtener beneficios. En el caso de una empresa, esto implica que puede gozarse de las utilidades que ella proporcione o incluso intercambiarse.

#### Profesionalización en la Gestión de las Empresas Familiares

En palabras sencillas, la profesionalización de un negocio familiar implica pasar por un proceso, en el que el negocio se empieza a manejar y administrar como una empresa, en lugar de una familia; y en donde se invitan a personas a bordo de la empresa, por sus habilidades, capacidades y experiencia, y no por el simple hecho de ser un miembro familiar. (Miranda, 2013). Una organización puede ser de propiedad de una familia, estar gestionada por la familia y ser profesional. El profesionalismo nada tiene que ver con categorías, sino con actitudes y comportamientos personales. Y, de hecho, es posible que los miembros de la familia que posean la combinación apropiada de cualidades tengan ciertas ventajas al gestionar el negocio, en especial para asegurar a los principales interesados, familiares accionistas, empleados, clientes y proveedores, que la empresa es estable y pueden confiar en ella. Por lo tanto, no hay que caer en la trampa de suponer que para hacer más profesional una empresa hay que deshacerse de los empleados-familiares. (Valda, 2011)

En un estudio realizado por (Flores, Vega, Solís, 2013), hacen referencia que de acuerdo con Belausteguigoitia (2010), la profesionalización es un proceso de transformación gradual que implica un cambio de mentalidad en cada uno de los elementos de la organización. Para que esto sea eficaz, deben comprometerse aquellos que se encuentran en las máximas posiciones jerárquicas. Para cualquier empresa la profesionalización significa un gran reto, pero para las empresas familiares, que suelen dejarse llevar por la inercia y les cuesta más trabajo transformarse este proceso es más complejo. El largo periodo que ocupan los directores generales en este tipo de organizaciones es un factor que puede inhibir los cambios que exige la profesionalización. Por lo tanto la profesionalización es un proceso de cambio gradual que se va conociendo y entendiendo mejor a través de las diferentes etapas por las cuales suele atravesar una empresa familiar y tomar en cuenta los factores de contingencia que inciden en su profesionalización. De tal modo que los factores de contingencia, son aquellos estados o condiciones organizativas que están asociados al uso de ciertos parámetros de diseño. Los

factores a los que vamos a referirnos pueden clasificarse de la siguiente manera:

Proceso de profesionalización. El diseño organizativo en las empresas familiares debe preocuparse por contemplar una estructura que le permita el control y la toma de decisiones tanto desde una perspectiva de negocio como familiar. (Meroño, 2009). El perfil del gerente/propietario, la edad y el tamaño, tomando en cuenta la dimensión, ubicación geográfica de la organización; entre mayor antigüedad tenga la organización, más formalizado estará su comportamiento, y entre más grande sea la organización, más compleja será su estructura es decir, más especializadas estarán sus tareas, más diferenciadas sus unidades de trabajo y su componente administrativo. De tal manera que en una estructura burocrática, existe la especialización del trabajo, se requiere la definición de la jerarquía de autoridad, reflejándose en una tecno estructura para planificar y formalizar el trabajo, así como el crecimiento, desarrollo de la empresa, procesos y mecanismos con los que cuente la empresa familiar para realizar su proceso de profesionalización, lo anteriormente mencionado fue definido en una investigación realizada para el sector servicio, en donde se utilizaron los mismos factores de contingencia por (Flores et al., 2013), clasificándose de la siguiente manera:

Capacitación. El sistema técnico, que utiliza el núcleo de operaciones, es decir, cuánto más sofisticado sea el sistema técnico, más elaborada será la estructura administrativa, siendo más profesional y capacitado su personal y *staff* de apoyo. Con el control de la familia sobre la empresa, la primera garantiza que sus sueños, valores y deseos se reflejen en la segunda. Así, la familia puede estar segura de que la expresión de la familia a través de la empresa sería la adecuada. Belausteguigoitia (2010). Cultura organizacional. Distintos aspectos del entorno, especialmente la estabilidad, la complejidad, la diversidad y la hostilidad. Asimismo Belausteguigoitia (2010), también hacer referencia que con el compromiso de la empresa hacia la familia y viceversa, ambos subsistemas se mantienen cohesionados, por lo que es más difícil que se enfrenten. En este caso es mayor el grado de involucramiento de las personas relacionadas con la organización. Liderazgo. Algunas de sus relaciones de poder, que se ejerce de manera interna en la empresa, de acuerdo a las necesidades de poder de los miembros de la organización.

Belausteguigoitia (2010), menciona que con un liderazgo apropiado a las características de la propiedad y de la empresa, los propietarios, directores, y trabajadores en general se mantendrán relativamente unidos y perseguirán un mismo objetivo común: hacer una empresa fuerte que sea rentable para los accionistas y un buen lugar para trabajar. Selección. Según Zayas (2010), seleccionar no implica escoger a unos discriminando a otros, sino que la selección brinda la posibilidad de orientar y clasificar a las personas en función de sus potencialidades, y contribuir a la formación y desarrollo de los candidatos en la necesaria interrelación hombre-trabajo. El problema ético no está en seleccionar, sino en cómo se realiza la selección, ahí estriba el comportamiento ético del proceso, en las políticas, en los objetivos, en el proceder de las personas; esto enfatiza la necesidad de contar con principios que guíen el proceso de selección personal.

## MÉTODO

La metodología de investigación es cuantitativa. La investigación cuantitativa se aplica para el levantamiento de encuestas, a través de cuestionarios a los propietarios según una muestra finita de la población total de las empresas familiares del sector comercio. Se procesó la información recolectada con aplicación del programa estadístico SPSS para el análisis descriptivo e inferencial.

### Problemática y Justificación

En el contexto actual de la economía mexicana, se encuentran un número relevante de empresas familiares, en las que de acuerdo a las características de los mercados son globalizados y competitivos, en donde la turbulencia es muy agresiva, que ha incidido en lo económico, aunado a la poca formación de los propietarios con respecto a los conocimientos gerenciales que hoy en día se requieren, algunas empresas han cerrado y otras se encuentran estancadas, lo que conlleva a que se tomen las medidas y acciones adecuadas para contrarrestar los efectos de las variables de contingencias del entorno. La profesionalización de las empresas familiares en México, así como en Tijuana, B.C. es importante, ya que su existencia puede depender de dicho factor. Muchas empresas, al iniciar la producción de bienes o servicios, deben contemplar y considerar los diferentes factores que inciden en su organización. En una primera etapa, el propietario abarca todas las áreas de desarrollo de su empresa, pero llega un momento en el cual es necesaria la profesionalización de la misma y debe poner énfasis en la especialización de tareas para un correcto y sustentable desarrollo. Lo anterior, generalmente es obviado por los empresarios, ya que el trabajo cotidiano, les resta tiempo en temáticas de gestión de su empresa y la mayoría de las veces no cuentan con los conocimientos necesarios. (Flores, et al., 2013)

### Objetivos

**Objetivo General.** Analizar los factores de contingencias, tales como proceso de profesionalización, capacitación, cultura organización, liderazgo y selección, para determinar cuáles inciden en la profesionalización de las empresas familiares del Sector Comercio de Tijuana, B.C., México\_ **Objetivo Específico.** Determinar si los factores de contingencia tales como el proceso de profesionalización, capacitación, cultura organización, liderazgo y selección inciden en la profesionalización de las empresas familiares del Sector Comercio.

### **MÉTODO**

Para esta investigación la metodología utilizada es cuantitativa. En la investigación se aplicaron encuestas a través, de cuestionarios y entrevistas a los propietarios, de acuerdo a una muestra aleatoria, de la población total de las empresas familiares del sector servicios. Se procesó la información recabada con aplicación del programa estadístico SPSS 15.0 para el análisis descriptivo e inferencial. La variable dependiente es la profesionalización que consiste en hacer que las actividades se ejecuten con criterios empresariales de eficiencia y evaluación de resultados, sin que la toma de decisiones se encuentre influenciada por criterios familiares, que no siempre son compatibles con los empresariales.

En cuanto a las variables independientes se tomaron las siguientes: a) Proceso de profesionalización, como un factor que se caracteriza por la enseñanza-aprendizaje desde el punto de vista del rol que se ejerce y las actividades laborales que desempeña el empleado, b) Selección, en lo referente a los parámetros del perfil que debe tener la persona a ocupar el puesto, c) Liderazgo, en cuanto a la proactividad si se ejerce un liderazgo efectivo y si tiene libertad en la toma de decisiones, d) Capacitación, para determinar el crecimiento de los directivos dentro de la empresa y esto genere un sentido de lealtad y pertenencia, si son contratados por su capacidad y no por referencia, y, e) Cultura organizacional, refiriéndose al cúmulo de valores, expectativas de los empleados, creencias, normas y políticas aceptadas practicadas dentro de la empresa. (Flores, et al., 2013)

Para ello, consideraremos los factores de contingencia como variables independientes y la profesionalización como un parámetro de diseño con un valor dependiente, suponiendo por

consiguiente que la profesionalización representa el elemento “contingente” con la situación de la organización. Para el presente trabajo se eligió una muestra de 54 propietarios de las empresas familiares del sector comercio, registrados en el Sistema de Información Empresarial Mexicano (SIEM), correspondiente a delegación Tijuana, Baja California. A los propietarios se les aplicó un cuestionario conformado con 41 preguntas relacionadas al tema de estudio. Una vez recopilada la información de los cuestionarios se procedió a la elaboración de una base de datos en SPSS y posteriormente se procedió a la captura de la información, para luego realizar el respectivo análisis para su interpretación. Se utilizó una escala de medición con una escala de *likert*. Se elaboraron los cuadros, que permiten un análisis de la situación actual de la profesionalización en las empresas del sector comercio. (Flores, et al., 2013)

El diseño de la muestra es resultado de la identificación de una población total de 84 empresas familiares del sector comercio, registradas en el Sistema de Información Empresarial Mexicano (SIEM) de Marzo 2010, de Tijuana, B.C. México y de la consideración del porcentaje de presencia sobre la población total, dando como resultado 54 empresas, como se muestra en la Tabla 1. Los factores que se tomaron en cuenta en el cálculo de la muestra, es que la población se considera con características homogéneas, además, de contarse con una población finita, ya que el número de empresas familiares es conocido y la representatividad de la muestra está determinada por un error permisible de 0.068, con un nivel de confianza del 95% y  $p = q = 0.5$ . Para la recolección de la información se realizaron entrevistas personales, para aclarar cualquier duda que tuviera el entrevistado, acerca de alguna de las preguntas del cuestionario, finalmente se obtuvieron 54 encuestas, estas fueron válidas y ninguna fue excluida al momento de analizar la información

Tabla 1: Total de Empresas de Acuerdo al SIEM, Marzo 2010

	Población	Muestra
Total de empresas	84	54

*Esta tabla muestra que el total de las empresas encuestas del sector comercio y si cuentan con un nivel de confiabilidad. Fuente: elaboración propias con datos del spss (2013)*

### Validación del Instrumento

A los propietarios se les aplicó un cuestionario conformado con 41 preguntas, el cual fue validado relacionado al tema de estudio. Se utilizó una escala de medición con categorías de respuestas de opción múltiple. Se elaboraron los cuadros que permiten un análisis de los factores que inciden en el proceso de profesionalización de las empresas familiares. La validez del cuestionario se determinó mediante el coeficiente de confiabilidad de *Alfa-Cronbach*, por medio del programa SPSS: el resultado arrojado por dicho programa fue de .80, un grado de confiabilidad aceptable (ya que esta por arriba .60 y de 0.70, puntuación mínima aceptable.).

Tabla 2: Análisis de Fiabilidad

Alfa de Cronbach	No. de elementos
.873	41

*En la tabla se muestra la validez del cuestionario se determinó mediante el coeficiente de confiabilidad de Alfa-Cronbach, por medio del programa SPSS: el resultado arrojado por dicho programa fue de .80, un grado de confiabilidad aceptable (ya que esta por arriba .60 y de 0.70, puntuación mínima aceptable.). Fuente: elaboración propias con datos del spss (2013)*

## RESULTADOS

### Análisis de Factores de Contingencias de Área y Distribución Geográfica

Asimismo, en la Tabla.3, se presenta la ficha técnica de la investigación, en donde se muestra la información más relevante en cuanto al universo objeto de estudio, que son las empresas familiares del sector comercio que cuenten con dos o más empleados, el ámbito de la investigación es el Municipio de Tijuana, B.C., con un muestreo aleatorio simple estratificado, encuestándose a 54 empresas, con un error muestral de  $E=\pm 5\%$  para un nivel de confianza del 95% y  $p = q= 0.5$ , aplicándose una encuesta presencial por empresa, respondiendo el propietario, gerente o un directivo de la empresa, se aplicó un cuestionario de 41 preguntas, relacionadas con la situación de la empresa familiar.

En la Tabla 4. Se refleja la información acerca de la representatividad de la distribución del tamaño de la muestra, atendiendo el criterio del tamaño y el sector al que pertenecen las empresas familiares en Tijuana, B.C., de acuerdo a la clasificación publicada en el Diario Oficial de la Federación de 2009 para el sector comercio, siendo dos categorías las de mayor representatividad; las microempresas (con un rango de empleados de 0 a 5 trabajadores) representando el 68.52% y las empresas pequeñas (con un rango de 6 a 20 trabajadores) representando el 29.63% y las empresas medianas representan un 1.85% de la muestra.

Tabla 3: Ficha Técnica Encuesta Por Muestreo Empresas Familiares del Sector Comercio

<b>Trabajo de Campo</b>		<b>Inicio: 12 de Agosto de 2011</b> <b>Final: 30 de Noviembre 2012</b>
Universo Objeto de Estudio	Empresas familiares del Sector Comercio con dos o más empleados pertenecientes al sector servicios, de Tijuana, B.C.	
Ámbito	Municipio de Tijuana, B.C., México	
Selección de unidades muestrales	Muestreo aleatorio simple estratificado	
Muestra	54 encuestas	
Error Muestral	$E=\pm 5\%$ para un nivel de confianza del 95% y $p = q= 0.5$	
Selección unidad muestral	Una encuesta por empresa, responde el propietario, gerente o algun directivo de la empresa.	
Tipo de entrevista	Presencial	
Cuestionario	Estructurado, 41 preguntas relacionadas a la situacion de las empresas familiares del sector comercio	

*Esta tabla contiene la ficha técnica en la cual se refleja el muestreo realizado a las empresas familiares del sector comercio, resumiendo la información más importante como el Universo objeto de estudio, el ámbito, selección de unidades muestrales, la muestra utilizada en la investigación, el error muestral, selección de unidad muestrales de una encuesta por empresa, el tipo de entrevista siendo esta presencial y la estructura del cuestionario aplicado de 41 preguntas. Fuente: elaboración propia (2013)*

Tabla 4: Distribución de la Muestra las Empresas Familiares del Sector Comercio

<b>De acuerdo al Tamaño (%)</b>	<b>Porcentaje del tamaño de la muestra</b>
Microempresa	68.52%
Empresa Pequeña	29.63%
Empresa Mediana	1.85%
De acuerdo al sector de actividad (%)	100%

Tabla 5: Antigüedad de Empresas Familiares del Sector Comercio

De acuerdo al Tamaño	Antigüedad (promedio)	Porcentaje del Tamaño de la Muestra
Microempresa	8 años	68.52%
Empresa pequeña	15 años	29.63%
Empresa Mediana	20 años	1.85%
De acuerdo al sector de actividad (%)		100%

En la tabla se muestra el porcentaje de la distribución de la muestra de las empresas familiares del sector comercio, dando como resultado que las empresas familiares encuestadas del sector comercio, son empresas jóvenes, ya que promedio tienen una antigüedad de 8 años y representan el 68.52% de la muestra y el 29.63% son empresas consolidadas con una antigüedad promedio de 15 años y el 1.85% son empresas maduras con una antigüedad promedio 20 años de la muestra. Fuente: elaboración propia (2013)

A continuación se presentan los criterios utilizados para la estimación de la proporción de empresas familiares del Sector Comercio, de manera que se encuestaron 54 empresas del sector servicios por el número de empleados contratados, siendo estas de la localidad y de carácter familiar como se muestra en la Tabla 6.

Tabla 6: Estimación de Proporción de Empresas Familiares del Sector Comercio Por Empleados

Empleados	Población	Muestra
0 a 5	37	68.52%
6 a 20	16	29.63%
21- 100	1	1.85%
Total	54	100%

Esta tabla muestra la estimación de proporción de empresas familiares del sector comercio que fueron encuestadas, en base al número de empleados con que cuentan, dando como resultado que el 68.52% son empresas que tienen de 0 a 5 empleados y el 29.63% de las empresas encuestadas de 6 a 20 empleados y e. 1.85% son empresas que tienen de 21 a 100 empleados. Fuente: elaboración propia (2013)

Asimismo en la Tabla 7, se muestra la estructura organizativa por variables de contingencia del sector servicios representando un 59.98% las empresas que son dirigidas por miembros de la familia siendo estas microempresas y jóvenes en cuanto a su antigüedad. Y las de menor proporción con un 40.02% participan más directivos no familiares.

Tabla 7: Estructura Organizativa Por Variables de Contingencia del Sector Comercio

Dirección de la Empresa Familiar por miembros de la familia	Empresa de dirección familiar	Dirección de la Empresa familiar por directivos no familiares	Empresa de dirección por directivos no familiares	Gran Total
	40.74%	Directivo No	21.14%	61.88%
	12.96%	Familiar	12.20%	25.16%
	3.70%	Encargados		3.70%
	9.26%			9.26%
	66.66%		33.34	100%

Esta tabla muestra la estructura organizativa por variables de contingencia del sector comercio de acuerdo al tipo de dirección de la empresa familiar, dando como resultado que el 66.66% de las empresas familiares su dirección está a cargo de algún miembro de la familia y el 33.34% la dirección de la empresa es dirigida por un miembro ajeno a la familia. Fuente: elaboración propia (2013)

Tabla 8: Perfil del Propietario/Gerente Por Variables de Contingencia del Sector Comercio

Perfil del propietario/gerente	Mujer 26	Hombre 28	Dirección familia propietaria	Edad Rango 40-45 años	Antigüedad Rango 4 – 6 años	Estudios Universitarios

Según el tipo de dirección familiar por miembros de la familia	73.08%	60.71%	66.66%	56.50%	53.42%	39.60%
Según la dirección de la empresa familiar por directivos no familiares	26.92%	39.29%	33.34%	43.50%	46.58%	60.40%
Total	100%	100%	100%	100%	100%	100%

En esta tabla se muestra el perfil del propietario/gerente en cuanto a las variables de contingencias de sexo representando un 73.08% la participación de las mujeres en la dirección de la empresas dirigidas por miembros de la familia y un 26.92 las que se encuentran en las empresas dirigidas por directivos no familiares, asimismo el 66.66% de los propietarios/gerentes son los que dirigen la empresa familiar y el 56.50% está dentro del rango de los 40-45 años de edad promedio, con una antigüedad en el puesto de 4 a 6 años con un porcentaje del 53.42% y solo el 39.60% de los directivos de la empresa familiar en la cual la dirección es asumida por algún miembro de la familia cuenta con estudios universitarios. Fuente: elaboración propia (2013)

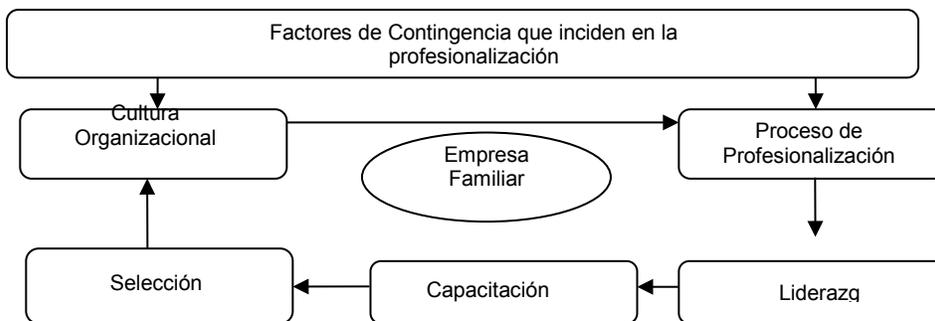
Tabla 9: Correlaciones Bivariadas (Matriz De Pearson) de las Variables Independientes

Correlación entre Variables	Correlación
Cultura Organizacional – Cultura Organizacional	.665**
Selección – Selección	.638**
Liderazgo-Selección	.603**
Liderazgo-Liderazgo	.747**
Capacitación – Capacitación	.683**
Proceso de Profesionalización - Selección	.610**
Proceso Profesionalización – Liderazgo	.633**
Proceso Profesionalización – Capacitación	.633**
Proceso Profesionalización-Proceso Profesionalización	.679**

En la tabla se observan las correlaciones que resultaron del análisis estadístico a través del SPSS 15. Se muestran las correlaciones más altas con respecto a las variables independientes, dando como resultado que el liderazgo incide en la selección en un 0.603, el proceso de profesionalización incide en la selección en un 0.610, de igual manera en el liderazgo con un 0.633, así como en la capacitación en un .633 y los cinco factores de contingencia presentan correlaciones significativas en el nivel 0.01, dado como resultado las siguientes correlaciones en cada uno de ellos: cultura organizacional con 0.655, selección con 0.638, liderazgo con 0.74, capacitación con 0.683 y el proceso de profesionalización con 0.679. Fuente: elaboración propias con datos del spss (2013)

En la figura 1, se muestran las variables que se tomaron como factores de contingencia y que inciden en el proceso de profesionalización de las empresas familiares del sector comercio en Tijuana, B.C., obteniendo como resultado las cinco variables: la cultura organizacional, selección, capacitación, liderazgo y el proceso de profesionalización. Estas cinco variables representan un conjunto de criterios empresariales de eficiencia que las empresas familiares deben considerar para profesionalizarse, que se respaldan en la gestión de estas variables como recursos intangibles, sin olvidar que su estructura organizacional se fundamenta en los tres elementos básicos que son la familia, propiedad y empresa y por lo tanto el Modelo de los tres círculos, sirve de base para ilustrar el modelo de articulación dinámica de Belausteguigoitia (2010), en donde la empresa familiar muestra el balance y la articulación que deben existir entre la propiedad, la empresa y la familia.

Figura 1: Factores de Contingencia Que Inciden en la Profesionalización de las Empresas del Sector Comercio



La Figura 1, muestra un esquema en donde se representan los cinco factores de contingencia que inciden de manera directa en la profesionalización de las empresas familiares del Sector Comercio, de acuerdo a los resultados obtenidos en las correlaciones realizadas. Estas cinco variables representan un conjunto de criterios empresariales de eficiencia que las empresas familiares deben considerar para profesionalizarse, que se respaldan en la gestión de estas variables como recursos intangibles, sin olvidar que su estructura organizacional se fundamenta en los tres elementos básicos que son la familia, propiedad y empresa y por lo tanto el Modelo de los tres círculos, sirve de base para ilustrar el modelo de articulación dinámica de Belausteguigoitia (2010). Fuente elaboración propia Flores M.V. y Vega A. (2013).

## CONCLUSIONES

Es de suma importancia para que las empresas familiares permanezcan, es importante que realicen la profesionalización de su gestión, por lo cual los puestos directivos deben estar ocupados por personas con los requerimientos solicitados, habilidades, capacidades y la experiencia necesaria, independientemente si son miembros de la familia o directivos ajenos a la familia. Solo que contar con profesionales externos, pasa a ser una necesidad en un determinado momento por el crecimiento de la empresa, porque va a llegar un punto en el cual el propietario no va a poder administrar de manera eficiente la organización, como es el caso de las empresas familiares del sector comercio que las empresas en un 33.34% son dirigidas por directivos ajenos a la familia y con estudios universitarios representado en un 60.40%

La presencia de la mujer en la dirección tanto de la empresa familiar dirigida por algún miembro de la familia o en la que es dirigida por directivos no familiares representan una minoría, solo siendo 26 el total de propietarios/gerentes las que ocupan estos puestos. Aun así, continua siendo mayor la presencia de los hombres tanto en las empresas de dirección familiar como en las empresas que son dirigidas por directivos ajenos a la familia, el rango de edad entre ambas es el mismo ya que es de 40 a 45 años en promedio, teniendo también una antigüedad en el puesto de 4 a 6 años en promedio dado lo joven de las empresas familiares del sector comercio representando un 68.52%. Cabe resaltar que el nivel de estudios universitarios es menor en las empresas familiares cuya dirección es familiar, pero es importante que las empresas familiares tomen en cuenta la contratación de personal directivo ajeno a la familia con una preparación profesional, ya que resultan un recurso valioso cuando estas organizaciones se tornan complejas. (Flores, et al., 2013). Obteniéndose como resultado que son las empresas las de mayor complejidad las que su personal directivo es de la familia con una representatividad del 66.66%.

En cuanto a su estructura organizativa las empresas familiares al inicio de su ciclo de vida tienen estructuras sencillas, basadas en el propietario, si logran sobrevivir empiezan a formalizar su estructura organizacional debido a su crecimiento contemplando nuevos departamentos e inclusive la contratación de personal ajeno a la familia, siendo la gestión y la toma de decisiones más descentralizada. (Flores, et al., 2013) Las empresas familiares del sector comercio aún tienen estructuras sencillas basadas en la gestión y en la toma de decisiones de su fundador, siendo microempresas con un máximo de 5 empleados, representando el 68.52% de las empresas

familiares de este sector, por lo cual son empresas jóvenes con un promedio de antigüedad de 8 años.

Respecto a las variables independientes, el liderazgo incide en la selección en un 0.603, el proceso de profesionalización incide en la selección en un 0.610, de igual manera en el liderazgo con un 0.633, así como en la capacitación en un .633 y los cinco factores de contingencia presentan correlaciones significativas en el nivel 0.01, dado como resultado las siguientes correlaciones en cada uno de ellos: cultura organizacional con 0.655, selección con 0.638, liderazgo con 0.74, capacitación con 0.683 y el proceso de profesionalización con 0.679. Asimismo de acuerdo a lo anterior las decisiones sobre la estructura organizacional de las empresas familiares del sector comercio concentran la toma de decisiones en el propietario y al tratarse de microempresas y siendo de dirección familiar representando un 66.66%, por lo cual estas no han formalizado su estructura organizativa a través de un organigrama. Por último se puede concluir que al analizar los factores de contingencia de la cultura organizacional, selección, capacitación, liderazgo y el proceso de profesionalización estos tienen una incidencia directa en la profesionalización de las empresas familiares del sector comercio como se representó en el esquema.

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# **POLÍTICAS PÚBLICAS E INTEGRACIÓN DE LA SOCIEDAD CIVIL EN LA TRANSPARENCIA Y ACCESO A LA INFORMACIÓN GUBERNAMENTAL EN MÉXICO**

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## **RESUMEN**

*En la Constitución Política de los Estados Unidos Mexicanos está incorporado el derecho a la información desde el año de 1977 y fue hasta el año 2002 que se aprobó e inició vigencia la Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental. Al promulgarse la Ley de transparencia se empodera a la sociedad civil ya que le permite hacer uso del derecho a la información pública, lo que ha propiciado avances significativos en las discusiones sobre el desempeño del gobierno y el diseño e implantación de las políticas públicas de transparencia y acceso a la información. La estructura legal de la transparencia y acceso a la información gubernamental obliga a los funcionarios públicos a cumplir con las obligaciones de transparencia y acceso a la información y brinda seguridad jurídica a los ciudadanos para que puedan acceder a la información que les interese de las gestiones y desempeño del gobierno. Ley Federal de Transparencia y Acceso a la Información Pública gubernamental, constituye la piedra angular del derecho humano a la información, sin embargo es necesario la promulgación o modificación a leyes secundarias que fortalezcan y apoyen el cumplimiento de tan importante derecho. Dentro de esas se pueden mencionar la Ley General de Contabilidad Gubernamental, Ley Federal de Archivos, Ley de Fiscalización y rendición de cuentas, Ley Federal de Presupuesto y Responsabilidad Hacendaria, entre otras.*

**PALABRAS CLAVE:** Derecho, Información, Sociedad

## **PUBLIC POLICIES AND INTEGRATION OF CIVIL SOCIETY IN THE TRANSPARENCY AND ACCESS TO GOVERNMENT INFORMATION IN MEXICO**

### **ABSTRACT**

*In the Constitution of the United Mexican States is built the right to information from the year 1977 and until 2002 was approved and initiated force the Federal Law of Transparency and Access to Public Government Information. The enactment of transparency empowers civil society because it allows you to use the right to public information, which has led to significant progress in the discussions on the government's performance and the design and implementation of public policy of transparency and access to information. The legal framework of transparency and access to government information requires public officials to fulfill the obligations of transparency and access to information and provides legal certainty for citizens so they can access the information they are interested in the negotiations and government performance. Federal Law of Transparency and Access to Government Public Information, is the cornerstone of the human right to information, however you need the enactment or amendment of secondary legislation to strengthen and support the implementation of this important law. Among these may be mentioned the Government Accountability Act , Federal Archives, Law Enforcement and accountability, Federal Budget and Fiscal Responsibility , among others.*

**KEYWORDS:** Law, Information, Society

**JEL:** H83, K39, M48

## **INTRODUCCIÓN**

El derecho de acceso a la información pública que tienen los ciudadanos mexicanos, tiene su sustento en la Constitución Política de los Estados Unidos Mexicanos. En 1917 se incorporó ese derecho a la Constitución y a partir de entonces fue algo olvidado y no era prioridad para el gobierno informar a la sociedad sobre su quehacer. Fue hasta el año 2002 cuando se aprobó la Ley Federal de Acceso a la Información Pública Gubernamental y con ella se abre paso a una nueva relación gobierno y sociedad.

En el presente trabajo se desarrolla los temas del Derecho de acceso a la información, la participación de la sociedad civil y los órganos garantes. En cada uno de ellos se abordan cuestiones sobre antecedentes, definiciones, evolución y algunos datos importantes para analizar de forma más integral estos elementos.

La participación de la sociedad civil en el derecho al acceso a la información es otro de los puntos que se abordan y se relata la participación que ha tenido la sociedad civil desde la etapa de elaboración de la iniciativa de la Ley Federal de Acceso a la Información Pública Gubernamental hasta nuestros días. Es tan importante y necesaria la participación de la sociedad civil que en el Plan Nacional de Desarrollo (2013-2018), se contempla como política pública en la estrategia transversal: Gobierno cercano y moderno, la vinculación con las organizaciones de la sociedad civil y la promoción de la participación ciudadana en la gestión pública.

Otro punto de análisis fue el relacionado a los órganos garantes del derecho a la información pública tanto en el ámbito federal como en el estatal. Se realizó una compilación de los nombres de cada órgano garante, la fecha en que iniciaron y el número de solicitudes que recibieron en cada uno de los años siguientes: 2006, 2007, 2008 y 2009. Todos estos puntos de análisis permiten dar cuenta de los cambios estructurales que ha sufrido nuestro país para responder a las exigencias del contexto internacional y nacional, sin embargo la participación ciudadana en el legítimo uso del derecho a la información es un cambio cultural que promueve que los ciudadanos se involucren de manera directa en la evaluación y seguimiento de la gestión pública.

## **REVISIÓN LITERARIA**

El derecho de acceso a la información se considera un derecho humano fundamental consagrado en una serie de instrumentos internacionales de derechos humanos, (López, 2009) señala que “los derechos humanos son una de las primeras y más importantes expresiones, se plasmó en Francia en 1789 con la Declaración de los Derechos del Hombre y Ciudadano”. También son instrumentos importantes la Declaración Universal de los Derechos Humanos, el Pacto Internacional de Derechos Civiles y Políticos y la Convención Americana de Derechos Humanos. En 1946, la Asamblea General de Naciones Unidas, afirmó en su resolución 59. “La libertad de información es un derecho humano fundamental y la piedra angular de todas las libertades a las que están consagradas las Naciones Unidas”. De esta resolución se desprende que el derecho de acceso a la información debe defenderse como un fin en sí mismo, en su carácter de derecho

fundamental, y como un medio, en su dimensión de derecho facultativo para la exigencia de otros derechos. La Corte Interamericana de Derechos Humanos dictaminó que la información pertenece a las personas, la información no es propiedad del Estado y el acceso a ella no se debe a la gracia o favor del gobierno. Éste tiene información sólo en cuanto representante de los individuos. Las instituciones del Estado tienen disposiciones jurídicas, cuyo objetivo es precisamente la protección de los derechos de las personas y de sus datos personales. Sin embargo, la información de interés público, se refiere a la que surge o se encuentra en posesión de las autoridades en función de las atribuciones del Estado, misma que será pública y podrá ser solicitada por los ciudadanos.

El derecho a la información pública, ha adquirido notoria importancia en el mundo de las ideas políticas, sociales y jurídicas del pensamiento contemporáneo; al grado de que se le considera como uno de los rasgos más distintivos de los Estados constitucionales modernos, esto en virtud de que el acceso a la información forma parte de una corriente universal, que va mucho más allá de una administración y se exige que se observe como un auténtico derecho y no sea ignorado, evadido o pospuesto.

## **METODOLOGIA**

Dentro de los objetivos del presente trabajo se pueden mencionar los siguientes: Explicar el marco constitucional del derecho de acceso a la información, analizar la participación de la sociedad civil en el derecho de acceso a la información y conocer el número de solicitudes de información que se recibieron en los años siguientes: 2006, 2007, 2008 y 2009. Para la realización de esta investigación se revisaron libros, artículos en revistas especializadas y páginas electrónicas de las instituciones gubernamentales relacionadas con los temas de derecho de acceso a la información, participación de la sociedad civil y órganos garantes del derecho de acceso a la información.

La Técnica utilizada fue el análisis documental y el instrumento lo constituyó la guía de análisis documental. El tipo de investigación es informativa ya que brinda una panorámica sobre el derecho de acceso a la información y la participación de la ciudadanía. Una vez revisada la información se procedió a estructurar el tema vinculando el derecho a la información pública gubernamental con la participación de la sociedad civil y con los órganos garantes del derecho de acceso a la información. Posteriormente se visitaron las páginas electrónicas de las instituciones relacionadas al derecho de información y se realizó una búsqueda para conocer el número de solicitudes que recibieron los órganos garantes en los años: 2006, 2007, 2008 y 2009. Con la información obtenida se elaboró una figura que permite conocer el número de solicitudes recibidas por cada ámbito de gobierno: estatal y federal y el total de solicitudes recibidas y finalmente se dan a conocer las conclusiones de nuestra investigación.

## **RESULTADOS**

Aplicando la metodología descrita se presenta un análisis detallado del marco constitucional del derecho de acceso a la información.

En la Constitución Política de los Estados Unidos Mexicanos el derecho a la información está incorporado desde el año de 1977, sin embargo no existían instituciones o procedimientos para proporcionar a los ciudadanos la información en poder del gobierno, fue hasta el año 2002, cuando entro en vigor la Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental (LFTAIPG). Con ello se origina una nueva perspectiva ciudadana, la cual se nutre

con la información que genera el gobierno en su desempeño, también le permitirá conocer los motivos en los que se basan para tomar determinadas decisiones en cualquier área incluyendo el manejo de los recursos económicos que la ciudadanía le proporciona al gobierno en forma de impuestos.

El fundamento legal para hacer uso del derecho de acceso a la información pública lo constituye el artículo 6 constitucional que dentro de las garantías individuales o derechos humanos, consagra al derecho de acceso a la información en el ámbito federal, estatal y municipal. Dicho artículo se ha venido adecuado a las necesidades y demandas de la sociedad con el objetivo de brindar certidumbre jurídica en el uso del derecho de acceso a la información pública. A continuación se describe de forma resumida las modificaciones del artículo 6 constitucional que dan mayor sustento legal al derecho de acceso a la información: En el año 2007 se hicieron dos modificaciones al artículo 6 constitucional; una de ellas para incluir el derecho de réplica y se establece que será ejercido en los términos dispuestos en la ley. La otra modificación se detalla en la iniciativa que reforma el artículo 6 constitucional publicada en la Gaceta Parlamentaria de la Cámara de Diputados, número 2155-I el 19 de diciembre de 2006, donde se puntualiza que para garantizar el derecho al acceso a la información tanto en la federación, los estados y municipios, se requiere una descripción más detallada de la información que están obligados a proporcionar, por ello y mediante decreto se adicionaron siete fracciones al artículo 6 constitucional y se publicaron en el Diario Oficial de la Federación el día 20 de julio de 2007. Por su importancia se describe de forma resumida el contenido de cada una de las fracciones que se adicionaron al artículo 6 constitucional:

I.- Toda la información en posesión de cualquier autoridad, entidad, órgano y organismo federal, estatal y municipal, es pública y solo podrá ser reservada temporalmente por razones de interés público.

II.- La información que se refiere a la vida privada y los datos personales será protegida en los términos y con las excepciones que fijen las leyes.

III.- Toda persona sin necesidad de acreditar interés alguno o justificar su utilización. Tendrá acceso gratuito a la información pública, a sus datos personales o a la rectificación de estos.

IV.- Se establecerán mecanismos de acceso a la información y procedimientos de revisión expeditos.

V.- Los sujetos obligados deberán preservar sus documentos en archivos administrativos actualizados y publicaran a través de los medios electrónicos disponibles.

VI.- Las leyes determinaran la manera en que los sujetos obligados deberán hacer pública la información relativa a los recursos públicos que entreguen a personas físicas o morales.

VII.- La inobservancia a las disposiciones en materia de acceso a la información pública será sancionada en los términos que dispongan las leyes. El 11 de junio de 2013, se publicaron en el Diario Oficial de la Federación, algunos párrafos al artículo 6 constitucional, por su importancia se señalan a continuación:

*Toda persona tiene derecho al libre acceso a información plural y oportuna, así como a buscar, recibir y difundir información e ideas de toda índole por cualquier medio de expresión.*

*El Estado garantizará el derecho de acceso a las tecnologías de la información y comunicación, así como a los servicios de radiodifusión y telecomunicaciones, incluido el de banda ancha e internet. Para tales efectos, el Estado establecerá condiciones de competencia efectiva en la prestación de dichos servicios.*

Como se puede apreciar las modificaciones al artículo 6 constitucional, describen con mayor detalle las situaciones que estaban sujetas a los criterios de los sujetos obligados. Las adiciones tienen el propósito de establecer los principios y las bases mínimas a partir de las cuales se daría cumplimiento al derecho de acceso a la información pública en todo el país. (Merino, 2008). Una vez que se analiza la información constitucional, vale la pena continuar con la Ley principal: Ley Federal de Transparencia y Acceso a la Información Pública gubernamental (LFTAIPG), para entrar en materia, se define la Ley de acceso a la información, Ackerman y Sandoval (2008), la describen como “una ley que otorga a los ciudadanos el derecho a conseguir información bajo el resguardo del gobierno, sin la necesidad de demostrar interés legal”. Se considera que la LFTAIPG forma parte de un proyecto diseñado para la formación de los ciudadanos, donde se busca que se incorporen los valores de responsabilidad, respeto, honestidad, tolerancia, entre otros, dicho proyecto debe darse desde los espacios formativos, tales como escuelas y universidades y organizaciones de la sociedad civil.

La LFTAIPG en el artículo 3 fracción XIV señala a los sujetos obligados: funcionarios públicos del Poder Ejecutivo Federal, la Administración Pública Federal y la Procuraduría General de la República, el Poder Legislativo Federal, integrado por la Cámara de diputados, la Cámara de Senadores, la Comisión Permanente y cualquiera de sus órganos, el Poder Judicial de la Federación y el Consejo de la Judicatura Federal y los Órganos Autónomos donde se señalan los siguientes: Instituto Federal Electoral, la Comisión Nacional de los Derechos Humanos, el Banco de México, las universidades y las demás instituciones de educación superior a las que la ley otorgue autonomía y cualquier otro establecido en la Constitución Política de los Estados Unidos Mexicanos.

Así también, el artículo 7 de la LFTAIPG señala las obligaciones de transparencia y dentro de ellas se mencionan las siguientes: la estructura orgánica de la entidad donde presten sus servicios, las facultades de cada unidad administrativa, el directorio de servidores públicos, desde el nivel de jefe de departamento o sus equivalentes, la remuneración mensual por puesto y las compensaciones que se reciban, el domicilio de la unidad de enlace y la dirección electrónica donde podrán recibirse las solicitudes para obtener la información, las metas y objetivos de las unidades administrativas señalados en sus programas operativos.

Todos estos cambios a las legislaciones mexicanas para dar un sustento a la obligación de la transparencia y acceso a la información gubernamental se despliegan en el contexto de un compromiso internacional por contener la corrupción el cual fue expresado en la Convención de la ONU contra la Corrupción, cuyo texto se publicó en diciembre de 2003.

Un dato importante es que los países con menor corrupción en el mundo, tienen una sólida ley de acceso a la información. Por medio de estas legislaciones, los ciudadanos se pueden convertir en vigías sociales, su escrutinio permanente es una salvaguarda de la rectitud en el manejo de recursos y en la toma de decisiones públicas. (Ramírez, 2008) A partir de la entrada en vigor de la LFTAIPG, más de 250 dependencias y entidades del gobierno federal tienen la obligación de atender las solicitudes de información, esta obligación brinda a la sociedad la oportunidad de que recupere la confianza en el gobierno, por medio del conocimiento de la información sobre la gestión pública, incluyendo los presupuestos donde se identifique el origen y aplicación de los

ingresos. Pazos, (1991) señala que el fin del gobierno es la generación del bien común que se refiere a lo siguiente: Crear, mantener y proteger la atmósfera propicia para que individuos y grupos se desarrollen plenamente.

Así mismo, se analizó la literatura que sobre la participación de la sociedad civil, donde se conoció que existen varias definiciones del derecho de acceso a la información dependiendo de la rama del derecho que lo analice, para efectos de esta investigación se considera que el derecho de acceso a la información es un derecho fundamental que forma parte de las garantías individuales que consagran los derechos humanos. Para analizar el significado de sociedad civil, se parte también, de que la sociedad civil tiene muchas definiciones, pero para nuestro propósito es suficiente decir que cubre todas las actividades que son independientes de los Estados y mercados, basadas en una actividad voluntaria sin ánimo de lucro. La sociedad civil está integrada por organizaciones no gubernamentales, organizaciones sin ánimo de lucro, organizaciones comunitarias, organizaciones de autoayuda, sindicatos, organizaciones religiosas y cooperativas, voluntariado, movilización social, acción colectiva y demás manifestaciones de la sociedad civil en nuestro país. La participación de la sociedad civil en el uso legítimo del derecho a la información ha propiciado avances significativos, en la mayoría de las discusiones sobre la política de transparencia y acceso a la información subrayan la importancia de que la sociedad civil vigile los procesos mediante los cuales se garantiza el derecho a la información.

Al respecto Luna Pla (2009), señala que “la sociedad en México ha respondido de manera lenta asimilando y comprendiendo los usos, alcances y límites del derecho de acceso a la información”, quizá esto va a cambiar con el paso de los años, cuando realmente se refleje el impacto en la gestión pública, con funcionarios comprometidos con la sociedad a la cual se debe, esta actitud puede revertir aunque sea un poco, la desconfianza hacia los servidores públicos. La ley que protege el Derecho de acceso a la información fue resultado de la participación intensa de los integrantes de la sociedad civil en el denominado Grupo Oaxaca, quienes plasmaron el decálogo del derecho a la información, donde se establecen los puntos centrales que se incluyeron en la LFTAIPG, por considerar elemental para nuestra investigación se transcribe el decálogo.

Tabla 1: Decálogo del Derecho a la Información

<b>1.</b>	<b>El acceso a la información es un derecho fundamental</b>
2.	La información pública le pertenece a las personas y a ellas corresponde qué información requieren y como la usarán.
3.	Debe existir la máxima apertura, transparencia y rendición de cuentas por parte de los poderes del estado.
4.	Hay obligación de publicar y entregar información que posee el estado de forma veraz, oportuna y correcta.
5.	Deben establecerse procedimientos ágiles, sencillos y a costos mínimos. La entrega no deberá exceder de diez días h
6.	La ley establecerá las excepciones para tener acceso a la información. Entre ellas se incluirán los campos de: vida privada, seguridad nacional, seguridad pública, política exterior y secretos científicos, industriales y bancarios.
7.	Debe haber un organismo autónomo para promover la apertura y resolver las controversias
8.	Todos los órganos del estado y entidades que ejerzan gasto público estarán obligados a permitir el acceso a la información relacionada con los fondos administrados por ellos.
9.	La ley debe poseer consistencia jurídica
10.	Significa una promoción del federalismo. Se busca que la ley de acceso a la información sea punto de partida para fomentar la deliberación y regulación de la materia en el ámbito de los estados y municipios.

Fuente: Elaboración propia con datos de Escobedo 2002. Citado en Ramírez (2008)

En México están emergiendo nuevas formas de participación pública, se han abierto nuevas fórmulas de participación ciudadana en la elaboración de políticas públicas en todo el conjunto de la democracia representativa. Los ciudadanos exigen a sus gobiernos mayores cuotas de transparencia y control, y demandan la oportunidad de participar activamente en la elaboración de políticas que les afecten, un documento de la OCDE (2005) refiere que los gobiernos deben ser

eficientes, flexibles, responsables, orientados en base a resultados y deben ser transparentes, abiertos al escrutinio público y garantes del derecho que cualquier ciudadano tiene a acceder a la información en manos de las instituciones y los servidores públicos. Así también el documento en mención señala que la mayoría de los países de la OCDE han evolucionado hacia un gobierno más abierto y transparente, donde el gobierno permite la participación ciudadana en la toma de decisiones.

La influencia de la sociedad civil sobre la transparencia y el acceso a la información se reconoce ampliamente, O'Donnell (1999), señala que el impacto de la presión de la sociedad civil en la transparencia de las autoridades públicas, depende en gran medida de las acciones que toman agencia de estado propiamente autorizadas para investigar y sancionar las ofensas. La relación entre el estado y sociedad civil es, en la actualidad, compleja y problemática. Tradicionalmente el Estado apoya las actividades de la sociedad civil como una cuestión de principios, simplemente porque son manifestaciones del derecho de asociación de los ciudadanos. Hoy, este principio se enfrenta a la creciente presión del énfasis puesto en la gestión por resultados y la necesidad de la participación en los servicios de las organizaciones de la sociedad civil.

Es importante recordar que los ciudadanos dirigen el Estado federal en lugar de lo contrario. En este proceso, se requieren debates abiertos y libres en la sociedad civil. Sin embargo se necesitan iniciativas ascendentes y descendentes. El Estado puede apoyar a la ciudadanía activa a través de la educación. (INAP 2008) En un país en el que la desigualdad es uno de los principales problemas que enfrenta la población, las organizaciones civiles adquieren un compromiso especial con el desarrollo económico, social, cultural y el impulso de una ciudadanía plena y responsable. Sojo (2005), expresa que para ser sólida, una democracia necesita mucho más que elecciones libres y equitativas. En una sociedad plural, como la mexicana, la convivencia diaria tiene que fundamentarse en virtudes cívicas como la tolerancia, el respeto a las leyes y a los derechos de terceros y, de manera específica a los derechos de las minorías.

Una de estas organizaciones de la sociedad civil, se le conoce como: El Colectivo por la Transparencia, surgió a finales del año 2002 como un espacio de reflexión y acción, conformado por seis organizaciones de la sociedad civil. Para agosto de 2006 ya se han sumado otras organizaciones a este esfuerzo, quedando integrado por las siguientes once instituciones:

Tabla 2: Colectivo por la Transparencia

Organización		Dirección electrónica
1.	Alianza Cívica	<a href="http://www.alianzacivica.org.mx">www.alianzacivica.org.mx</a>
2.	Artículo 19	<a href="http://www.articulo19.org">www.articulo19.org</a>
3.	Centro Mexicano de Derecho Ambiental	<a href="http://www.cemda.org.mx">www.cemda.org.mx</a>
4.	Ciudadanos en medios. Democracia e Información A.C.	<a href="http://www.ciudadanosenmedios.org.mx">www.ciudadanosenmedios.org.mx</a>
5.	Cultura Ecológica	<a href="http://www.culturaecologica.org.mx">www.culturaecologica.org.mx</a>
6.	DECA- Equipo Pueblo	<a href="http://www.equipopueblo.org.mx">www.equipopueblo.org.mx</a>
7.	Fundar, Centro de Análisis e Investigación	<a href="http://www.fundar.org.mx">www.fundar.org.mx</a>
8.	GESEC Gestión social y cooperación	<a href="http://www.gesoc.org.mx">www.gesoc.org.mx</a>
9.	ONG Contraloría Ciudadana para la rendición de cuentas	<a href="http://www.contraloriaciudadana.org.mx">www.contraloriaciudadana.org.mx</a>
10.	Presencia Ciudadana Mexicana	<a href="http://www.presenciaciudadana.org.mx">www.presenciaciudadana.org.mx</a>
11.	Sonora Ciudadana	<a href="http://www.sonoraciudadana.org.mx">www.sonoraciudadana.org.mx</a>

Fuente: *Elaboración propia con datos de México transparente*

En México a partir del año 2000 se han establecido condiciones que fomentan las organizaciones civiles, se puede mencionar la creación de un marco normativo para identificar y regular la actividad de las organizaciones civiles, el cual sienta las bases para la institucionalización de la relación con las organizaciones civiles. Adicionalmente se estableció el registro Nacional de instituciones y organizaciones políticas sociales y civiles, para identificar aquellas con causas

similares, a fin de propiciar su trabajo conjunto. En necesario señalar que en el Plan Nacional de Desarrollo (2013-2018), se contempla la política pública de participación ciudadana en el quehacer gubernamental, en la estrategia II de la meta: México en paz, se señala lo siguiente “Estrechar desde la oficina de la Presidencia, la Secretaría de Gobernación y demás instancias competentes, la vinculación con las organizaciones de la Sociedad Civil y promover la participación ciudadana en la gestión pública”

Por tanto, es necesario que realmente se lleve a la práctica acciones tendientes a promover la creación de organizaciones de participación ciudadana como mecanismos fundamentales para la participación de la ciudadanía en el diseño de las políticas públicas, la transparencia y la rendición de cuentas, así como alentar la participación de las organizaciones civiles tanto en la elaboración de los programas sectoriales como en el diseño de políticas públicas específicas. Esta estrategia busca impulsar que los ciudadanos participen de forma activa en el monitoreo, el seguimiento y la evaluación de la gestión pública con la finalidad de que estas acciones se traduzcan en medidas correctivas dentro de la función pública, ya sea en la mejora de la administración o en la sanción ante actos de corrupción. Para implementar la estrategia se requiere construir alianzas con la sociedad civil y el establecimiento de foros permanentes de consulta, evaluación y seguimiento sobre la gestión gubernamental donde participe la sociedad. Por otra parte, es necesario desarrollar e implementar estrategias que permitan la participación ciudadana en los procesos de toma de decisión para mejorar la gestión pública.

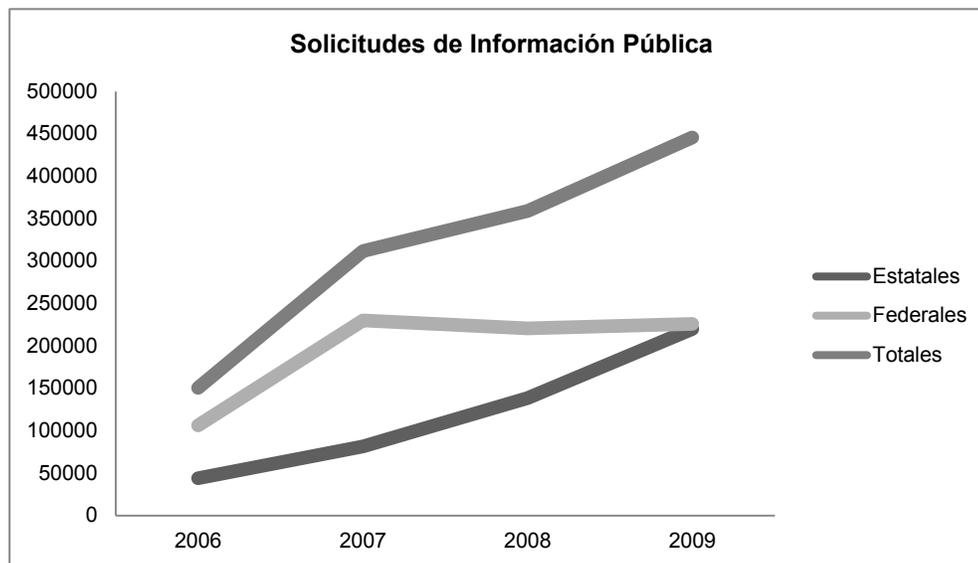
#### Órganos Garantes del Derecho al Acceso a la Información (OGDAI)

Un órgano garante de un derecho, es una instancia pública con autonomía operativa, presupuestaria y de decisión, encargado de promover y difundir el ejercicio del derecho que protege. Para la protección del derecho de acceso a la información, los integrantes del Grupo Oaxaca, propusieron la creación de un órgano supervisor y se logró la aprobación en la LFTAIPG la creación del Instituto Federal de Acceso a la Información Pública (IFAI). La LFTAIPG en el artículo 33 establece que el IFAI, es un órgano de la administración pública federal, con autonomía operativa, presupuestaria y de decisión, encargado de promover y difundir el ejercicio del derecho de acceso a la información, resolver sobre la negativa a las solicitudes de acceso a la información y proteger los datos personales en poder de las dependencias públicas. El IFAI y los órganos garantes en las entidades federativas son considerados como órganos reguladores y en el ámbito gubernamental los órganos reguladores han sido parte del marco institucional de la administración pública, surgen como una idea de formar agencias reguladoras independientes. Los órganos reguladores se pueden clasificar en dos categorías, la primera relacionada a los órganos que regulan sectores económicos específicos como el de energía y el de comunicaciones. La segunda categoría se refiere a los órganos que se crearon para afianzar los procesos de reforma horizontal, tales como el IFAI. López, Haddou (2007).

Así como se tiene establecido en la LFTAIPG la creación del IFAI, de igual manera cada entidad federativa tiene su propia ley de transparencia y acceso a la información, que garantiza al ciudadano el derecho al acceso a la información pública y también cada ley estatal contempla la creación de un órgano garante, que puede denominarse comisión, instituto o consejo. Al realizar el análisis de la participación social como un elemento relevante en el uso del derecho de información, se indagó el número de solicitudes que reciben los órganos garantes, por considerarse a las solicitudes de información una manifestación de la participación de los integrantes de la sociedad, y se ve que año con año se suman más ciudadanos decididos a conocer la información del gobierno, por lo que se incrementan las solicitudes de información

pública. En la siguiente figura se puede conocer el número de solicitudes de información tanto en el ámbito estatal como en el federal.

Figura 1: Solicitudes de Información Pública



*Elaboración propia con datos del estudio Métrica para la Transparencia (2010) del CIDE*

Se puede apreciar que en 2006 se recibieron en los estados un total de 44,075 solicitudes y en el ámbito federal 106,340 dando una suma total de 150,415. Para el año 2007 se recibieron en los estados 81,587 solicitudes y en el ámbito federal 230,132 dando una suma total de 311,719. En el año 2008 se recibieron en los estados 138,615 solicitudes y en el ámbito federal 220,544 dando un total de 359,159. Por último en el año 2009 se recibieron en los estados 219,941 solicitudes y en el ámbito federal 225,835 dando un total de 445,776.

## CONCLUSIONES

Con el análisis realizado del marco constitucional del derecho a la información se puede concluir que se han llevado a cabo cambios importantes en el aspecto normativo con las modificaciones y adiciones al artículo 6 para dar certidumbre jurídica a los ciudadanos al hacer uso del derecho a estar informado sobre el desempeño de sus gobernantes. Sin embargo, no basta consagrar un derecho en la Constitución para que por sí solo genere los cambios que se requieren, se hace necesario traducir las normas constitucionales en lenguaje sencillo, para que puedan aplicarse en la práctica en la vida cotidiana de las instituciones y de la sociedad para que realmente impacte y genere un beneficio social.

La reforma constitucional y la aprobación de la LFTAIPG, así como la constitución del órgano garante a nivel federal y la constitución de los órganos garantes estatales, son pasos firmes hacia una mejor utilización del derecho de acceso a la información. En cada reforma constitucional y legal, se reconoce la participación de grupos de la sociedad civil que de manera comprometida

participan haciendo que las cosas sucedan, en un país como México donde los problemas sociales como pobreza, desempleo, inseguridad, las sociedades civiles adquieren un compromiso especial con el desarrollo económico, social, cultural y el fomento de una ciudadanía responsable y plena.

Hay mucho por hacer en el tema de los órganos garantes, algunos de ellos no gozan de autonomía plena y estas sujetos a las preferencia de los gobernantes en turno, con las futuras investigaciones y la comprometida participación de los integrantes de los grupos de la sociedad civil, se seguirá poniendo énfasis en lo que se requiere para que el ejercicio del derecho de acceso a la información vaya mejorando en todas sus dimensiones. Sin duda se ha avanzado mucho en el derecho de acceso a la información pública, la participación ciudadana y los órganos garantes, sin embargo la aprobación de la LFTAIPG y las modificaciones que se han realizado al marco legal del derecho a la información es solo un inicio, por si solos no generan cambios, se requiere el compromiso y voluntad de cambio de los funcionarios públicos para cumplir con la ley, así como de los ciudadanos para hacer uso del derecho de información.

En el discurso político se puede interpretar que todo está muy bien y que hay grandes avances en materia de transparencia y acceso a la información, sin embargo es necesario investigar lo que realmente sucede en el entorno. Las investigaciones sobre estos temas son esenciales para el futuro de nuestro país, queda pendiente el análisis de cada una de las respuestas emitidas por los sujetos obligados para evaluar si realmente cumplen con la solicitud de los ciudadanos. Por último conviene mencionar que en los últimos años se han realizado algunas investigaciones y será menester seguir con ellas hasta que se conforme las condiciones óptimas para el ejercicio de este derecho.

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# **INTEGRACIÓN DE LA CADENA DE VALOR DE LA OFERTA DE PROVEEDORES DE SERVICIOS PARA EL TURISMO DE REUNIONES DEL MUNICIPIO DE TIJUANA, BAJA CALIFORNIA**

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## **RESUMEN**

La presente investigación analiza la integración de los eslabones de la Cadena de Valor de la Oferta de Proveedores de Servicios para el Turismo de Reuniones en la ciudad de Tijuana, B.C., México. Por lo cual se definió que es el Turismo de Reuniones, se identificaron los eslabones que integran la cadena de valor del turismo, así como las tres variables para analizar la integración entre estos. El diseño de la investigación fue transversal y no experimental. El método de investigación fue cuantitativo se realizó un censo aplicando encuestas cara-cara a los directivos de las 121 empresas proveedoras para el Turismo de Reuniones ubicadas en Tijuana, estas fueron aplicadas de abril a junio del 2013. El número de empresas proveedoras se determinó mediante la integración de bases de datos de asociaciones, cámaras, Comité de Turismo y Convenciones y directorios telefónicos comerciales. Una vez realizado el trabajo de campo se analizaron los datos y se determinó cuáles son los eslabones mayormente consolidados y los eslabones débiles o inexistentes dentro en la cadena de valor del Turismo de Reuniones.

**PALABRAS CLAVE:** Turismo De Reuniones, Cadena de Valor, Integración Horizontal, Integración Vertical, Convenios

## **INTEGRATION OF THE VALUE CHAIN OF THE SERVICE PROVIDERS'S OFFER FOR THE MEETINGS TOURISM IN THE CITY OF TIJUANA B.C., MEXICO**

### **ABSTRACT**

The present study examines the integration of the links in the offer Service Providers in the Meeting Tourism value chain in the city of Tijuana, B.C., Mexico. Therefore it was defined meetings tourism, identified the links that integrate the tourism value chain, as well, the three variables to analyze integration between them. The research design was cross-sectorial and non-experimental study. The research method was quantitative, a census was conducted applying face-to-face surveys to the managers of 121 supplier companies for Meeting Tourism located in Tijuana, and it were applied from April to June 2013. The number of providers was determined by integrating databases from associations, business chambers, the Tourism and Conventions Committee and commercial telephone directories. Once the fieldwork data was analyzed, it was determined the strongest, weak or nonexistent links within the Tourism Meeting value chain.

**JEL:** L83, D22

**KEYWORDS:** Meeting Tourism, Value Chain, Horizontal Integration, Vertical Integration, Agreements

## INTRODUCCIÓN

Se desconoce el estado de integración entre los eslabones de la Cadena de Valor de la Oferta de Proveedores de Servicios (CVOPS) para el Turismo de Reuniones del municipio de Tijuana, Baja California, México. Por lo cual, fue necesario realizar un diagnóstico de la oferta actual de servicios turísticos, determinando si las condiciones actuales de las empresas proveedoras permiten la consolidación de la cadena de valor para el de Turismo de Reuniones. Debido a que mejorando los nexos entre las diferentes cadenas de valor, se pueden obtener ventajas competitivas, logrando estrategias de diferenciación de producto lo que podría contribuir paulatinamente a atraer un mayor número de eventos a la ciudad, los proveedores de servicios aumentarán sus ventas y por ende, habrá una mayor derrama económica. El objetivo general de la investigación fue analizar la cadena de valor de la oferta de servicios, identificando la caracterización y estado actual de encadenamiento de las empresas proveedoras para el Turismo de Reuniones en Tijuana. Los objetivos específicos planteados fueron:

1. Identificar la cadena o sistema de valor del sector de Turismo de Reuniones.
2. Elaborar un inventario de los proveedores de la oferta de servicios para el Turismo de Reuniones en el municipio de Tijuana.
  - 1.1
3. Caracterizar de los proveedores de servicios para el Turismo de Reuniones en Tijuana.
4. Diagnosticar el nivel de integración entre los proveedores para el Turismo de Reuniones.
  - 1.2
5. Explicar la relación entre los eslabones de la cadena de valor de proveedores para el Turismo de Reuniones.

## REVISIÓN LITERARIA

Para realizar la investigación resultó imprescindible definir el Turismo de Reuniones, de acuerdo con CESTUR (2011), es el conjunto de participantes que viajan a las Reuniones, los cuales pernoctan fuera de su lugar de residencia en establecimientos de alojamiento pagados, o que viajan más de 75 kilómetros de distancia de su domicilio para asistir a la reunión. Los componentes del sector de Reuniones considerados como industrias “centrales” e industrias de “apoyo” que incluyen un grupo más amplio de negocios. Las industrias centrales de las Reuniones y sus actividades relacionadas son Organizadores de Reuniones especializados, Centros de Convenciones especializados, Casas de incentivos y compañías de administración de empresas y Oficinas Profesionales de Convenciones. Las industrias de apoyo incluyen a todos los negocios registrados en la economía, que participan en la producción de servicios que inciden directamente o están relacionados con la participación o la organización de reuniones.

Tales negocios proveen servicios de apoyo, equipamiento y personal que son usados en la organización o participación en las reuniones. Para realizar el análisis de la oferta de los proveedores de servicios de la ciudad de Tijuana, fue necesario definir cuáles son los actores que integra la oferta, para ello se revisaron los modelos de Sistema Turístico propuesto por Neil Leiper, (1990), el modelo de Sistema Turístico propuesto por la OMT (1998). Sin embargo, debido a que no especificaban suficientemente las variables que los integran se analizó el modelo

de Sistema turístico propuesto por Boullón (1985) integrado por: 1) La demanda, 2) La oferta, 3) El Proceso de venta y 4) El Producto Turístico. Este último modelo fue el seleccionado para realizar el análisis de la oferta turística en Tijuana, debido a la especificidad de este en cuanto a los aspectos que integran la oferta dentro del producto turístico.

Boullón afirma que el punto de partida del funcionamiento del sistema, se origina en el encuentro de la oferta con la demanda turística a través de un proceso de venta del llamado producto turístico, que junto a la infraestructura forman la estructura de producción del sector y por último, la superestructura turística, cuya función es controlar la eficiencia del sistema vigilando el funcionamiento e interrelación de las partes. Posteriormente, se determinó el modelo a utilizar para definir y analizar los eslabones que integran la cadena de valor del turismo, la revisión de la literatura incluyó el modelo del Diamante de Porter (1990), el cual no fue seleccionado debido a que autores como Fayos Sola(1994) y la OMT(2001), afirman que el modelo del diamante de la competitividad de Porter ha sido útil, al permitir un elevado nivel de consenso entre la industria, pero carece especificidad turística y de capacidad de cuantificación de los actores y resultados.

Por lo tanto se revisaron la cadenas de valor específicas de la actividad turística, tales como la cadena propuesta Poon (1993), la cadena de valor del turismo Internacional propuesta por Christian, Fernández, Ahmed y Gereffi (2011), finalmente se revisó y seleccionó como modelo para esta investigación, el Sistema de Valor Territorial del Turismo (Gollub, Hosier, Woo, 2003), donde sus autores definen la cadena de valor del sector turismo, como un conjunto de actividades económicas interrelacionadas entre si y vinculadas al hecho turístico. Este modelo está integrado por seis eslabones principales: 1) Planificación de vacaciones, 2) Transporte, 3) Alojamiento, 4) Alimentos, 5) Compras y Ocio y por último 6) Experiencias del visitante. Dentro de la definición de la cadena de valor del sector turístico, se encuentra la variable de integración, la cual es una de las variables independientes del estudio, por ellos es necesaria su definición. Varisco (2004), define la integración como los encadenamientos productivos que constituyen una característica esencial de la actividad turística, tengan éstos carácter formal o no.

La integración vertical está presente en el armado de paquetes por acuerdo entre empresas o por intermediación de agencias y operadores de viajes, pero en última instancia, de no existir una integración formal, en el producto que el turista consume, existe dependencia al punto que una falla en un servicio, puede significar la valoración negativa del conjunto. La integración horizontal está presente en el nivel de productos genéricos, como agroturismo, turismo de aventura, turismo de salud, etc. Estos productos enlazan tipos de alojamientos, gastronomía, esparcimiento, etc., para conformar a un segmento de demanda, y son una clave para la competitividad de los destinos. La variable integración se analiza en tres aspectos, 1) La existencia de grupos de empresas unidas por una propiedad y administración común. 2) La existencia de acuerdos entre empresas que se concretan en los productos ofrecidos en el mercado. 3) La existencia de eslabonamientos en relación a proveedores de insumos.

## **METODOLOGÍA**

El diseño de la investigación fue transversal y no experimental. El método de investigación utilizado es cuantitativo, se realizó un censo, aplicando encuestas cara-cara a los directivos de las 121 empresas proveedoras para el Turismo de Reuniones identificadas en Tijuana, estas fueron aplicadas de abril a junio del 2013. El número de empresas proveedoras se determinó mediante la integración de bases de datos de asociaciones, cámaras, Comité de Turismo y Convenciones y directorios telefónicos comerciales etc.

El cuestionario se diseñó mediante la aplicación de tres encuestas pilotos y la validación de tres expertos en la materia. El instrumento final está compuesto por 29 preguntas las cuales fueron diseñadas para cumplir los cinco objetivos de esta investigación. El primer bloque de la pregunta dos a la once es para cumplir con el objetivo de determinar la caracterización de los proveedores de servicios para el Turismo de Reuniones en Tijuana B.C. El segundo bloque, de la pregunta 12 a la 18 cumple con el objetivo de identificar la cadena o sistema de valor del sector de turismo de reuniones. El último bloque, de la pregunta 19 a la 29, fueron diseñadas para diagnosticar el nivel de integración entre los proveedores para el turismo de reuniones y explicar la relación entre estos.

## RESULTADOS

En el presente apartado se muestran los resultados del trabajo de campo realizado, es importante resaltar que se identificaron 121 empresas que cuentan con los criterios necesarios para atender al turismo de reuniones, sin embargo solo fueron encuestadas 104, debido a que 17 empresas se negaron a contestar el cuestionario. De acuerdo con el trabajo de campo, de las 104 empresas de proveedoras de servicios para el turismo de reuniones, en Tijuana existe un mayor número de restaurantes, se encuentra ubicados 41 de establecimientos de este giro, 14 agencias de viajes, existen 13 hoteles de clasificación de clasificación de cuatro y cinco estrellas, con el mismo número de establecimientos, existen 13 arrendadoras. En la ciudad se encuentra ubicadas siete tour operadoras, cinco empresas ofrecen el servicio de proveeduría de mobiliario y equipo, solamente existen 4 empresas organizadoras de eventos especializados, donde tan solo existe una DMC en la ciudad y ninguna OPC. Cuatro empresas ofrecen el servicio de renta de equipo audiovisual, existen dos sedes especializadas y por último, se encuentra una Oficina de Convenciones y Visitantes. De las 104 empresas proveedoras de servicios para el Turismo de Reuniones, solamente el 61% pertenece a una cámara o asociación, es decir 64 proveedores del total del censo. Donde el 53% (34 empresas) pertenecen a la Cámara Nacional de la Industria Restaurantera y Alimentos Condimentados (CANIRAC), el 16% (10 empresas) a Cámara Nacional Comercio (CANACO) y el 12% (8 empresas) a la Asociación Mexicana de Hoteles y Moteles.

En cuanto a la integración horizontal, de las 104 empresas proveedoras participantes en el estudio, 57 empresas cuentan con algún convenio o alianza con una empresa de servicios del sector turismo, mientras que 47 empresas no cuentan con ningún convenio. De estas 57 empresas que cuentan con convenios o alianzas con empresas del sector turismo, los restaurantes cuenta con 29 convenios, los hoteles con 25, las agencias de viajes con 23, las arrendadoras de autos con 10, las empresas de renta de mobiliario y equipo cuenta con cinco, los banqueteros, tour operadoras y renta de equipo audiovisual cuenta con tres convenios cada giro, los organizadores de eventos con dos, las sedes y recintos cuentan con uno, y por último la oficina de convenciones no cuenta con ningún convenio o alianza con otras empresas del sector.

Se encontró que de los 29 convenios con los que cuentan los restaurantes, el 31% (9 convenios) son con empresas de alimentos y bebidas, de los 25 convenios con los que cuentan los hoteles el 20% (5) es con empresas de otro sector, de los 23 convenios con el que cuentan las agencias de viajes el 26% (6) es con empresas de alojamiento. Por otra parte, las arrendadoras cuenta con 10 convenios, los cuales el 50% (5) es con alojamiento. Las empresas de mobiliario y equipo cuentan con cinco convenios y el 40% (2) son con agencias especializadas de eventos. De los tres

convenios existentes en los tour operadores, el 33% (1) es con transportación terrestre. Los proveedores que ofrecen el servicio de banquetes, cuentan con tres convenios, el 33%(1) es con un centro de convenciones, y otro 33%(1) con alimentos y bebidas. Las empresas de renta de equipo audiovisual cuentan con tres convenios, el 66%(2) son con agencias especializadas de eventos. Los organizadores de eventos solo cuentan con dos convenios y el 100% (2) es con diseño y montaje. Las sedes para reuniones solo cuentan con un convenio con una agencia organizadora especializada en eventos.

De los 104 empresas de servicios participantes en la investigación, 83 empresas cuentan con convenios o alianzas con proveedores de productos o servicios, lo que representa un 80% del total de estas, 21 no cuenta con ningún convenio con proveedores para la empresa, es decir el 20% de la población. De acuerdo con el giro de cada empresa, el 100% de las empresas de renta de mobiliario y equipo cuentan con convenios con proveedores, al igual que los establecimientos de banquetes y renta de equipo audiovisual. El 92% del total de las arrendadoras participantes cuenta con convenios con proveedores, el 80% de los restaurantes, 76% de los hoteles, el 71% de las agencias de viaje y el 57% de las tour operadoras. Solamente la mitad de las sedes y recintos cuentan con acuerdos con proveedores (lo que corresponde al 50% de estas) y la Oficina de convenciones y Visitantes no cuenta con ninguno.

## CONCLUSIONES

Después de analizar la variable integración desde sus tres aspectos, se determinó que los eslabones mayormente fortalecidos debido al número de convenios y alianzas con empresas del sector turismo son los eslabones de Restaurantes, Hoteles y Agencias de Viaje, los cuales pertenecen a las industrias de apoyo del sector del Turismo de Reuniones. Los eslabones intermedios, son las arrendadoras de autos, las empresas de renta de mobiliario y equipo, proveeduría de equipo audiovisual, banquetes y tour operadoras. Estos eslabones cuentan con algunos convenios con otras empresas del sector turístico, sin embargo, son los cuatro eslabones que cuentan con mayor número de alianzas con sus proveedores de insumo, es decir están fortalecidos con una integración vertical. Por lo cual, es necesario desarrollar la integración horizontal entre estos. Los eslabones débiles o inexistentes son: el de Organizadores Profesionales de Convenciones (OPC), Oficina de Convenciones y Visitantes (OCV), organizadores de eventos especializados, por último sedes y recintos, debido a los pocos o nulos convenios con los que estos cuenta con empresas del sector turismo. Es importante señalar que estos eslabones son las cuatro industrias centrales del Turismo de Reuniones

Por lo tanto para desarrollar el sector del Turismo de Reuniones en la ciudad de Tijuana B.C., es necesario mantener los eslabones ya fortalecidos, desarrollar la integración horizontal entre los eslabones intermedios y sobretodo desarrollar fomentar la creación de un mayor número de empresas pertenecientes a las industrias centrales, los cuales son los eslabones más débiles de la cadena y desarrollar un mayor número de convenciones entre empresas del sector turístico y con proveedores de insumos o servicios necesarios para la operación de estas.

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# UN MODELO DE NEGOCIO PARA LA CERTIFICACIÓN DE RESIDENCIAS GERIÁTRICAS

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## RESUMEN

*Esta investigación, puede considerarse como un primer acercamiento para abordar la problemática que enfrentan las residencias geriátricas en los aspectos de administración, normatividad, certificación, residencias geriátricas y medios de información. El objetivo de como intervienen los factores de administración normatividad, certificación, residencias geriátricas, y medios de información en el adulto mayor. Se trata de una investigación sincrónica porque el instrumento es aplicado en una sola ocasión. El instrumento es un cuestionario de opinión con 102 variables simples referentes a los 5 ejes, 15 señalísticas medidos en una escala del 0 al 10. La investigación es abierta, es decir a familiares que acompañan al paciente que acude a la consulta externa de geriatría en el centro estatal del adulto mayor de Saltillo, Coahuila, de los cuales fueron un total de 105 adultos.*

Palabras Clave: Administración, Normatividad, Certificación, Residencias Geriátricas y Medios de Información.

## A BUSINESS MODEL FOR THE CERTIFICATION OF NURSING HOMES

### ABSTRACT

This research can be considered as a first approach to address the problems faced by nursing homes In the areas of administration, standards, certification, nursing homes and media.As the objective of management factors involved, regulations, certification, nursing homes and media in the elderly. Research is a synchronous because the instrument is applied only once. The instrument is an opinion questionnaire with 102 variables concerning the 5 simple axes, 15 signalísticas measured on a scale of 0 to 10.

Research is open, ie relatives accompanying the patient who comes to outpatient geriatric state in the Center of the Elderly in Saltillo Coahuila. Of which were a total of 105 adults.

**KEYWORDS:** Administration, Standardization, Certification, Nursing Homes and The Media.

### INTRODUCCIÓN

El proceso de envejecimiento de la población en México se hizo evidente a partir de la última década del siglo XX, mostrando una inercia que lo convertirá, durante la primera mitad de del siglo XXI, en el cambio demográfico más notorio. En poco tiempo el número y proporción de población de edades avanzadas aumentará con respecto a los otros grupos de edad, en un proceso ineludible que finalmente supone una perenne estructura envejecida.

Junto con la delimitación en términos de dependencia de la población envejecida, también se manejan conceptos de vulnerabilidad. La mayor vulnerabilidad en la vejez se relaciona con la salud, cuando se genera dependencia debido a enfermedades crónicas y discapacidades motrices o mentales, requiriendo prevención, atención médica, medicamentos y cuidados personales de modo permanente. Un hecho crucial es que se trata de servicios especialmente costosos. Cuando el adulto mayor o su familia tienen capacidad económica, estas necesidades se adquieren en la oferta privada.

## **METODOLOGÍA**

Por la proposición del objetivo es de construcción de modelos que implica la asociación coherente de los elementos, atributivos que permitan plantear una descripción y explicación probabilística o estructural. Es de carácter inductivo. Además es de Innovación que supone un cambio, transformación o asociación en función de insumos que proporcionan novedad en elementos, formas, relaciones o estructuras.

Por la orientación funcional es aplicada porque interviene en la realidad concreta con objeto de ejecutar modelos, efectuar cambios o transformaciones en la misma. Es deductiva. Además es fáctica y conceptual ya que trabaja con hechos, ideas, nociones, objetos, conceptos y las relaciones que se dan entre ellos.

Por la orientación operacional es longitudinal porque se observa a lo largo del fenómeno integrado. Además es diacrónica debido a la exploración sucesiva y explícitamente secuencial en relación al tiempo.

Por su forma de ejecución la investigación es prospectiva, porque es una parte de la historia pero no toma ni el pasado ni el presente, proyecta dimensión de futuro. Su eje principal radica en la probabilidad.

Por la derivación expositiva es mostrativa porque enseña, muestra o presenta los atributos en cuanto tales o, en su caso, el fenómeno a manera de origen comprensivo. Además es explicativa, no requiere de un marco de referencia, necesita de la relación coherencia explícita entre los elementos atributivos y sus relaciones con capacidad predictiva.

### Previsión de Secuencia Metodológica

**Deducción:** Se realiza un análisis de la bibliografía que delimita el campo de investigación, descomponiendo ese todo en los elementos que los constituyen.

**Analogía:** Por medio de las medidas de tendencia central y variabilidad, se realiza una comparación entre los atributos, para destacar aquellos que se tienen en mayor y menor importancia, diferenciándolos de los que se muestran como regularidades.

**Inducción:** Articulando de manera coherente los elementos de un todo, a través del nivel correlacionar, se pretende establecer relaciones, explicar y discernir el fenómeno.

### Tratamientos y Estadísticos

Prueba de confiabilidad Alfa de Cronbach, análisis de ítems análisis univariable, frecuencias y porcentajes de los señaléticas, medidas de tendencia central y de variabilidad; n, Mínimo, Máximo, Media, Mediana, Moda, Desviación Estándar, Coeficiente de Variación, Coeficiente de Dispersión, valor Z, Sesgo, Kurtosis y prueba de normalidad. Análisis Comparativo Prueba t Student y análisis Correlacional de Pearson

Universo

Centro estatal del adulto mayor de Saltillo, Coahuila

Población

Familiares que acuden con pacientes adultos mayores a la consulta externa de geriatría en el centro estatal del adulto mayor.

### Muestra

Se selecciona un grupo al azar y se les aplica el instrumento a todos aquellos familiares de pacientes que acuden a la consulta externa de geriatría en el centro estatal del adulto mayor.

Para fines de la investigación, se trabaja con 105 familiares de adultos mayores, el instrumento se aplicó a todos ellos en el mes de mayo y junio del 2012, que acuden a consulta externa de geriatría de 9:00 a.m. a 14:00 hrs.

### Selección de Variables

Se incluyeron 120 variables, descartándose aquellas que por sus respuestas tienden a ser constantes, sumando un total de 117 variables, no se descartó ninguna variable para su análisis.

De esta manera, se explora un total de 102 variables, de las cuales, se miden con una escala del 0 al 10, son de tipo ordinal de razón, las cuales están organizadas en cinco ejes y sus variables categoriales El fenómeno se observa por medio de 5 variables ejes, que son: Los aspectos de administración, normatividad, certificación, residencias geriátricas y medios de información de la cual se destilan 22 variables simples, de administración, 18 variable simples de normatividad, 18 variables simples de certificación, 32 variables simples de residencias geriátricas y 12 variables simples de medios de información.

Se incluyen también, 15 variables signalíticas (edad, sexo, fecha de nacimiento estado civil, lugar de nacimiento, nacionalidad, ingreso económico, profesión, número de hijos, actividad a la que se dedica, religión, nivel cultural, escolaridad, entorno vital y finalmente nivel de satisfacción personal).

### Relevancia de los Signalíticos

Sexo. Es una variable que por su naturaleza sirve para fines de contrastación.

Edad, estado civil, donde los familiares tienen diferentes estados civiles y existe una oscilación muy grande entre las edades, lo que permite contrastar opiniones.

Ingreso económico, profesión, número de hijos, actividad a la que se dedica, religión, nivel cultural, escolaridad, y entorno vital se agrega para fines de contrastación debido a que existe una gran variedad de opiniones.

La prueba de confiabilidad del instrumento de medición se sustenta en el análisis de ítems, realizado en la prueba piloto (n=20) indica como nivel de confiabilidad de un Alpha de Cronbach de 0,893039.

Hipótesis

Las hipótesis se originan de la interrogante principal de las interrogantes de investigación y de la bibliografía, las cuales van dirigidas a la muestra en estudio, de los familiares de pacientes mayores de 60 años que acuden al centro estatal del adulto mayor.

- H1 Existe relación entre la calidad, calidez y el cumplimiento de normas y derechos.  
H2 Existe relación entre la acreditación y la confianza en las residencias geriátricas.  
H3 Existe relación entre las normas establecidas y el buen funcionamiento de la administración.  
H4 Existe relación entre eficiencia, capacitación y la competitividad.  
H5 Existe relación entre los lineamientos, capacitación y la certificación.  
H6 Existe relación entre la acreditación, protocolos e innovación.

### Nivel Univariable

El análisis de las estadísticas sobre la certificación de residencias geriátricas hace pensar que esta problemática sobre la regulación en los aspectos como son administrativos, normativos, funcionalidad y estructuralmente que afecta a tantas residencias en todo el país y muy en especial en nuestra localidad.

Si a esto le sumamos que esta etapa de la vida, por sus características muy peculiares, condiciona en muchos casos la aparición de múltiples enfermedades crónico degenerativos, demencias, depresión, delirium y sobre todo síndrome de abandono, maltrato, fragilidad y deslizamiento, entonces no cabe duda acerca de por qué es necesaria la regulación y certificación de las residencias.

### Frecuencias

En las tablas de frecuencias una (n=102) de los encuestados el 61 % son del sexo femenino, las edades más representativas son de 36 y 40 años de edad, el 49% son casados y el 32% solteros, la mayoría de los encuestados con un 63% son de saltillo, de nacionalidad mexicana, el 33% tiene 2 hijos y el 31% no tiene familia, el nivel económico al que pertenece es el 86% que representa al nivel medio, el 23% son empleados, la religión que profesan es la católica con un 82% ,en cuanto a su nivel cultural el que predomina es el medio con un 62%, de los entrevistados el nivel de escolaridad más alto representado por un 61% es con licenciatura, en conjunto podemos afirmar que pertenecen al medio urbano y muestran un alto nivel de satisfacción en sus vidas.

En los aspectos de la administración indica que los familiares de los adultos mayores prefieren que en las residencias geriátricas se de calidad, calidez, eficiencia, satisfacción, capacitación, responsabilidades, recursos, funcionamiento, organización, calificación de personal, de manera común que se respeten las normas, evaluaciones y organigrama y en baja proporción la participación, los puestos, aspectos legales y democracia.

En los aspectos de normatividad indica que los familiares de los adultos mayores prefieren en las residencias geriátricas que cuenten con planes de emergencia, medidas de seguridad, cumplimientos, normas, licencias, derechos, programas, aspectos funcionales y en las funciones de manera común que existan evaluaciones, protección ambiental, departamento de quejas, proyectos, plantilla laboral y modelos de valoración y en baja proporción consten con políticas y datos informáticos.

En los aspectos de certificación indica que los familiares de los adultos mayores prefieren que las residencias geriátricas cuenten con calidad, instalaciones, sistema de guarda, obligaciones y reglamentos.

Los familiares de los adultos mayores en las características de las residencias geriátricas prefieren la atención las 24 hrs. los 365 días del año, la presencia de médicos, enfermeras, servicio de urgencias instalaciones adecuadas.

Los familiares de los adultos mayores les gustaría recibir información de las residencias geriátricas a través de los médicos, familia, internet trípticos y televisión en forma común del periódico la radio, trabajo, pláticas y amigos y en menor proporción de espectaculares y revistas.

#### Nivel Comparativo

Al contrastar a los casados prefieren que en las residencias geriátricas se brinde confianza, planificación y cumplimientos, sin embargo los solteros prefieren que existan buenas instalaciones.

Que las personas de nivel económico medio prefieren que en las residencias geriátricas cuente con servicio de capilla y tienda de regalos en comparación con los del nivel alto.

Que las personas del nivel económico bajo en las residencias geriátricas opten por la participación, puestos, que cuenten con sacerdote, tienda de regalos y que la información de las residencias geriátricas la reciban a través de espectaculares en relación con los del nivel medio.

Que las personas de nivel económico bajo prefieren en las residencias geriátricas que se brinde calidez, participación, seguridad calificación de personal, datos informáticos, y que cuenten con un laboratorio, comedor, gimnasio, capilla, sacerdote y que se les informe a través de pláticas e internet en relación al nivel económico alto.

Que las mujeres le dan más importancia que los hombres a los aspectos de administración, normatividad, certificación, residencias geriátricas democracia, eficiencia, funciones, capacitación, evaluaciones, participación, organización derechos, medidas de seguridad, reglamentos, lineamientos manuales, calidad, registros, visión, contratos, innovación y certificación para la selección de una residencia geriátrica.

#### Nivel Correlacional

Cuando existe eficiencia hay una gran mejora en sus derechos y satisfacciones dando una mejor calidad, capacitación y un buen funcionamiento ayudando a una mejor planificación, contribuyendo a mejorar los programas de actividades, evaluaciones y normas reflejando mejores recursos en la administración de las residencias geriátricas. Existiendo una buena capacitación se podrá contar con instalaciones adecuadas, programas de prevención organización, participación, evaluación, satisfacción funciones, reglamentos y eficiencia contribuyendo a la capacitación de médicos y, enfermeras dando a conocer las normas, derechos, políticas, funcionamiento, lineamientos, sistemas de acreditación reflejando las responsabilidades y calidad en los departamentos. Cuando se generan evaluaciones existe una mejor organización, confidencialidad, participación, protección de datos, información, legal y ambiental, lineamientos, código de ética, registros, programas, satisfacción y sistema de acreditación. Cuando se constituyen los lineamientos esto favorece a un buen funcionamiento, organización, política, participación, obligaciones, trato digno, confidencialidad, seguridad, derechos, plantilla laboral, normas, protocolos, sistema de acreditación, manuales, registros, evaluaciones, capacitación y funciones. Cuando se dispone de manuales se despliegan mejores programas, modelos de valoración, plantilla laboral, planificación, información completa, código de ética, programas de actividades, protección de datos, de información y ambiental, recursos, lineamientos, evaluaciones, registros, derechos, protocolos, organización, participación y reglamentos. Cuando se cuenta con un sistema de acreditación se ve reflejado en las medidas de seguridad, protocolos, instalaciones adecuadas, políticas, mayor participación, evaluaciones, lineamientos., Al reflejarse un trato digno se confirma un buen servicio de enfermeras ofreciendo un buen funcionamiento, seguridad,

confidencialidad, reglamentos, medidas de seguridad, organización, lineamientos, recursos, protocolos. Generando confidencialidad mejora la organización, funcionamiento, registros, lineamientos, reglamentos, código de ética.

## RESULTADOS

Interpretando a Martínez (2006), para el buen funcionamiento de un hospital, todos están de acuerdo que son fundamentales, los recursos. Villacobos 2012 Que cuando existe la eficiencia en la residencias geriátricas constituye la utilización de los recursos disponibles para la obtención de los resultados deseados, al establecer la capacitación se propiciará la competitividad, fortaleciendo las actitudes, valores, destrezas y conocimientos para un buen logro de los objetivos.

Interpretando a Yoder (2006), la dirección y gestión de un hospital, actúa en el ámbito interno, ahí es donde se puede trabajar para facilitar la eficiencia, economía, transparencia y efectividad. Villacobos 2012 en el aspecto de la administración de residencias geriátricas probablemente es más importante la calidad, calidez y eficiencia, sin embargo la normatividad le es más significativa que existan las medidas de seguridad, cumplimientos, normas derechos, programas y funciones.

Drucker (2000), dice, que no basta que la dirección y gestión hagan bien las cosas (eficiencia), tienen que hacerlas correctamente (efectividad). Villacobos 2012 Cuando existe una mejor proyección en los sistemas de acreditación, protocolos, desempeño de actividades, innovación se brindarán mejores resultados en todos los programas de los centro geriátricos.

Interpretando a Reyes (2004), en un hospital a parte de la administración de los recursos financieros, recursos materiales y tecnológicos, es fundamental para la dirección y gestión, la humanos. Villacobos 2012 Para un buen funcionamiento administrativo en las residencias geriátricas se necesita que existan elementos de organización, integración, control y consten criterios de desempeño, un programa de planeación, normas establecidas y se creará una mejor administración en las residencias geriátricas.

Interpretando a Porter (1997), la incorporación de los principios de competitividad al desarrollo de las funciones, actividades y operaciones de los hospitales, permite incrementar su nivel de competitividad. Villacobos 2012 Si existe la participación en la residencias geriátricas se genera una sensibilización, formación, transparencia, planificación, participación y toma de decisión en forma transparente obteniendo la satisfacción mediante el logro de las virtudes, capacidades, comportamientos y evaluaciones reflejándose el logro en las metas en las residencias geriátricas.

Villacobos 2012 Contando con una buena organización se obtienen mejores resultados en los sistemas de acreditación actuando correctamente bajo las normas dándose los mejores resultados en todos lineamientos, cuando se ejecutan perfectamente los programas se obtienen mejores resultados en todos los proyectos de las residencias geriátricas.

Según Socorro (2002), múltiples tendencias en el área gerencial como la Calidad Total, el Mejoramiento Continuo, todas han aportado grandes cambios luego de su aplicación. Villacobos 2012 Cuando existe una mejor proyección en los sistemas de acreditación, protocolos, desempeño de actividades, innovación se brindarán mejores resultados en todos los programas de las residencias geriátricas.

## CONCLUSIÓN

A los familiares de los adultos mayores en el aspecto de administración en las residencias geriátricas probablemente les es más importante la calidad, calidez y eficiencia, sin embargo la normatividad le es más significativa que existan las medidas de seguridad, cumplimientos, normas derechos, programas y funciones.

En el aspecto de certificación de residencias geriátricas les es más importante la calidad, las instalaciones, sistema de guarda, obligaciones, reglamentos, sistemas de acreditación, atención las 24 hrs. los 365 días de año, la presencia de médicos, enfermeras, nutriólogo, rehabilitador, que cuenten con un departamento de terapia ocupacional, servicio de urgencias y sobre todo que brinden confianza.

Cuando existe la eficiencia constituye la utilización de los recursos disponibles para la obtención de los resultados deseados, al establecer la capacitación se propiciará la competitividad, fortaleciendo las actitudes, valores, destrezas y conocimientos para un buen logro de los objetivos.

A través de la capacitación se propicia la competitividad, fortaleciendo las actitudes, valores, destrezas y conocimientos para un buen logro de los objetivos, existiendo un buen funcionamiento que valore su capacidad para cumplir con todas sus funciones ordenadas y continuas.

Contando con una buena organización se obtienen los mejores resultados en los sistemas de acreditación. Si se aplican cabalmente las evaluaciones se alcanzan mejores efectos en los planes diseñados estableciendo los derechos logrando mejores resultados al respetar, proteger y realizar las medidas de seguridad reflejará un mejor funcionamiento.

Cuando existe una mejor proyección en los sistemas de acreditación, protocolos, desempeño de actividades, innovación se brindarán mejores resultados en todos los programas.

Cuando se cuenta con instalaciones adecuadas, departamento de recursos humanos, un buen equipo médico se brindará confiabilidad, trato digno mayor credibilidad del uso y servicio de sus instalaciones.

Propuesta de acción y cambio

En base a las conclusiones y resultados presentados en este trabajo, a continuación se despliega los contextos que puede significar un cambio categórico en adoptar una perspectiva de ciclo vital para poner al alcance del común de la población un envejecimiento saludable.

Proporcionan un entorno universal para evaluar aspectos administrativos, métodos de calidad, técnicas, herramientas, procedimientos; además, proveen un enfoque de implementación hacia la calidad total y lograr identificar los procesos claves de la organización en los centros geriátricos.

Contar con un sistema de derecho confiable y objetivo, haciendo un manejo sustentable del medio ambiente, sociedad incluyente, preparada y sana, refrendar un sistema político estable y funcional, mercado laboral amplio, una gran infraestructura y estar en constante sofisticación e innovación.

Progreso y cambio cultural en la sociedad mexicana para aceptar ingresar en un centro geriátrico llegada la vejez o jubilación.

Realizar un autodiagnóstico de la situación que prevalece en el núcleo familiar.

Modelo para el perfeccionamiento en la certificación de las residencias geriátricas.

Sistema de dirección que incita a lograr niveles de competitividad permanencia y crecimiento continuo. En base a las conclusiones y resultados presentados en este trabajo, a continuación se despliega los contextos que puede significar un cambio categórico en adoptar una perspectiva de ciclo vital para poner al alcance del común de la población un envejecimiento saludable.

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# EL MARKETING SUSTENTABLE COMO ESTRATEGIA DE POSICIONAMIENTO GLOBAL EN LAS FRANQUICIAS MEXICANAS QUE OPERAN EN LA CIUDAD DE HERMOSILLO, SONORA

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## RESUMEN

*Es indudable que las empresas sustentables están de boga; sin embargo, no es una moda, es una tendencia. En este marco y ante la ola “verde”, es común que muchas empresas, sobre todo las franquicias mexicanas quieran sumarse a este esfuerzo; motivo por el cual, no es raro encontrar que algunas compañías comiencen a incluir uno o más productos ecológicos como parte de su oferta de diversificación, o incluso empiecen a implementar acciones sustentables como parte integral de su plan de marketing. Así, para que una empresa pueda decir con veracidad que realiza marketing sustentable, debe saber y conocer dónde y bajo qué condiciones vienen sus insumos; si es un bien renovable; quién lo procesa y cómo lo hace; qué impactos sociales y ambientales conlleva la producción del producto; a qué mercado se le hace llegar; cómo se distribuye y a qué precio se comercializa; cómo es utilizado y posteriormente, la forma en que se desecha, con la finalidad de diferenciarse y posicionarse en un mercado cada vez más competido. La investigación analiza la información obtenida mediante la aplicación de cuestionarios estructurados a las franquicias mexicanas y que operan en Hermosillo, Sonora, desde la perspectiva e inclusión de las cuatro “P’s” en la filosofía del marketing sustentable.*

**PALABRAS CLAVES:** Marketing sustentable; diversificación; franquicias

## INTRODUCCIÓN

Hasta hace poco, la sustentabilidad pertenecía al ámbito del departamento de Responsabilidad Social Empresarial (RSE) de una empresa, pero a medida que la comunidad nacional e internacional se ha enfrentado a problemas como la sobrepoblación, la creciente demanda energética, la pérdida de biodiversidad y los efectos del cambio climático, la sustentabilidad se ha convertido en un objetivo que ha trascendido fronteras políticas, culturales y profesionales. Buscar los medios para desarrollar prácticas de marketing más sostenibles se ha convertido en un asunto primordial que toda organización, grande o pequeña, debe tener en cuenta para prosperar y las firmas transnacionales como las franquicias, no son la excepción. Mediante el desarrollo de este trabajo de investigación, se pudo valorar la estrategia del marketing sustentable y como ésta es, efectivamente una práctica que combina consideraciones sociales, como por ejemplo, derechos humanos; igualdad o diversidad; y medioambientales, tales como la gestión de residuos; uso energético y contaminación; todos ellos inevitablemente conectados e interrelacionados. Partiendo del enfoque del desarrollo sustentable en el contexto de la empresa, éste implica un enfoque basado en la triple cuenta de resultados, de modo que los beneficios de la empresa no se midan teniendo en cuenta exclusivamente su rentabilidad financiera, sino también su rentabilidad

social y medioambiental. El objetivo es dar una respuesta a las demandas de esta generación sin poner en peligro la capacidad de futuras generaciones para atender sus propias necesidades.

Sin embargo, surge la siguiente pregunta de investigación, ¿qué tanto impacta el marketing sustentable como estrategia de posicionamiento global en las franquicias mexicanas? Antes de dar respuesta al cuestionamiento, primeramente, se debe de entender el concepto de “marketing sustentable”; en ese sentido, Fuller (1999) define del siguiente modo el marketing sustentable: *“El proceso de planificación, implementación y control del desarrollo, precios, promoción y distribución de productos de modo que satisfaga los tres criterios siguientes: (1) satisfacción de las necesidades del cliente; (2) consecución de los objetivos de la empresa; y (3) compatibilidad del proceso con el ecosistema”*.

De igual forma, se procedió con la aplicación de un cuestionario estructurado en cuatro secciones, una para cada “p’s” del estudio: Producto (*Product*); Precio (*Price*); Plaza (*Place*) y Promoción (*Promotion*), desde el punto de vista mercadológico; sin embargo, es importante resaltar que en cada una de ellas (p’s), existieron preguntas relacionadas con las “3p’s” del marketing sustentable: Personas (*People*); Planeta (*Planet*) y Beneficio (*Profit*). Asimismo, se establecieron 24 preguntas del tipo dicotómicas cerradas (Si o No). El instrumento de medición fue aplicado a 33 franquicias mexicanas que operan en la ciudad de Hermosillo, Sonora, de un total de 49 empresas, las cuales conforman la población total, de acuerdo al a la Secretaría de Economía del Estado de Sonora (SE, 2013).

Lo anterior, corresponde a una muestra probabilística del 73.46 %; sin embargo, es importante mencionar que de acuerdo a Santesmases (2009), se procedió a calcular el tamaño de la misma, considerando un error del 10 %, con un intervalo de confianza del 95 %, un nivel de heterogeneidad (p y q) de atributo del 50 %, dando como resultado un tamaño de muestra de 36 empresas (franquicias) a encuestar, tal y como se presenta en la siguiente ecuación estadística (1), para el cálculo de muestras para poblaciones N, finitas y conocidas.

$$n = \frac{N * Z_{\alpha}^2 * p * q}{d^2 * (N - 1) + Z_{\alpha}^2 * p * q} \quad (1)$$

Donde:

N = Tamaño de la población;  
 Z = Nivel de confianza;  
 p = Probabilidad de éxito;  
 q = Probabilidad de fracaso;  
 d = Error máximo permisible.

Para evaluar la confiabilidad del instrumento de medición, se procedió con el análisis de consistencia interna mediante el alfa de Cronbach. Se trata de un índice que toma valores entre 0 y 1 y, que sirve para comprobar si el instrumento que se está evaluando recopila información defectuosa y por tanto, llevaría a conclusiones equivocadas o si se trata de un instrumento confiable que hace mediciones estables y consistentes (Santesmases 2009, citado por Ibarra, Casas & Barraza, 2013). Dentro de esta categoría de coeficientes, el alfa de Cronbach es, sin duda, el más ampliamente utilizado por los investigadores. Alfa estima el límite inferior del coeficiente de confiabilidad y se expresa mediante la siguiente formula como:

$$\alpha = \left( \frac{K}{K-1} \right) * \left[ 1 - \left( \frac{\sum_i S_i^2}{S_{sum}^2} \right) \right] \quad (2)$$

Donde  $k$  es el número de ítems de la prueba,  $S_i^2$  es la varianza de los ítems (desde 1...i) y  $S_{sum}^2$  es la varianza de la prueba total. El coeficiente mide la confiabilidad del test en función de dos términos: el número de ítems (o longitud de la prueba) y la proporción de varianza total de la prueba debida a la covarianza entre sus partes (ítems). Ello significa que la confiabilidad depende de la longitud de la prueba y de la covarianza entre sus ítems (Santesmases 2009, citado por Ibarra, *et al.*, 2013). Su interpretación será que, cuanto más se acerque el índice al extremo 1, mejor es la confiabilidad, considerando un resultado aceptable a partir de 0.70; en ese sentido, para el presente trabajo de investigación, el resultado de alfa de Cronbach, fue igual a 0.7931, lo que significa que el cuestionario aplicado es aceptable y por ende, confiable, lo que indica que el instrumento de medición utilizado tiene un alto grado de confiabilidad, validando su uso para la recopilación de datos.

La presente investigación está organizada como sigue. En la sección de revisión de literatura se encontrará información puntual y precisa sobre el esquema del marketing sustentable y como países de la Unión Europea y del Continente Americano, en un esfuerzo por situarse en la vanguardia, buscan constantemente lo que se ha denominado la triple cuenta de resultados de acuerdo con la cual, además de la rentabilidad financiera habitual, una empresa debe tener en cuenta sus impactos sociales y medioambientales. Asimismo, se hará una revisión de las contribuciones que existen de la literatura actual y el cómo abonan al tema que se investiga; del mismo modo, el presente trabajo de investigación contribuirá a enriquecer aún más el campo literario objeto de estudio. Posteriormente, en la sección de metodología se presentan aspectos relevantes en cuanto a la operatividad de las variables que son estudiadas y analizadas, a partir de un cuestionario estructurado y cómo éstas han iniciado con la adaptación de esta estrategia del marketing sustentable para lograr posicionarse en el mercado donde se compite. Seguidamente, se presentan los resultados de la investigación con base al estudio descriptivo y análisis estadístico de la información obtenida, a través del *software IBM SPSS Statistics 21*. Finalmente, se presentan las conclusiones y las futuras líneas de investigación derivadas del presente trabajo de investigación.

## REVISIÓN DE LA LITERATURA

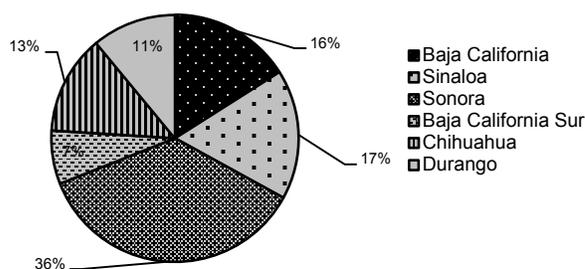
Primeramente, se definirá el sector empresarial para lo cual se ha seleccionado como el objeto de estudio. El sector de las franquicias mexicanas, específicamente aquellas que se localizan y operan en la ciudad de Hermosillo, Sonora, México. De acuerdo con cifras de la Asociación Mexicana de Franquicias (AMF, 2013), de las 1,300 franquicias que se estima hay en el país, unas 500 están realmente activas, y casi la mitad de las que operan ya están acreditadas en el Padrón Nacional de Franquicias (PNF). La distribución de las franquicias existentes en México, según la AMF, es como se muestra en la Figura 1, donde se aprecia la distribución en porcentajes correspondiente al número de franquicias localizadas en cada una de las regiones del país, notándose un fuerte porcentaje en la región Centro de México, con un 43 %, seguido de la región Occidente, con un 15 %. Para el caso de la región Noroeste, existe un 9 % de establecimientos con respecto al total nacional, distribuidos en seis Estados. Para el Estado de Sonora, le corresponde un 36 %, el mayor porcentaje de la región, de acuerdo a la Figura 2.

Figura 1: Distribución Porcentual de las Franquicias Por Región en México



En esta Figura se muestran los porcentajes de distribución de franquicias mexicanas por región en el país. Fuente: Elaboración propia a partir de la información de la AMF, 2013.

Figura 2: Distribución de las Franquicias Mexicanas, Región Noroeste



En la presente Figura se muestran los porcentajes de distribución de franquicias mexicanas por región en el país. Fuente: Elaboración propia a partir de la información de la AMF, 2013.

De acuerdo a Combs y Ketchen (2003, citado por Hitt, Ireland y Hoskisson, 2008), el franquiciamiento es una estrategia corporativa de cooperación que una empresa (el franquiciador) utiliza como relación contractual mediante una franquicia que describe y controla la forma en que compartirá sus recursos y capacidades con sus socios (los franquiciados). De acuerdo a Lafontaine (1999), una franquicia es “un contrato que celebran dos empresas independientes desde el punto de vista legal, mediante el cual la empresa franquiciadora otorga a la franquiciada el derecho de vender su producto o desarrollar sus actividades en una plaza determinada, utilizando sus marcas comerciales registradas, durante un periodo específico”. Ahora bien, se puede decir que el marketing sustentable surge como respuesta mundial frente al deterioro medioambiental provocado por el crecimiento social que, junto a los hábitos de consumo, han provocado un daño y alteración al ecosistema. Por lo que las empresas, como principal responsable de este problema deben hacer frente a las demandas sociales y hacerse cargo de estos problemas (Lorenzo, 2002). Cabe mencionar que, para referirse a marketing sustentable en la actualidad, se han utilizado diferentes conceptos en la literatura, tales como: marketing ecológico, marketing verde, marketing ambiental y eco-marketing, por mencionar algunos.

Santesmases (2000), define el marketing ecológico “...como la comercialización de productos y envases que son menos tóxicos o contaminantes que los normales, más duraderos, contienen materiales reutilizables, incorporan componentes reciclados, o su fabricación supone un menor

*desgaste de los recursos naturales, o una menor contaminación del medio ambiente*". Mientras que Terron (2007), define al marketing ecológico como "...es el resultado de complementar el factor medioambiental en las funciones de marketing y por lo tanto, la aplicación de un marketing operativo que reafirme al consumidor el producto que por su naturaleza, presentación, costo e impacto medioambiental, responda mejor a sus necesidades". Por último, American Marketing Association (2008), define al marketing verde como "es el esfuerzo que hace una empresa para producir, promover, empaclar y recuperar los productos con un enfoque de responsabilidad y sensibilidad ecológica".

### El Contexto del Marketing Sustentable

El marketing sustentable ha tenido muchas definiciones desde el desarrollo y promoción de productos y empaques que contienen componentes biodegradables que protegen el medio ambiente; sin embargo, este concepto tiene una visión mucho más amplia y busca contemplar el ciclo de vida completo del producto, es decir, integrar en todos los aspectos del marketing, las consideraciones medioambientales, por lo que se le da importancia a todas las actividades del ciclo de vida del producto hasta la comercialización final del mismo (Lara, 2011). Existen diversas razones para adoptar el marketing sustentable o verde en la estrategia de la organización, ya que ésta genera algunas oportunidades y ventajas competitivas que se pueden obtener una vez que la empresa se diferencie de los competidores, generando un mejor posicionamiento de marca. Otra razón fundamental es la responsabilidad social empresarial, ya que hoy los consumidores son cada vez más conscientes de los fenómenos y daños medioambientales, por lo que exigen una mayor responsabilidad por parte de las empresas hacia la protección ambiental en todos sus sentidos. También tiene su peso las regulaciones gubernamentales en materia de leyes y certificaciones en materia ambiental, motivo por el cual, los competidores están prestando atención a los requerimientos gubernamentales y alientan a los consumidores a la adquisición de productos ecológicos (Echeverri, 2010; Lara, 2011). "La filosofía del marketing ecológico es propiciar la producción de bienes y servicios que sean amigables con el medio ambiente mediante el uso de tecnologías que no atenten contra la naturaleza y el ecosistema y que a su vez sean fuentes de nuevos negocios en el mercado", Prieto, J. (2009). Algunas de las ventajas del marketing ecológico son: penetrar en el mercado ambiental, mantener o aumentar la competitividad, incrementar la rentabilidad, mejorar la imagen corporativa, disminuir la incidencia de los grupos de presión, ayudar a la comunidad a conservar la naturaleza, Prieto, J. (2009).

Los resultados de las investigaciones en otros países sugieren la existencia de segmentos de mercado sustanciosos, viables e identificables, que toman en cuenta el nivel de responsabilidad social de las empresas en sus decisiones de compra e inversión (NMI, 2005; Arellano, R., 2002; Mohr, Webb y Harris, 2001). Más aún, "... parecen pruebas suficientes, no sólo de la existencia de una incipiente demanda colectiva, sino también de cierta disponibilidad a pagar por actuaciones socialmente responsables" (Fernández y Merino, 2005:40). Esta es una gran oportunidad para que las empresas y comerciantes apelen a este segmento y de este modo satisfagan sus objetivos de negocio al mismo tiempo que contribuyen con la sociedad (Mohr, Webb y Harris, 2001:69).

Con base a lo anterior expuesto, se puede deducir que el marketing sustentable aporta a las empresas algunos beneficios, tanto tangibles como intangibles, tales como los que se mencionan a continuación: distinción de la marca; reducción de riesgos e identificación de oportunidades; lealtad por la marca y retención de clientes; creación de nuevas oportunidades de mercado; innovación y creatividad en los productos y servicios; motivación a los empleados; reputación del

negocio y de la propia marca; reducción en la estructura de costos; atraer inversión; transparencia con los clientes en cuanto a las operaciones que se realizan; desarrollar un marketing relacional; es decir, ayudar al consumidor a llevar un consumo más proactivo y consciente; desarrollar y optimizar la tecnología “verde”; minimizar las emisiones al medio ambiente; creación de mayor conciencia y respeto por el entorno; desarrollo de un marketing responsable y; generar una eficiencia energética en sus proceso y procedimientos.

### Las Franquicias en el Contexto del Marketing Sustentable

En los últimos años, el establecimiento de empresas verdes en México y el mundo ha ido en aumento, esto orienta al sector franquicias hacia un nueva fase, donde los grandes retos son: el cuidado del medio ambiente y ofrecer productos y/o servicios de calidad inigualable. Actualmente, contar con una franquicia verde es una gran oportunidad de inversión, debido a que su concepto pro ambiental da más valor a la imagen de las marcas; brinda una mayor fortaleza ante su competencia, está a la vanguardia, cuenta con una mayor afiliación de mercado y ofrece productos y servicios únicos. Las franquicias son una modalidad de negocios que ha incrementado sustancialmente el número de establecimientos en el país en un tiempo relativamente corto y en una gran diversidad de actividades económicas, la Encuesta Nacional de Ocupación y Empleo (ENOE, 2013), al inicio del año 2005, el catálogo registraba alrededor de 450 unidades económicas, actualmente, contiene alrededor de 1,245 establecimientos, mismos que no solamente son de origen extranjero como podría pensarse en un inicio, sino que muchos de ellos son de origen nacional, de ahí la importancia de que la ENOE pueda dar cuenta del número y de las características generales con que operan en lo referente al mercado laboral mexicano.

Los negocios sustentables tienen el reto de mantenerse en constante innovación para ofrecer alternativas al consumo cotidiano. Su responsabilidad más grande es brindar productos y servicios que propicien una mejora en el medio ambiente, el entorno social y que a la vez permitan una rentabilidad a la empresa. “El interés por la sustentabilidad está creciendo en los consumidores, ésta es una carta a favor de los negocios que incorporan tecnología verde; sin embargo, es momento de observar las tendencias que se vislumbran en el futuro cercano”, señala Julián Vega Gregg (2013), Senior Advisor de Ernst&Young para la práctica de cambio climático y sustentabilidad.

### **METODOLOGÍA**

La metodología empleada para el desarrollo de esta investigación se llevó a cabo en dos fases, siendo la primera de ellas la consulta de fuentes y revisión de la literatura existente de acuerdo al tema de investigación; asimismo, se consultó fuentes de información oficial como la Secretaría de Economía; la Asociación Mexicana de Franquicias; Secretaría de Economía Municipal, entre otras. En la segunda fase, se diseñó un cuestionario estructurado por preguntas dicotómicas, distribuidas en cuatro secciones y que a la vez, fue aplicado a los administradores o encargados de las franquicias mexicanas y que operan actualmente en la ciudad de Hermosillo, Sonora, por lo que se considera una investigación de campo.

*Preguntas de Investigación:* ¿Qué tanto impacta el marketing sustentable como estrategia de posicionamiento global en las franquicias mexicanas que operan en la ciudad de Hermosillo, Sonora?

*Instrumento de Medición:* El instrumento que se diseñó para medir el marketing sustentable partió del contexto de las “4 P’s” de la mercadotecnia tradicional (Precio, Promoción, Plaza y Producto); sin embargo, no se perdió el enfoque de las “3 P’s” del marketing sustentable (*Planet, People y Profit*). Los cuestionarios fueron aplicados a los encargados o administradores de las 36 franquicias, de acuerdo a la muestra representativa calculada, lo que hizo más confiable y válida la información que se recabó.

Tabla 1: Directorio de las Franquicias Sonorenses Registradas en la Secretaría de Economía del Gobierno del Estado de Sonora, 2013

1. Big Torta.	14. D'Ver.	27. Morralla Express.	40. Sunland Sushi.
2. Carne Express.	15. Electrónica Aranda.	28. Mueblestética.	41. Sushi To Go.
3. Charisday Té Helado.	16. El Mezquite Sombrería.	29. Muro Block.	42. Tabú Sushi.
4. Chicanos Diésel (Nogales).	17. El Pescadito.	30. Olga.	43. Tacos El Chino.
5. Chiltepinos Wings.	18. Garrido Fresh Water.	31. Palo Alto Escuela Bilingüe.	44. Taste Boutique.
6. Chupa Dedos.	19. Jaas Light.	32. Pastelería Suspiros.	45. Tiendas Naturistas Jung.
7. CIF	20. Kowi (Navajoa).	33. Plancha Fácil.	46. Tinta Max (Navajoa).
8. City Salads.	21. La Fábula Pizza.	34. Prodomus.	47. Varón Peluquería.
9. Comicx.	22. La Reyna de Sonora.	35. Que Rollo Sushi.	48. Vimark.
10. Comunicación Digital Empresarial	23. Las Parrillas de Sonora (Obregón).	36. Refriauto.	49. W Rent A Car.
11. Creni.	24. Los Arbolitos de Cajeme (Obregón).	37. Restaurant Elba (Santa Ana).	
12. Double AA Tacos.	25. Maru AWA Purificada.	38. Shio Nails.	
13. D'Abaco Consultores.	26. Mochilandia.	39. Start Bien Café.	

En la presente Tabla se muestra el directorio de las franquicias mexicanas que actualmente están operando en el Estado de Sonora. Fuente: Elaboración propia a partir de la información de la SE, 2013.

El cuestionario diseñado se aplicó durante el mes de junio del año 2013, al total de las franquicias que integran la muestra estadística y que operan en la ciudad de Hermosillo, Sonora, siendo 33 empresas. En ese sentido, se puede considerar que el estudio es de corte transversal y de diseño no experimental, ya que la información obtenida y analizada corresponde a un periodo en particular y se maneja de forma cualitativa para una mejor interpretación, pero no se modifica los argumentos originales de las fuentes de información primaria. La metodología usada para el apoyo en la interpretación de los resultados obtenidos de los cuestionarios aplicados, fue la utilizada por *The European Business Network for Corporate Social Responsibility (CSR Europe)* y por el *Business to Business Working Group on Sustainable Marketing*. Los factores básicos determinantes que se analizaron son los que se muestran en la Tabla 2 y que para efectos del presente trabajo de investigación se operacionalizaron como variables de acuerdo a las “3 P’s” del marketing sustentable.

Tabla 2: Operacionalización de las Variables de Acuerdo a las “3 P’s” del Marketing Sustentable

Variable	Consideraciones
Producto	¿De qué está hecho? ¿Quién lo hace? ¿Cuál es la vida útil del producto? ¿El embalaje es reutilizable / reciclable?
Plaza	¿Dónde se fabrica el producto? ¿Dónde / cómo se vende el producto? ¿Cómo se transporta?
Precio	¿Refleja el precio de manera adecuada los valores de sostenibilidad de la empresa? ¿Se le comunican al cliente de manera clara y precisa las características del producto?
Promoción	¿Qué transmite el producto sobre los valores de la empresa? ¿Podría utilizarse el producto para mejorar la reputación de la organización?
Profit	¿Detalla los atributos del producto? ¿Es el compromiso de la empresa serio?

<p>People</p> <p>Planet</p>	<p>¿Es consciente la empresa de la oportunidad de mercado?</p> <p>¿El precio es razonable al producto que se ofrece?</p> <p>¿Cuenta con un programa de capacitación para sus empleados?</p> <p>¿Cuenta con un programa de apoyo para sus empleados y sus familias?</p> <p>¿Realiza campañas en mejora del medio ambiente?</p> <p>¿Cómo manejan el cuidado del medio ambiente en la elaboración de sus productos?</p>
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En la presente Tabla se muestra la operacionalización de las variables sujetas de estudio. Fuente: Elaboración propia a partir de la literatura consultada.

### RESULTADOS

A continuación, se presentan los principales resultados obtenidos y procesados en el SPSS, v21. En la Tabla 3 se puede apreciar el total de franquicias por sector, predominando el sector de alimentos con un total de 52.78 %

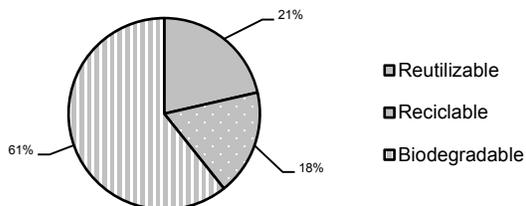
Tabla 3: Número de Franquicias Por Sector

Sector de la Franquicia	Número de Franquicias	Porcentaje
Sector de Refacciones	3	8.33 %
Sector de Alimentos	19	52.78 %
Sector de Belleza	4	11.11 %
Sector de Informática y Consumibles	2	5.56 %
Sector de Botanas y Dulces	1	2.78 %
Sector de Decoración	1	2.78 %
Sector Varios	6	16.67 %
Total =	36	100.00 %

En la presente Tabla se muestra el número de franquicias por sector que actualmente están operando en la ciudad de Hermosillo, Sonora, y que forman parte de la muestra que fue seleccionada. Fuente: Elaboración propia a partir de los datos obtenidos en el SPSS, v21.

De acuerdo a la vida útil del producto que manejan las franquicias, un 36.1 % afirmaron que sus productos tienen una utilidad de 1 a 6 meses, mientras que en menor escala, observaron que la vida útil de sus productos oscilan entre 6 a 5 años. Analizando el tipo de producto que manejan las franquicias mexicanas, en la Figura 3, se puede apreciar el tipo de producto clasificado de acuerdo al instrumento de medición, en biodegradable, reciclable y reutilizable.

Figura 3: Tipo de Producto Utilizado Por las Franquicias Mexicanas



En la presente Figura se muestran los porcentajes por tipo de producto que manejan las franquicias mexicanas que operan en la ciudad de Hermosillo, Sonora. Fuente: Elaboración propia a partir de los datos obtenidos en el SPSS, v21.

Otro resultado importante de análisis es el tipo de material con que está fabricado el empaque del producto que comercializan las franquicias mexicanas, el cual se puede observar en la Tabla 4, donde se especifica las cinco áreas que se englobaron para fines del estudio.

Tabla 4: Material del Empaque del Producto

Material	Frecuencia	Porcentaje
Cartón	8	22.22 %
Unicel	5	13.89 %
Plástico	21	58.33 %
PVC	1	2.78 %
No Tiene	1	2.78 %
<b>Total</b>	<b>36</b>	<b>100.00 %</b>

En la presente Tabla se muestra la frecuencia del material con que está fabricado el empaque del producto que comercializan las franquicias que actualmente están operando en la ciudad de Hermosillo, Sonora. Fuente: Elaboración propia a partir de los datos obtenidos en el SPSS, v21.

Sin embargo, las respuestas proporcionadas a la pregunta de ¿qué si el material de empaque es reciclable?, se puede observar que el 36.1 % de los encargados de las franquicias contestaron que no lo es, mientras que un 58.3 %, dijeron lo contrario, a lo que se puede deducir que es necesario que las empresas inicien con una sensibilización hacia la producción o adquisición de materiales para el empaque más ecológicos o amigables con el medio ambiente. En cuanto al servicio de postventa, la gran mayoría de las franquicias consultadas observaron que no realizan ningún tipo de actividad relacionada con el servicio después de efectuado la venta del producto o el servicio brindado, siendo un grueso 72.2 %, lo que hace suponer que es necesario que las empresas realicen este tipo de estrategias en aras de posicionarse aún más en el mercado y que al mismo tiempo, atiendan una de las P's del marketing sustentable (*people*). Analizando la parte del *Profit*, los encargados de las franquicias respondieron en su mayoría de forma positiva al cuestionamiento de ¿qué si el precio es razonable al producto y/o servicio que se ofrece?, es decir, un 97.2 % respondió que sí, lo que indica que se están generando las expectativas en cuanto a ganancias y aceptación del producto y/o servicio entre los consumidores de la ciudad. En cuanto a la parte *People*, las franquicias de acuerdo a la Tabla 5, respondieron tener y llevar a cabo un programa de capacitación para sus empleados, lo que significa que se preocupan por el bienestar de ellos y del cómo manejar los productos y/o servicio que ofrecen o comercializan.

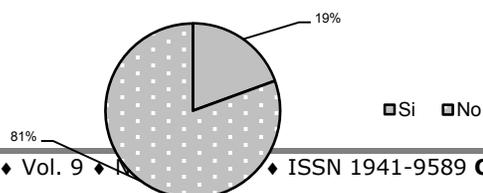
Tabla 5: Frecuencia de Respuestas Para la Operación de un Programa de Capacitación

	Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
No	4	11.1	11.1	11.1
Válidos Si	32	88.9	88.9	100.0
Total	36	100.0	100.0	

En la presente Tabla se muestran las frecuencias y porcentajes de respuesta a un programa de capacitación existente para las franquicias que actualmente están operando en la ciudad de Hermosillo, Sonora. Fuente: Elaboración propia a partir de los datos obtenidos en el SPSS, v21.

Analizando la variable de promoción, se obtuvo que un 83.3 % de las franquicias, detallan los atributos del producto o servicio que brindan en las campañas de promoción que se diseñan para tal efecto. Sin embargo, el 80.6 %, negó realizar campañas enfocadas a la mejora del medio ambiente, lo que se entiende que se tendrá que valorar la participación de la franquicias mexicana, muy en especial, aquellas que operan en la ciudad de Hermosillo, Sonora, en cuanto a las campañas de mejora y conservación del medio ambiente, como parte de sus valores y formas de actuación. El anterior resultado se puede apreciar con más ahínco en la Figura 4, ya que los valores obtenidos son mostrados gráficamente.

Figura 4: Frecuencia de Realización de Campañas Para Mejora del Medio Ambiente



*En la presente Figura se muestran los porcentajes por de realización de campañas de atención al medio ambiente por parte de las franquicias mexicanas que operan en la ciudad de Hermosillo, Sonora. Fuente: Elaboración propia a partir de los datos obtenidos en el SPSS, v21.*

## CONCLUSIONES

Se concluye que a partir del análisis realizado, que un marketing sustentable sería aquel que consiga la máxima satisfacción del cliente en cuanto a funcionalidad y servicio del producto, teniendo en cuenta tanto el uso de funciones ambientales, como los recursos naturales empleados; así como su capacidad para un tratamiento adecuado después de su vida útil dentro de unos determinados límites. Asimismo, el marketing sustentable debería contribuir a hallar puntos de encuentro entre el mundo de los negocios (franquicias) y los retos ambientales y sociales, en los que la situación resultante sea beneficiosa para ambas partes. Hoy, las mejoras ambientales de productos y servicios están demostrando que son la mejor vía para aumentar los beneficios y la eficiencia de las franquicias. Diferenciarse del resto depende de la capacidad de la empresa, en este caso, las franquicias mexicanas de transmitir el valor del marketing en cuanto al desarrollo sustentable aporta al producto o servicio. El objetivo es crear en el consumidor la necesidad de adquirir un producto y/o servicio, y hacer que se decante por él frente al de la competencia. En igualdad de características e igualdad de precios, los consumidores se basan para la toma de sus decisiones en el proceso de compra.

Por lo tanto y de acuerdo a los resultados obtenidos, existe una correlación fuerte en cuanto a los productos y tipo de material utilizado, lo cual indica que las franquicias mexicanas están haciendo uso de la sustentabilidad y cuidado del medio ambiente y que será la clave para que su estrategia de marketing sustentable sea efectiva. La elección de un buen mensaje no es sencillo, y más teniendo en cuenta que lo que se desea decir y lo que finalmente se percibe puede ser distinto. Esto pone de manifiesto que no se puede desvirtuar la realidad del modelo de negocio de la franquicia ni la imagen que se tenga sobre ella.

Por lo anterior, es oportuno hacer una reflexión del papel relevante que tienen las empresas como lo es el compromiso inalienable con el planeta en cuestiones ambientales, el cual presenta un ritmo de explotación de los recursos naturales mayor al grado de recuperación del mismo. El término “huella ecológica” acuñado por los autores Wakernagel y Rees (1996), hace referencia a este fenómeno que *“es una forma de medir la intensidad del impacto de la población sobre el medio ambiente a través de la cantidad de superficie que se requiere para producir los bienes que consume, dotarlo de servicios y absorber o reciclar sus desechos”*. Esta “huella ecológica” requiere la atención inmediata del gobierno, de la sociedad y de las empresas, sobre todo de estas últimas que generan un volumen importante de desechos contaminantes al medio ambiente como producto de su actividad.

### Estudios Posteriores

Una nueva línea de investigación que puede surgir del presente estudio o trabajo, es proponer un modelo de análisis de integración de las variables enmarcadas en el desarrollo sustentable y en la mercadotecnia “verde”, como parte de una estrategia global de negocios; así como ética en la forma de actuación de las empresas, de tal manera que permita la mejora en los modelos de negocios de todas las empresas nacionales e internacionales. Cabría mencionar que, algunas limitaciones que se pudieran presentar en el estudio o estudios posteriores, es la disposición de los

empresarios en cuanto al tiempo y tipo de información que se vaya a manejar o manipular como parte del instrumento de medición que se diseñe para tal efecto.

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# LA INFLUENCIA DE LA INNOVACIÓN Y LA INFORMACIÓN FINANCIERA EN LA COMPETITIVIDAD DE LA PEQUEÑA Y MEDIANA EMPRESA MANUFACTURERA

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## RESUMEN

*En este trabajo de investigación se busca medir la influencia de la innovación y la información financiera en la competitividad de la Pequeña y Mediana Empresa (Pyme) manufacturera. El objetivo es analizar los aspectos más importantes relacionados con la innovación, la información financiera y la incidencia de éstos en la competitividad empresarial, identificando la significancia y sus interrelaciones. Para este estudio se consideró una muestra de 149 Pymes del sector manufacturero del estado de Aguascalientes, México. Los resultados obtenidos muestran una evidencia empírica que la intervención de la consultoría externa especializada y la falta de protección del conocimiento mediante patentes son los factores de innovación más relevantes para la muestra, así como la repercusión de la información financiera en la competitividad de este tipo de empresas.*

**PALABRAS CLAVE:** Innovación, Información Financiera, Competitividad, Pyme Manufacturera.

## THE INFLUENCE OF INNOVATION AND FINANCIAL INFORMATION IN COMPETITIVENESS OF MANUFACTURING SMALL AND MEDIUM-SIZED ENTERPRISE

### ABSTRACT

*This research seeks to measure the impact of innovation and financial information on the competitiveness of the manufacturing Small and Medium-Sized Enterprises (SMEs). The aim is to analyze the most relevant aspects related to innovation, financial information and the impact of these on business competitiveness, identifying the significance and interrelationships. For this study, we considered a sample of 149 SMEs in the manufacturing sector of the state of Aguascalientes, Mexico. The results obtained show empirical evidence that the intervention of specialized external consultants and the lack of patent protection of knowledge are the most relevant factors in the innovation for the sample, as well as the impact of financial information on the competitiveness of such companies.*

**JEL:** M40, M20, L60

**KEY WORDS:** Innovation, Financial Information, Competitiveness, SMEs Manufacturing.

### INTRODUCCIÓN

Existen en la literatura una serie de investigaciones que abordan los recursos o factores clave en el éxito de las estrategias empresariales, permitiendo identificar cuáles son críticos y que se les confiere una mayor importancia para la competitividad y el crecimiento de las empresas (Rubio y Aragón, 2006; Warren y Hutchinson, 2000; Pelham, 2000, 1997; Barney, 1991; Huck y McEwen, 1991). Este análisis de investigaciones arroja que son diversos los recursos o factores internos que inciden en el éxito competitivo de las Pequeñas y Medianas Empresas (Pymes). Los más importantes, por ser los que aparecían con mayor frecuencia, son la tecnología, la innovación, los recursos comerciales, los recursos humanos, las capacidades directivas, aspectos financieros, la cultura y la calidad del producto o servicio. Como se observa, dentro de los principales recursos estratégicos se encuentran la innovación y la información financiera, los cuales pueden influir en el proceso de adaptación a los cambios del entorno y mejorar las oportunidades para alcanzar los objetivos empresariales.

En la actualidad no existe abundancia en estudios que consideran la innovación y el uso de la información financiera como pieza fundamental en el proceso de toma de decisiones encaminadas a la competitividad de las Pymes. La mayoría de la literatura se enfoca principalmente a abordar este tema en grandes empresas (Rouhani y Mahmodian, 2012; Guío, 2007; Gonzalo, 2004), dejando de lado su importancia en empresas de menor tamaño. Es por esto que surge la necesidad de estudiar la importancia de la innovación e información financiera en las Pymes de la industria manufacturera de Aguascalientes en su desempeño competitivo. Así, en el presente trabajo de investigación se utilizó un enfoque cuantitativo, empírico y correlacional en la cual se consideró la influencia de la innovación y la información financiera en la competitividad de las Pymes manufactureras del estado de Aguascalientes. Para esto, se realizó un muestreo probabilístico aleatorio simple de Pymes del estado arrojando una muestra de 149 empresas a quienes se les aplicó, durante el periodo comprendido entre abril – junio de 2012, un instrumento de medición tipo encuesta personalizada dirigida a los gerentes o responsables directos de la administración de este tipo de organizaciones.

Para la medición de los resultados, se aplicó un análisis de fiabilidad considerando el coeficiente Alfa de Cronbach con la finalidad de validar la confiabilidad del modelo teórico (Nunnally y Bernstein, 1994). Además se efectuó un análisis de la varianza (ANOVA por sus siglas en inglés: *Analysis of Variance*) para validar si las variables de competitividad empresarial toman valores medios significativamente distintos que los valores arrojados por la variable innovación y de la existencia de una persona encargada del análisis de la información financiera (Uriel y Aldás, 2005; Luque *et al.*, 2000). Ambos análisis se realizaron con el programa de cómputo IBM SPSS Statistics versión 19, con lo que se busca obtener resultados que permitan determinar si, efectivamente la innovación y la información financiera influyen de manera significativa en la competitividad de la muestra de Pymes manufactureras del estado de Aguascalientes.

### Marco Contextual

La Pyme es de suma importancia en la economía local y nacional. De acuerdo cifras arrojadas por el último censo económico llevado a cabo por el Instituto Nacional de Estadística y Geografía (INEGI) en el año 2009, las Pymes en México representan el 4.8% del total de las empresas. Además generan el 26.4 por ciento del Producto Interno Bruto y contribuyen con el 31.2 por ciento de los empleos formales. Con cifras muy similares, la Pyme también es muy importante en la economía del estado de Aguascalientes ya que según el Instituto Nacional de Estadística y Geografía, en Aguascalientes, el 5.14% de las empresas son de estos tamaños. Adicionalmente, las Pymes aportan el 24.85% de del producto interno bruto del estado y el 25.81% de las personas económicamente activas se encuentran ocupadas en una empresa de estas características (INEGI,

2009). Asimismo, cabe señalar que la industria manufacturera ocupa un lugar de coyuntura en la entidad. El 10.52 por ciento de las empresas manufactureras en la entidad son pequeñas y medianas (INEGI, 2009). De acuerdo a cifras proporcionadas por el INEGI, (2012), Aguascalientes ha sido uno de los estados en donde la industria manufacturera ocupa el primer lugar de aportación al producto interno bruto local con un 27.1%; además, principalmente el empleo en el estado de Aguascalientes está conformado principalmente por el sector manufacturero con un 30.4%. En este sentido, las remuneraciones totales al personal ocupado por la industria manufacturera asciende al 48.7% del total de remuneraciones a la población económicamente activa de la entidad.

### **REVISIÓN DE LA LITERATURA**

En la literatura, varios autores que han realizado importantes aportaciones en el tema, han coincidido en que parte importante en la estrategia empresarial constituyen los recursos con los que cuentan las organizaciones. En este sentido, Chandler (2000) estableció que la estrategia es el elemento que especifica las metas básicas de una empresa a un largo plazo, así como la adopción de planes de acción y la asignación de los recursos necesarios para alcanzar estas metas. Mintzberg (1996) señala que la estrategia busca el desarrollo de ventajas competitivas o la supervivencia de la organización incluyendo un adecuado esquema de utilización de los recursos. Según algunos investigadores, los recursos o factores clave en el éxito de las estrategias empresariales son la tecnología, la innovación, los recursos comerciales, los recursos humanos, las capacidades directivas, aspectos financieros, la cultura organizacional y la calidad del producto o servicio (Rubio y Aragón, 2006; Warren y Hutchinson, 2000; Pelham, 2000, 1997; Barney, 1991; Huck y McEwen, 1991). Como se observa en el párrafo anterior, dentro de los principales recursos estratégicos se encuentran la innovación y los aspectos financieros, los cuales pueden influir en el proceso de adaptación a los cambios del entorno y mejorar las oportunidades para alcanzar los objetivos empresariales.

Por otra parte, dentro de los principales problemas que enfrentan las organizaciones empresariales del sector industrial en México son la falta de innovación y deficiencias en la cultura financiera (Castillo, 2010; Secretaría de Economía, 2007). En relación a la innovación, de acuerdo a la Encuesta de Entorno Empresarial 2010: "Problemática que Enfrentan las Empresas del Sector Industrial" realizada por la Cámara Nacional de la Industria de Transformación (CANACINTRA), se evidencia que dentro de los principales problemas que padecen las empresas del sector industrial se encuentra la actividad innovadora. Por su parte, la Pyme manufacturera comparte esta realidad al no poder hacer frente a la competencia de manera adecuada debido a que carece de actividades de innovación y desarrollo (Cámara Nacional de la Industria de Transformación, 2010).

Hadjimanolis (2000) señala que la mayoría de los estudios sobre innovación se han concentrado en empresas grandes, que por su estructura organizacional y su carácter de orientación al mercado, son por naturaleza innovadoras. A pesar de que las grandes empresas, por poseer más medios financieros y humanos, pueden parecer más propensas a realizar innovaciones, algunos trabajos muestran que no se trata de un factor de éxito exclusivo de este tipo de empresas (Aguilera, *et al.*, 2013). De hecho, muchas estadísticas evidencian que las Pymes son las principales promotoras del crecimiento en los niveles de innovación de los países (Camisón *et al.*, 2004; Lloyd *et al.*, 2002). Berumen (2008), Furio Blasco (2005) y Witt (2002) –citando a Schumpeter (1912)– mencionan que la innovación consiste en la utilización productiva de algo nuevo (bienes con nueva calidad, nuevo método productivo, nuevo mercado, nuevas fuentes de materias primas o nuevos esquemas de organización). Al respecto Sutton (1980) indica que la innovación es un proceso que implica la elaboración de productos y servicios con cierto grado de

novedad para quien los adopta. También Frenkel (2003) indica que la innovación faculta a las empresas para operar más eficientemente y mejorar su habilidad para ofrecer productos al mercado, resaltando el importante rol de la información y el conocimiento en el cambio de procesos y tecnología.

Administradores de empresas que han tenido un crecimiento acelerado han señalado que la innovación es, más que cualquier otro atributo, un aspecto diferenciador que les ha brindado una ventaja frente a sus competidores más cercanos (PricewaterhouseCoopers, 2002). La transformación de ideas en nuevos negocios, productos, servicios y soluciones se sustenta en la comprensión de las sinergias e interacciones entre las diferentes tecnologías, productos y conocimientos de la empresa y el establecimiento de una adecuada organización interna (Helfat y Raubitschek, 2000). Desde esta premisa, parte de la competitividad de la empresa se puede explicar a partir del potencial innovador que la creación, transferencia, integración y aplicación de conocimientos aportan a la organización.

Otro recurso importante en relacionado con la estrategia empresarial es la parte financiera (Koontz, 2004; Chandler, 2000; Mintzberg, 1996). Koontz (2004) señala que, para el proceso de formulación de la estrategia empresarial es importante conocer la situación por la que pasa la organización para así poder adoptar los cursos de acción y la asignación de los recursos necesarios para lograr los propósitos fundamentales y los objetivos básicos a largo plazo. Considerando entonces los recursos y capacidades clave del éxito de las empresas, éstas utilizan diversas estrategias formuladas partiendo de la situación actual y sus factores externos e internos que la rodean, visualizando el crecimiento y posición competitiva futura deseada (Haugstad, 1999). Así, en el proceso de formulación de la estrategia, el administrador deberá pensar en sus distintos recursos y capacidades disponibles, consciente de la realidad actual por la que pasa la entidad y hacia dónde la querrá dirigir. Como punto de partida, es necesario establecer un diagnóstico adecuado, por lo que será fundamental contar con información financiera suficiente que permita conocer cómo se encuentra la empresa hacia su interior y con respecto al entorno que la rodea. Por lo tanto, parte primordial del análisis situacional de la entidad económica es la información financiera, ya que esta última conlleva implícito un potencial valioso para la determinación de un adecuado diagnóstico interno y externo (Bolívar, 2004).

De acuerdo al Consejo Mexicano para la Investigación y Desarrollo de Normas de Información Financiera (CINIF) (2013), la información financiera que emana de la contabilidad, es información cuantitativa expresada en unidades monetarias y descriptiva, que muestra la posición y desempeño financiero de una entidad, y cuyo objetivo esencial es el de ser útil al usuario general en la toma de sus decisiones económicas. Se enfoca esencialmente a proveer información que permita evaluar el desenvolvimiento de la entidad, así como en proporcionar elementos de juicio para estimar el comportamiento futuro de los flujos de efectivo, entre otros aspectos. La información financiera representa entonces, una herramienta básica para establecer un diagnóstico más profundo y objetivo de la situación y desempeño de la administración de una entidad económica determinada, sirviendo como apoyo en la toma de decisiones (Consejo Mexicano para la Investigación y Desarrollo de las Normas de Información Financiera, 2013).

A la vez, Naruanard y Kotey (2006) revelan que la calidad de la información financiera tiene un efecto positivo significativo en el rendimiento y en la percepción de su capacidad para acceder a capital externo propietarios y gerentes de las Pymes. Además señalan que, junto a la falta del conocimiento del negocio y la carencia de la información financiera les impide aprovechar oportunidades de financiamiento con proveedores e instituciones financieras, lo cual impacta en su desempeño competitivo. En las organizaciones de hoy, los datos y la información son una de

sus principales riquezas. Las partes interesadas en las empresas requieren utilizar esta riqueza para ganar ventajas competitivas, basándose en ella la toma de decisiones de negocios orientadas también al desarrollo de innovaciones en productos y procesos administrativos. Los sistemas de información de negocios, como son los sistemas de información financiera, convierten y almacenan los datos financieros importantes.

Por lo tanto, es primordial integrar la toma de decisiones apoyándose en el medio ambiente de estos sistemas (Rouhani y Mahmodian, 2012). Por lo tanto, para las empresas manufactureras, la innovación y la utilización de la información financiera representan aspectos que influyen de manera positiva en su competitividad. Estos aspectos son determinantes en la estrategia empresarial, puesto que el éxito éstas, por una parte se asocia al desarrollo de nuevos productos, servicios o procesos que permitan responder a las necesidades de los clientes, adaptarse a los cambios en el entorno o mejorar las oportunidades para alcanzar los objetivos de la empresa (Rubio y Aragón, 2006; Camisón *et al.*, 2004; Lloyd *et al.*, 2002). Para ello, se puede plantear la siguiente hipótesis:

H<sub>1</sub> - La Innovación Incide Positivamente en la Competitividad de la Pyme Manufacturera

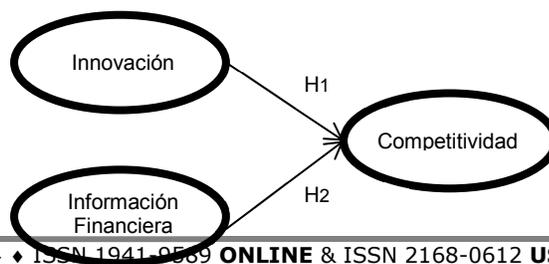
Por otra parte, Rouhani y Mahmodian (2012) señalan que los datos y la información son una de las principales riquezas de las organizaciones, las partes interesadas en las empresas requieren utilizar esta riqueza para impulsar la competitividad, basándose en ella su toma de decisiones de negocios. En este sentido se formula la siguiente hipótesis:

H<sub>2</sub> – La Utilización de la Información Financiera Influye Positivamente en la Competitividad de la Pyme Manufacturera Es por ello que en el presente trabajo de investigación, se realizó con una muestra de empresas para investigar y medir el papel de la innovación y la información financiera como factores que inciden en la competitividad de las Pymes manufactureras del estado de Aguascalientes.

## METODOLOGÍA

El presente trabajo de investigación es de tipo descriptivo, exploratorio y correlacional en el cual se analizó la influencia de la innovación y la información financiera en la competitividad de la Pyme manufacturera de Aguascalientes. Se tomó como referencia la base de datos que ofrece el Directorio Empresarial de Aguascalientes (SIEM, 2009) donde se menciona que en Aguascalientes, existen registradas 7,061 empresas de las cuales 1,332 son Pyme y para lo cual el tipo de muestreo fue aleatorio simple. El trabajo es de carácter empírico y se tomaron como muestra los datos de 149 Pymes del sector de manufactura en Aguascalientes a quienes se les aplicó un instrumento de medición tipo encuesta personalizada para los gerentes o responsables directos de este tipo de organizaciones. En base a esto, para medir las hipótesis establecidas, se plantea el siguiente modelo teórico:

Figura 1: Modelo Teórico



Fuente: Elaboración propia

### Desarrollo de Medidas

Para la elaboración del instrumento de medición utilizado en el presente trabajo de investigación, el cual se aplicó a los gerentes responsables de las Pymes manufactureras de Aguascalientes, se conformó mediante una adaptación de los siguientes tres bloques: Actividad Innovadora, Información Financiera y Competitividad. Para el análisis estadístico del primer bloque (F1) llamado Actividad Innovadora, se utilizaron 21 elementos en total medidos con escala Likert del 1 al 5 con diferentes descripciones (Choe *et al.*, 1997). El segundo bloque (F2) se denominó “Información Financiera” medido con un elemento dicotómico (Zorrilla, 2006; Claver *et al.*, 2005; Kent y Mentzer, 2003). El tercer bloque (F3), fue identificado como “Competitividad” compuesto por 30 elementos, medidos con escala Likert de 5 puntos (Porter, 2008, 1996, 1980; Camisón *et al.*, 2007; Prahalad y Hamel, 1990; Quinn y Rohrbaugh, 1983).

### RESULTADOS Y DISCUSIÓN

En primera instancia, se realizó un Análisis Factorial Confirmatorio (AFC) con la finalidad de evaluar la fiabilidad y validez de la escala de medida utilizada en este trabajo. Para ello, el programa estadístico SPSS arroja el valor de 0.903 para el coeficiente  $\alpha$  de Cronbach, con lo que se puede interpretar que el estudio es fiable y válido (Nunnally y Bernstein, 1994).

Tabla 1: Estadísticos de fiabilidad

Alfa de Cronbach	Alfa de Cronbach basada en los elementos tipificados	N de elementos
.903	.901	52

Fuente: Elaboración propia con IBM SPSS Statistics v19

Posteriormente, el análisis de la varianza se realizó para validar si las variables de competitividad empresarial toman valores medios significativamente distintos que los valores arrojados por la variable de la existencia de una persona encargada del análisis de la información financiera, lo cual permitirá separar la muestra en grupos distintos, además de medir si estos grupos son heterogéneos uno frente a otro y tener la certeza de que no tienen los mismos resultados entre sí (Luque *et al.*, 2000; Uriel y Aldás, 2005).

Tabla 2: ANOVA

		Suma de cuadrados	gl	Media cuadrática	F	Sig.
Inter-personas		1687.012	145	11.635		
Intra-personas	Inter-elementos	2030.746	51	39.819	35.425	.000
	Residual	8312.139	7395	1.124		
	Total	10342.885	7446	1.389		
Total		12029.897	7591	1.585		

Fuente: Elaboración propia con IBM SPSS Statistics v19

De acuerdo a estos resultados resumidos en la Tabla anterior, se observa que el p-valor es inferior a 0.05, lo que sugiere que hay una relación estadísticamente significativa en el vínculo entre las variables independientes que representan la innovación e información financiera con la variable dependiente de competitividad con un 95% de nivel de confianza (Manzano, 1995). Por lo tanto,

para las hipótesis planteadas en el presente trabajo de investigación muestran resultados favorables que permiten evidenciar resultados que a continuación se describen: Con respecto a la primera hipótesis  $H_1$ , los resultados obtenidos presentados en la Tabla 2 ( $p < 0.05$ ), indican que la Innovación incide positivamente en la Competitividad de la Pyme manufacturera. Para la segunda hipótesis  $H_2$ , los resultados obtenidos ( $p < 0.05$ ), indican que la utilización de la Información Financiera influye positivamente en la Competitividad de la Pyme manufacturera.

## CONCLUSIONES

Aspectos como la innovación y el conocer el desempeño de las empresas a través de la información financiera, representan factores de envergadura en el proceso de diseño e implementación de estrategias en las organizaciones, las cuales, considerando los factores señalados, pueden resultar con una mayor eficacia para encarar los desafíos que demanda el ambiente externo. Por una parte la innovación, ha despertado mayor interés en los investigadores considerándola como parte de sus estudios, mismos que han reafirmado que es determinante en el desempeño empresarial, influyendo en su competitividad. Asimismo, la Pyme manufacturera de Aguascalientes comparte esta realidad. Este estudio, por un lado se destaca el papel de la innovación dentro de la competitividad de la Pyme del estado de Aguascalientes, para lo cual los resultados obtenidos permiten inferir que la innovación influye positivamente en la competitividad de la muestra de Pymes de la industria manufacturera. Dentro de la innovación, se pueden resaltar dos puntos, la importancia de la intervención de la consultoría externa especializada y la escasa protección del conocimiento mediante patentes registradas en el Instituto Mexicano de la Propiedad Industrial (IMPI), debido a que estos aspectos son los que mayormente explican la importancia de la innovación en el marco de esta investigación.

Primeramente, los resultados de este estudio arrojaron un impacto negativo en la competitividad empresarial la falta de protección del conocimiento generado mediante patentes, debido a que la mayoría de las Pymes encuestadas manifestaron una baja protección del conocimiento desarrollado a través de registros en el Instituto Mexicano de la Propiedad Industrial, lo cual puede provocar que si un producto tiene éxito, otras empresas competidoras estarán tentadas a fabricarlo, aprovechándose de la capacidad innovadora de la empresa creadora, sin tener que pagar por dicho uso. Además del riesgo de que alguien más se anticipe y registre alguna invención de la empresa, lo que puede excluir de manera legítima a ésta última del mercado. Adicionalmente sin derechos de propiedad industrial, la empresa no tendrá posibilidades de negociar la concesión de licencias, venta o transferencia de tecnología a terceros (Morales, 2010). Asimismo, el servicio de consultoría externa especializada u “*outsourcing*” es prestado por un individuo o empresa que, como ente distinto a la empresa cliente, presta sus servicios desde fuera.

Otorga a las empresas un punto de vista libre de prejuicios con el cual puede apalancarse para tomar decisiones más objetivas ante situaciones específicas o generales. Además, los asesores externos, debido a su alto grado de especialización en temas particulares, comúnmente tienen mayor conocimiento sobre la situación actual en la propia industria en la cual se desenvuelve la organización y en otras distintas, así como poseer información actualizada y tendencias futuras útiles para el proceso de decisión. El uso de la consultoría externa especializada permite a la empresa incrementar su nivel de innovación al adaptar sus operaciones y costos a las necesidades actuales del mercado enfocando sus esfuerzos, talentos y recursos clave partes medulares del negocio, las cuales pueden ser la fabricación de artículos, así como brindar servicios de mayor calidad a los clientes, facultando a la consultoría externa adentrarse en otra clase de asuntos, apoyando en aspectos administrativos, financieros, técnica-tecnológica, entre otros.

El servicio prestado por consultores externos puede favorecer la creación de un ambiente en el cual se genere información financiera confiable, comparable y oportuna. En lo particular, para la Pyme, contratar servicios de “outsourcing” puede representar una alternativa viable permitiendo una carga financiera más ligera que la contratación de personal exclusivo para estas funciones aportando opiniones más objetivas e innovadoras. En este sentido, la Pyme, en repetidas ocasiones, requiere de especialistas que apoyen en el procesamiento, presentación y revelación de las transacciones, transformaciones internas y otros eventos que afecten económicamente a la organización para poder contar con información financiera útil para la toma de decisiones. Los resultados de este estudio permiten ver que prácticamente el 84% de los casos encuestados tienen a al menos una persona encargada del análisis de la información financiera, lo cual, en la mayoría de los casos, se refiere al servicio de consultoría externa.

Esto se puede adjudicar a que hoy en día uno de los principales problemas a los que se enfrenta la información financiera en el panorama nacional es la complejidad en la aplicación de la normatividad financiera mexicana para el procesamiento, revelación y presentación de reportes financieros. La posición y los resultados financieros pueden ser expresados de muy diferentes maneras, en función del tipo de organización que se trate. El empresario de una Pyme puede verse con limitaciones al momento de analizar, interpretar y aplicar los lineamientos contenidos en las Normas de Información Financiera mexicanas, a menos que tenga una preparación previa en estos temas. Es por esto que se ve con mayor obligación a contratar los servicios de expertos que puedan auxiliar en este sentido, aunque en muchas ocasiones sólo sea para fines de cumplimiento fiscal. Aunado a esto, actualmente en México no existe normatividad financiera diseñada particularmente para las empresas de menor tamaño, diferenciándolas de las grandes, considerando las características y problemáticas especiales de estos tipos de entidades económicas. Aun cuando en México el Consejo Mexicano de Normas de Información Financiera (2011), argumentando que los mismos principios de reconocimiento y de valuación son aplicables a todas las entidades que emiten estados financieros, cualquiera que sea su tamaño, decidió que en el país no se admitiera; con la finalidad de lograr una mayor adecuación a las organizaciones económicas de menor tamaño, se puede buscar la adopción de la “IFRS for Small and Medium sized Entities” o “IFRS for Smes” (Norma Internacional de Información Financiera para entidades de tamaño pequeño y mediano o NIIF para Pymes) emitida por el Consejo de Normas Internacionales de Contabilidad (International Accounting Standards Board - IASB). Esta norma ofrece una estructura alternativa que puede ser aplicada por las entidades de menor tamaño en lugar del conjunto pleno de estándares nacionales e internacionales de información financiera vigentes. Mediante la eliminación de algunos tratamientos permitidos por las NIIFS, la eliminación de asuntos y requerimientos de revelación que generalmente no son relevantes para las Pymes, y la simplificación de los requerimientos para el reconocimiento y la medición, la NIIF para Pymes reduce en más del 90 por ciento el volumen de los requerimientos de contabilidad aplicables a las Pymes, cuando se comparan con el conjunto pleno de las NIIFS. Con esto, muchas Pymes pueden encontrar un “sello” reconocido internacionalmente para sus estados financieros, lo que mejorará su acceso a mercados globales (Muñoz, 2009).

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# CASO DE LA EMPRESA DE B & B, INC.: ANÁLISIS DE LA COMPETITIVIDAD DE LA INDUSTRIA ELECTRÓNICA DE TIJUANA, B.C., MÉXICO

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## RESUMEN

*En la presente investigación se realiza una correlación de los niveles de turbulencia que inciden en la competitividad de la empresa B & B, Inc., cuyo objetivo es identificar las actividades que generan valor y crean ventajas competitivas, de manera que sea posible crecer y mejorar la posición de la compañía, la cual ha basado su ventaja competitiva en mantener costos bajos integrales utilizando el esquema de maquiladora que se le otorga en México a su división de diseño, ensamble y manufactura y de manejar la comercialización de su producción de filtros electrónicos a través de representantes de ventas en Estados Unidos de América; sin embargo, el surgimiento de nuevos competidores ha traído el reto de que la organización sea competitiva a escala mundial. Se aplicó un censo a 20 supervisores y gerentes de la empresa para revisar la situación actual de la organización con la finalidad de generar estrategias que promuevan su competitividad.*

**PALABRAS CLAVES:** Competitividad, Niveles de Turbulencia, Industria Electrónica

**JEL:** L21, L22,

## CASE OF THE B & B COMPANY, INC., COMPETITIVENESS STUDY OF ELECTRONIC INDUSTRY TIJUANA, B.C., MÉXICO

### ABSTRACT

*This research carried out a study on the levels of turbulence that impact the competitiveness of the company B & B Inc., as the company has based its competitive advantage in maintaining low integral costs using the maquiladora scheme that is given in Mexico to its design division, assembly and manufacturing, also handle the marketing of its production of electronic filters through sales representatives in the United States of America, however, the development of new competitors has brought the challenge of the organization to be competitive globally, to obtain results we applied a census to 20 supervisors and managers of the company to review the current status of the organization in order to develop strategies that promote competitiveness. In order to establish an action plan presenting the objectives, strategies and goals for the next five years, which will be evaluated by management prior to his implementation.*

**KEYWORDS:** Competitiveness, Turbulence Levels, Electronic Industry

**JEL:** L21, L22,

## INTRODUCCIÓN

La industria de la radiofrecuencia es un mercado muy fragmentado, donde algunos tipos de componentes son claves, como los filtros que son el corazón de los electrónicos. En Estados Unidos de América (EE. UU.), los componentes electrónicos representaron un mercado de \$3.6 billones de dólares en 2011, con un crecimiento anual aproximado proyectado de 5.6% anual hasta 2016. Es un mercado que ha incrementado su atractivo, ha tenido grandes evoluciones técnicas y cambios que son observados en el terreno competitivo de cada una de las categorías de los componentes. (Yole, 2012). La manufactura en EE. UU. ha sido un sector que se ha caracterizado por la costosa mano de obra en comparación con otros países, donde el lento crecimiento económico, la fortaleza de los competidores externos y la reubicación de fábricas en países emergentes han golpeado el sector gravemente. (*Economic sectors: Manufacturing*, 2007). La participación de la manufactura en el empleo total ha decrecido, cayendo de un alto 32% en 1953 a 9% en 2009. (Johnson, 2010)

Actualmente, México es el segundo proveedor más importante de productos electrónicos en el mercado de Estados Unidos; siendo la industria electrónica constituida por electrónica de consumo, computadoras personales, equipo de telecomunicaciones, componentes electrónicos y equipo industrial y médico, uno de los sectores de más rápido crecimiento en México en términos del potencial exportador donde los elementos centrales de competitividad son recursos humanos y tecnología. De acuerdo con estadísticas por el Instituto Nacional de Estadística y Geografía (2010), del Sistema de Cuentas Nacionales de México. Producto Interno Bruto por Entidad Federativa 2005-2009), la industria manufacturera es detonador del crecimiento económico del país y en los últimos años ha tomado mayor relevancia derivado de la apertura comercial, llevándola a contribuir con un 17.51% de la producción total del país, medida a través del Producto Interno Bruto (PIB); siendo Baja California el sector con mayor contribución al PIB con 20.77% por lo cual se puede reconocer su poder generador de crecimiento económico a través de la inversión y la generación de empleo, ubicándose dentro de los principales sectores económicos

La Empresa B & B, Inc. comercializa filtros electrónicos por medio de su división LE Engineering, Co. a través de representantes de ventas en Estados Unidos, asimismo se encarga de cubrir los costos de operación de Filtrónicos, S.A. de C.V. generados por las actividades de maquila, actividad que realiza bajo el Programa para la Industria Manufacturera, Maquiladora y de Servicios de Exportación (IMMEX), a través del cual el Gobierno Mexicano otorga la facilidad de manufacturar mercancías en el país para su posterior retorno al extranjero con beneficios que le permiten recibir facilidades administrativas, obtener ventajas arancelarias y acogerse a beneficios fiscales que disminuyen sus costos de operación en México, haciéndolas competitivas en el ámbito mundial.

## REVISIÓN LITERARIA

En la literatura en un estudio (Vega, Flores, Solís y Chávez, 2013), hacen referencia que en cuanto a la competitividad no es un estadio a alcanzar, sino un proceso continuo de esfuerzos conjuntos hacia la adquisición de atributos diferenciables en el que los resultados se obtienen a largo plazo. (Horta y Jung, 2002) . En tanto que el Instituto Mexicano para la Competitividad, conocido por sus siglas, por IMCO, (2011), define la competitividad como la capacidad de atraer y retener inversiones. La definición mostrada anteriormente, implica que para poder atraer y retener inversiones, es necesario que un país ofrezca las condiciones integrales aceptables en el ámbito internacional, para maximizar el potencial socioeconómico de las empresas y personas que en él radican y, además incrementar de forma sostenida su nivel de bienestar, más allá de las posibilidades intrínsecas que sus propios recursos, capacidad tecnológica y de innovación

ofrezcan y, todo ello, con independencia de las fluctuaciones económicas normales por las que el país atraviese. (Vega, Flores, Solís y Chávez, 2013)

En tanto que concepto de estrategia que de acuerdo con Ansoff (1997) define estrategia como una serie de normas para la toma de decisiones que guían el comportamiento de la empresa. Existiendo cuatro tipos de normas: Los objetivos y metas que son criterios con los que se mide el rendimiento presente y futuro de la empresa, la estrategia empresarial que son normas para desarrollar la relación de la empresa con su ambiente externo, es decir, qué tecnología de productos desarrollará, dónde y a quién se venderán los productos y cómo obtendrá la ventaja sobre sus competidores. El concepto de organización tales como las pautas para establecer las relaciones y los procesos internos dentro de la organización y por último las políticas operativas siendo las reglas por medio de las cuales la empresa dirige sus negocios diarios.

En cuanto a su funcionamiento se toma como base el Modelo de Turbulencia de Ansoff (1979), el objetivo de este modelo es analizar el comportamiento de las organizaciones en ambientes turbulentos, donde el estado actual de conocimiento de las organizaciones puede ser dividido en dos partes, la primera de cómo las organizaciones deberían comportarse y la otra parte consiste en por qué y cómo se comporta una organización. A través de este modelo se busca realizar un diagnóstico estratégico para determinar los cambios que deben realizarse en la estrategia de la empresa y en su capacidad interna para asegurar el éxito en su ambiente futuro, teniendo como concepto central que los resultados de éxito o fracaso de la empresa son ampliamente determinados por la alineación externa entre el nivel de turbulencia ambiental y la agresividad estratégica, y otra parte es interna entre la agresividad estratégica y las capacidades de la empresa. Para diagnosticar la alineación se debe construir una escala de turbulencia ambiental, que se limita a cinco niveles de turbulencia que pueden ser encontrados en una industria, donde en un extremo se encuentra la estabilidad con un ambiente completamente tranquilo y en el otro lado, el ambiente creativo caracterizado por grandes adelantos tecnológicos o trastornos sociopolíticos.

El nivel de turbulencia en una industria es el estado de conocimiento con el cual las organizaciones que sirven al ambiente deben responder a los cambios, las industrias no se mueven en un solo paso, puede ser que los adelantos tecnológicos, el cambio en la estructura de los mercados o una política de discontinuidad, aumenten rápidamente la turbulencia en una industria estable o manden a una industria en crecimiento al declive, por lo cual la escala de turbulencia ambiental puede ser usada para diagnosticar la turbulencia presente y futura de una industria. Ansoff, (1997) menciona que el nivel 1 de turbulencia describe un ambiente plácido en el cual una empresa puede dedicar atención a su mercado histórico, los retos continuos son una repetición del pasado, el cambio es más lento que la habilidad de la empresa para responder y donde se espera que el futuro sea una réplica del pasado, observando en raras ocasiones economías de libre mercado. En el nivel 2 el ambiente cambia en forma lenta y progresiva, una empresa tiene éxito si cambia sus productos sólo para responder a las medidas tomadas por los competidores, cuando estos no representan una amenaza, las empresas mantienen sus productos históricos, minimizando los costos para afectar los precios de la competencia.

En el nivel 3 las empresas mejoran progresivamente sus productos históricos anticipándose a las necesidades en evolución de los clientes, son empresas que descubrieron el secreto de dar forma a las necesidades del consumidor y de influir sobre ellas. El nivel 4 puede observarse en empresas cuyo entorno presenta una discontinuidad frecuente y una escasa capacidad de predicción, por lo que es mucho más complejo que los anteriores. La fórmula de éxito del nivel 5 es muy sencilla, aparentemente permanecer como líder en el desarrollo de productos, incorporando la ventaja de la innovación y la tecnología. Los distintos niveles de turbulencia se enfrentan por medio de la

agresividad estratégica definida por Ansoff, (1979), como el conjunto de características comunes a su actividad estratégica a través del tiempo, un común denominador o el patrón de una estrategia. La agresividad estratégica presenta como cualidades el grado de discontinuidad y la puntualidad; donde se analiza el grado de discontinuidad de los nuevos productos desde el pasado.

Los ambientes competitivos y las estrategias de marketing, variando la escala de discontinuidad de ningún cambio a un cambio progresivo y de un cambio discontinuo en la empresa pero que puede observarse en el ambiente o un cambio creativo que no se ha observado previamente; mientras que la puntualidad se refiere a la introducción de nuevos productos de la empresa en relación con nuevos productos que aparecen en el mercado, pudiendo pasar por ser reactiva, previsor, innovadora o creativa. (Ansoff, 1997). La capacidad estratégica es la medida de efectividad con la que una organización apoya la agresividad y que es determinada por la competencia de la administración, la estructura y la cultura.

## **METODOLOGÍA**

Para el presente trabajo se eligió una muestra de 20 supervisores y gerentes por tratarse de un estudio de caso realizado en una empresa, aplicándoseles un cuestionario conformado por 33 preguntas relacionadas al tema de estudio. Se utilizó una escala de medición con una escala de *lickert*. Se elaboraron los cuadros y gráficos que nos permite identificar, analizar y correlacionar los niveles de turbulencia para determinar los factores que inciden en la competitividad de la empresa B & B, Inc., y elaborar un perfil estratégico. Una vez recopilada la información de los cuestionarios, se procedió a la elaboración de una base de datos en SPSS 16.0 y posteriormente se realizó el respectivo análisis descriptivo y estadístico para su interpretación.

### Planteamiento del Problema

B & B, Inc. ha basado su ventaja competitiva en mantener costos bajos integrales utilizando el esquema de maquiladora que se le otorga en México a Filtrónicos, S.A. de C.V. y de manejar con *LE Engineering, Co.*, la comercialización de filtros electrónicos a través de representantes de ventas en Estados Unidos de América; sin embargo, ante el surgimiento de competidores globales, la empresa se ve en la necesidad de buscar nuevas estrategias que deriven en el incremento de la eficiencia para mantener su crecimiento en el sector y su posición en el mercado, por lo cual se busca ejercer acciones que le permitan fortalecer y maximizar cada una de las ventajas que posee con respecto a sus competidores.

### Justificación

Debido a la gran competencia del mercado, se tiene la necesidad de implementar estrategias que garanticen el éxito futuro, por lo cual se busca analizar el medio ambiente, la estrategia y la capacidad de respuesta de la empresa a través de la correlación de variables que inciden en la competitividad, con el objetivo de determinar la situación actual de B & B, Inc. Esta investigación se justifica desde el punto de vista práctico, ya que propone estrategias de acción al identificar, analizar y correlacionar los niveles de turbulencia para determinar los factores que inciden en la competitividad de la empresa B & B, Inc., y elaborar un perfil estratégico.

### Objetivos

*Objetivo General:* Identificar, analizar y correlacionar los niveles de turbulencia para determinar los factores que inciden en la competitividad de la empresa B & B, Inc., y elaborar un perfil estratégico.

*Objetivos específicos:* Identificar, analizar y correlacionar los niveles de turbulencia para determinar los factores que inciden en la competitividad de la empresa B & B, Inc. Determinar los niveles de turbulencia para la elaboración del perfil estratégico.

*Muestra:* Se conoce la población total, siendo la población objetivo los supervisores y gerentes de la empresa B&B, Inc. ya que cuentan con los criterios establecidos para el estudio de caso, llevándose a cabo un censo para obtener las mediciones del número total de los sujetos de estudio, aplicando los cuestionarios a través de una entrevista personal para estar en posibilidad de aclarar dudas que pudieran surgir sobre el mismo, estas fueron válidas y ninguna fue excluida al momento de analizar la información.

*Validación del Instrumento:* A los propietarios se les aplicó un cuestionario conformado con 33 preguntas, el cual fue validado relacionado al tema de estudio. Se utilizó una escala de medición con categorías de respuestas de opción múltiple. Se elaboraron los cuadros que permiten un análisis de los niveles de turbulencia que inciden en la competitividad de la Empresa B&B Inc. La validez del cuestionario se determinó mediante el coeficiente de confiabilidad de *Alfa-Cronbach*, por medio del programa SPSS: el resultado arrojado por dicho programa fue de .80, un grado de confiabilidad aceptable (ya que está por arriba .60 y de 0.70, puntuación mínima aceptable.). (Flores, Vega, Solís, 2013)

Tabla 1: Validación del Instrumento

Alfa de Cronbach	N de elementos
.824	33

Tabla 4. Estadístico de fiabilidad Fuente: SPSS versión 16.0

## RESULTADOS

Para determinar las variables en las que existe correlación se utilizó la Matriz de Correlación de *Pearson*. Los resultados de las correlaciones permiten concluir que dos variables están relacionadas. Se propone como estrategia de investigación a partir de la evidencia que arroja la matriz de coeficientes de correlación de *Pearson*, considerar sólo aquellas correlaciones significativas al rango de 0.01 y 0.05 con una magnitud igual o mayor a 0.5, lo cual representa una correlación positiva de moderada a fuerte. (Vega, Flores, Solís, 2012)

Tabla 2: Matriz de Pearson. Correlaciones Bivariadas de las Variables Independientes

VARIABLES	Correlación
Medio ambiente - Medio ambiente	0.649(**)
Medio ambiente - Agresividad	0.619(**)
Agresividad - Agresividad	0.680(**)
Agresividad - Cultura	0.645(**)
Agresividad - Administración	0.616(**)
Cultura - Estructura	0.629(**)
Cultura - Administración	0.975(**)
Estructura - Administración	0.682(**)

Fuente: Elaboración propia. (2012) En la tabla se observan las correlaciones resultado del análisis estadístico a través del SPSS 16.0, se muestran las correlaciones más altas con respecto a las variables independientes, dando como resultado que el medio

*ambiente incide de manera directa con el medio ambiente en 0.649, el medio ambiente incide de manera directa con agresividad en 0.619, asimismo que se presenta una incidencia directa en la agresividad del 0.680, en tanto que la agresividad incide directamente con la cultura en 0.645 y con la administración en 0.616, también se presenta una correlación entre la cultura incidiendo de manera directa con la estructura en 0.629 y la administración en 0.975 y por último una correlación entre la estructura incidiendo de manera directa con la administración en 0.682.*

*\*\*La correlación es significativa en el nivel 0.01*

*\* La correlación es significativa en el nivel 0.05*

*Medio ambiente – Medio ambiente:* Se considera que existe un relación positiva y fuerte entre la presión que ejercen los clientes y la frecuencia con que aparecen nuevos productos en la industria. De igual manera la frecuencia con que aparecen nuevos productos en la industria presenta una fuerte relación con el ritmo de cambio de la tecnología. Medio ambiente – Agresividad Existe una fuerte relación entre el futuro de la capacidad de la industria para enfrentar la demanda y como se desarrolla el mercado. Agresividad – Agresividad Se pudo encontrar que el enfoque para el desarrollo del producto tiene una amplia relación con cómo se desarrolla el producto. Agresividad – Cultura El enfoque para el desarrollo del producto presenta una fuerte relación con la actitud hacia los planes de mejora en la empresa.

*Agresividad – Administración :* Se muestra una fuerte relación entre cómo se desarrolla el mercado y el modelo de éxito que se utiliza como factor clave del éxito.

*Cultura – Cultura :* Se observó una fuerte relación directa entre los valores y actividades de la empresa y la actitud hacia el cambio.

*Cultura – Estructura:* El sistema de recompensas y sanciones tiene una muy fuerte relación con cuál es la organización en la empresa. También se encontró una muy fuerte relación entre la comunicación ascendente y descendente y el grado de flexibilidad organizacional.

*Cultura – Administración:* La comunicación ascendente y descendente tiene una relación importante con la forma en que se resuelven los problemas.

*Estructura – Administración:* Se consideró una relación fuerte respecto a cómo se lleva a cabo la descripción de puestos y que tipos de conocimientos se tienen. Asimismo existe una fuerte relación entre el grado de flexibilidad organizacional y la forma en que se resuelven los problemas. La forma de cómo se controlan las señales de los problemas presentó una fuerte relación con el modelo utilizado como factor clave del éxito.

### Modelo de Turbulencia Ambiental

Diagnostico estratégico Para elaborar el diagnostico estratégico se recurrió al modelo de turbulencia ambiental donde se utilizó como instrumento un cuestionario de 33 *items* que se aplicó a 20 gerentes y supervisores de B & B, Inc. para el análisis del medio ambiente, la agresividad estratégica y la capacidad de respuesta de la empresa, donde se visualizó el futuro a 5 años de acuerdo a la percepción de gerentes y supervisores acerca del ciclo de vida de la demanda y la tecnología pronosticado en base a la extrapolación de tendencias históricas, con los siguientes resultados:

Tabla 1: Diagnóstico estratégico de B & B, Inc

Diagnostico estratégico	Nivel
Medio ambiente	3.4
Agresividad estratégica	2.9

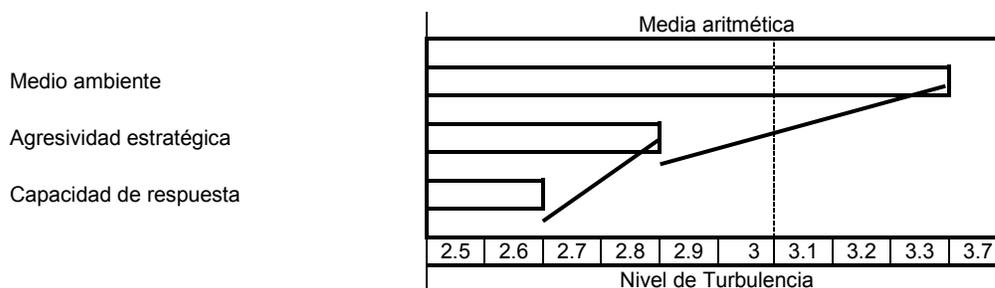
Capacidades		2.7
a) Estructura	2.9	
b) Cultura	2.6	
c) Administración	2.5	
Total		9.1
Media aritmética		3.0

En la Tabla , se muestra el análisis del medio ambiente dando como resultado un nivel de 3.4., la agresividad estratégica con un 2.9 y la capacidad de respuesta de la empresa en cuanto a su estructura con 2.9, cultura 2.6, administración 2.5, donde se visualizó el futuro a 5 años de acuerdo a la percepción de gerentes y supervisores acerca del ciclo de vida de la demanda y la tecnología pronosticado en base a la extrapolación de tendencias históricas. Fuente: Elaboración propia en base a cuestionario de Ansoff para el diagnóstico estratégico. (2012)

De acuerdo al diagnóstico estratégico el medio ambiente se ubica en un nivel de 3.4, mientras que la agresividad estratégica se encontró en 2.9, finalizando con el promedio determinado para estructura, cultura y administración para establecer la capacidad de respuesta de B & B, Inc. en un nivel de 2.7, elaborado basándose en el modelo de turbulencia ambiental de Ansoff, representado de acuerdo a lo siguiente:

De acuerdo a la aplicación del modelo de turbulencia ambiental se puede concluir respecto a medio ambiente de acuerdo a lo siguiente: En un futuro la estructura de mercado tendrá pocos competidores, que podrán influir en el precio, con empresas líderes de mercado y con gran influencia en el precio y pequeñas empresas que no podrán influir en el mismo. Asimismo se considera que la empresa continuará con participación mundial sin necesidad de establecerse en otro país. Se considera que la industria en el futuro podrá satisfacer las necesidades de los clientes en cuanto a demanda de filtros electrónicos. La presión del gobierno en ciertos casos puede ser fuerte y determinante por medio de sus políticas económicas. La presión de los clientes se considera insistente y demandante para reducir constantemente precios y aumentar calidad. La frecuencia con la que aparecen nuevos productos se considera moderada, considerando también un ritmo de cambio de la tecnología rápido, donde la clave del éxito en la innovación será el crear nuevas tecnologías.

Figura 1: Grafica de Likert de B & B, Inc



La grafica de Lickert de B&B Inc, en cuanto al nivel de turbulencia tiene una media aritmética de 3.0, basada en el modelo de turbulencia ambiental de Ansoff, de acuerdo al diagnóstico estratégico realizado el medio ambiente se ubica en un nivel de 3.4, mientras que la agresividad estratégica se encontró en 2.9, finalizando con el promedio determinado para estructura, cultura y administración para establecer la capacidad de respuesta de B & B, Inc. en un nivel de 2.7. Fuente: Elaboración propia en base a cuestionario de Ansoff para el diagnóstico estratégico. (2012)

Respecto a agresividad se concluyó con lo siguiente: La forma de responder al cliente es identificar sus necesidades y satisfacer sus dudas y comentarios con un enfoque en desarrollar el producto basados en la mejora de productos existentes con la finalidad de aumentar su calidad, su desempeño o de mejorar las condiciones para su producción. El ciclo de vida del producto es considerado de mediano a largo, dependiendo del producto considerando desde 1 a 10 años el ciclo. Se considera que se introducen nuevos productos con una alta frecuencia, alrededor de cada

2 años. Respecto al desarrollo del mercado se considera que principalmente se mantienen clientes pues se tienen ventas continuas con los mismos clientes y de los mismos productos. Sin embargo, se busca expandir mercados a través de la captación de mercados que antes tenían los competidores.

*La respuesta de las capacidades arrojó lo siguiente:* Los valores de la empresa y actitudes de la empresa se basan en dejar funcionar las cosas y reaccionar cuando surge el problema, teniendo mayormente una actitud de reacción hacia el cambio y estableciendo como criterio de éxito la eficiencia en resultados y sancionando las desviaciones. Se pudo observar que la actitud hacia los planes de mejora es cuestionarlos otorgando apoyo parcialmente y donde existe una comunicación suficiente para cubrir las necesidades de la empresa lo que crea un ambiente de trabajo de cohesión en el grupo y solidaridad. Se considera que la organización de la empresa es de tipo funcional, con la existencia de supervisores especializados en determinadas áreas. Considerando que existe una moderada flexibilidad organizacional y donde las descripciones de puestos se llevan a cabo por tareas específicas, es decir en base a las funciones o actividades principales. Se considera como principal centro de poder al departamento de Ingeniería y con respecto al liderazgo para ciertas situaciones hay un liderazgo autoritario dominante para tomar decisiones sin necesidad de que participen subordinados y sin tener que justificarlas; sin embargo, se da también el liderazgo situacional que mantiene un equilibrio entre dirigir y apoyar basado en un comportamiento que define funciones y tareas de los subordinados, donde se señala qué, cómo y cuándo deben realizarlas y se controlan resultados, asimismo se da el comportamiento de apoyo centrado en el desarrollo del grupo, donde se fomenta la participación en la toma de decisiones y se mejora la cohesión, se apoya y motiva al grupo. La resolución de problemas es a través del método de prueba y error, donde se rechaza el riesgo pero también se considera la aceptación del riesgo conocido, sin buscar afrontar nuevos riesgos. La reacción a la crisis es utilizada como la base para resolver problemas, y donde se busca la desviación hacia los planes, encontrando que los sistemas y procedimientos son la base para la toma de decisiones.

### Perfil Estratégico

Con base en los resultados arrojados por el modelo de turbulencia ambiental, se elabora el perfil estratégico, determinando que se presenta una brecha entre el perfil actual y el perfil óptimo futuro. La agresividad estratégica y la capacidad de respuesta actuales se encuentran por detrás de la turbulencia del medio ambiente, por lo que se sugiere alinear la agresividad estratégica y la respuesta de la empresa al medio ambiente para que la empresa pueda tener éxito en el futuro.

Tabla 2: Perfil Estratégico de B & B, Inc

Medio futuro	ambiente Repetitiva	En expansión	Cambiante	Discontinua	Sorpresiva
Complejidad	Nacional económica	+	Regional	<b>*Mundial</b>	Mundial, Social y Política
Conocimiento de los sucesos	Conocidos	Pueden extrapolarse		Discontinuos y conocidos	Discontinuos y nuevos
Rapidez del cambio	Más lento que la respuesta		<b>*Comparable a la respuesta</b>		Más rápido que la respuesta
Percepción del futuro	Recurrente	Puede pronosticarse	<b>*Predecible</b>	Parcialmente predecible	Sorpresas imprevisibles
<b>Agresividad estratégica actual</b>	<b>Estable</b>	<b>Reactiva</b>	<b>Previsora</b>	<b>Emprendedora</b>	<b>Creativa</b>
Base	Basada en precedentes	En aumento Basada en la experiencia	<b>*En aumento Basada en la extrapolación</b>	Discontinua Basadas en futuros esperados	Discontinua Basada en la creatividad
Capacidad de	<b>Preventiva</b>	<b>Producción</b>	<b>Marketing</b>	<b>Estratégica</b>	<b>Flexible</b>

<b>respuesta actual</b>					
Dirigida hacia	Precedentes	Eficiencia	<b>*Mercado</b>	Ambiente	Crear el ambiente
Actitud hacia el cambio	Se evita	<b>*Adaptable</b>	Busca cambios conocidos	Busca cambios novedosos	Busca cambios novedosos
Se busca	Estabilidad		<b>*Eficiencia operativa</b>		Creatividad
Sistema	Cerrado		*		Abierto
<b>Nivel de turbulencia</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

En la tabla 2, se muestra el Perfil estratégico en base al nivel de turbulencia determinado para el medio ambiente futuro, agresividad estratégica y la capacidad de respuesta actual de acuerdo al cuestionario de Ansoff. Fuente: Elaboración propia (2012)

Tabla 3: Plan de Acción Como Resultado del Análisis Realizado se Presenta el Siguiendo Plan de Acción Que Contiene Objetivos, Estrategias y Metas Para Los Próximos Cinco Años, el Cual Será Evaluado Por la Dirección Para su Posterior Implementación

<b>Objetivo</b>	<b>Penetración en el mercado</b>
Estrategia	Atracción de clientes de la competencia y clientes potenciales
Metas	Incrementar la participación del mercado en un 10%
Responsable	Gerente de ventas
Plazo	5 años
<b>Objetivo</b>	<b>Optimizar los procesos de producción</b>
Estrategia	Automatización de procesos de producción
Metas	Minimizar procesos manuales en un 50%
Responsable	Gerente de producción
Plazo	3 años
<b>Objetivo</b>	<b>Fabricación de filtros digitales</b>
Estrategia	Incurcionar en el diseño, ensamble y manufactura de filtros digitales
Metas	Incrementar en 5% anual la producción de filtros digitales
Responsable	Gerente de planta
Plazo	2 años
<b>Objetivo</b>	<b>Análisis de prestaciones laborales</b>
<b>Estrategia</b>	Reducción de costos laborales
<b>Metas</b>	Disminución de costos laborales en un 20%
<b>Responsable</b>	Gerente de Recursos Humanos
<b>Plazo</b>	1 año
<b>Objetivo</b>	<b>Fortalecimiento del modelo de operaciones de bajo costo</b>
Estrategia	Aplicar plan de austeridad en gastos de operación
Metas	Disminuir los costos de operación de un 15 a 20%
Responsable	Gerente de planta
Plazo	6 meses

En la tabla 3, se presenta el siguiente plan de acción que contiene objetivos, estrategias y metas para los próximos cinco años, el cual será evaluado por la dirección para su posterior implementación. Fuente: Elaboración propia (2012)

## CONCLUSIONES

Para el Modelo de Turbulencia Ambiental de Igor Ansoff se pudo observar que existe una brecha respecto del medio ambiente futuro con la agresividad estratégica, de la misma forma prevalece la brecha en relación al medio ambiente futuro con la capacidad de respuesta de la empresa B & B, Inc., por lo que se debe buscar que estas tanto la agresividad estratégica como la capacidad de respuesta de la empresa puedan alinearse al medio ambiente futuro con el objetivo de lograr el éxito futuro de la empresa. Las correlaciones resultado del análisis estadístico a través del SPSS 16.0, muestran las correlaciones más altas con respecto a las variables independientes, dando como resultado que el medio ambiente incide de manera directa con el medio ambiente en 0.649, considerándose que existe un relación positiva y fuerte entre la presión que ejercen los clientes y la frecuencia con que aparecen nuevos productos en la industria. De igual manera la frecuencia

con que aparecen nuevos productos en la industria presenta una fuerte relación con el ritmo de cambio de la tecnología.

En cuanto al medio ambiente incide de manera directa con agresividad en 0.619, existiendo una fuerte relación entre el futuro de la capacidad de la industria para enfrentar la demanda y como se desarrolla el mercado. Asimismo que se presenta una incidencia directa en la agresividad del 0.680, encontrándose que el enfoque para el desarrollo del producto tiene una amplia relación con cómo se desarrolla el producto. En tanto que la agresividad incide directamente con la cultura en 0.645, ya que El enfoque para el desarrollo del producto presenta una fuerte relación con la actitud hacia los planes de mejora en la empresa. De igual manera se la agresividad con la administración inciden de manera directa en 0.616, ya que se muestra una fuerte relación entre cómo se desarrolla el mercado y el modelo de éxito que se utiliza como factor clave del éxito. También se presenta una correlación entre la cultura incidiendo de manera directa con la estructura en 0.629, en cuanto al sistema de recompensas y sanciones tiene una muy fuerte relación con cuál es la organización en la empresa; también se encontró una muy fuerte relación entre la comunicación ascendente y descendente y el grado de flexibilidad organizacional. En tanto que existe una correlación directa entre la cultura y la administración en 0.975, dado que el sistema de recompensas y sanciones tiene una muy fuerte relación con cuál es la organización en la empresa; asimismo se encontró una muy fuerte relación entre la comunicación ascendente y descendente y el grado de flexibilidad organizacional. Por último una correlación entre la estructura incidiendo de manera directa con la administración en 0.682., considerándose una relación fuerte respecto a cómo se lleva a cabo la descripción de puestos y que tipos de conocimientos se tienen.

Asimismo existe una fuerte relación entre el grado de flexibilidad organizacional y la forma en que se resuelven los problemas. La forma de cómo se controlan las señales de los problemas presentó una fuerte relación con el modelo utilizado como factor clave del éxito. Al realizar el perfil estratégico la agresividad estratégica y la capacidad de respuesta actual se encuentran por detrás de la turbulencia del medio ambiente, por lo que se sugiere alinear la agresividad estratégica y la respuesta de la empresa al medio ambiente para que la empresa pueda tener éxito en el futuro. Asimismo se presenta un plan de acción el cual contiene objetivos, estrategias y metas para los próximos cinco años el cual lo debe evaluar la dirección para su posterior implementación en donde se propone: como primer objetivo realizar una penetración en el mercado, cuya estrategia es para atraer clientes de la competencia y clientes potenciales, teniendo como meta incrementar la participación de la compañía en el mercado en un 10%, siendo el responsable el Gerente de Ventas, llevándose a cabo el objetivo, la meta y la estrategia en un plazo de 5 años. El segundo objetivo es el optimizar los procesos de producción, cuya estrategia es lograr la automatización de los procesos de producción, teniendo como meta lograr minimizar los procesos manuales en un 50%, el responsable será el Gerente de Producción llevándose a cabo el objetivo, la meta y la estrategia en un plazo de 3 años. El tercer objetivo es la fabricación de filtros digitales en donde la estrategia es incursionar en el diseño, ensamble y manufactura de filtros digitales, estableciéndose como meta el incrementar en un 5% anual la producción de los mismos, siendo el responsable el Gerente de Plan, llevándose a cabo, el objetivo, la meta y la estrategia en un plazo de 2 años. El cuarto objetivo es el análisis de prestaciones laborales, cuya estrategia es la reducción de costos laborales y la meta es la disminución de costos laborales en un 20%, siendo el responsable siendo el responsable el Gerente de Recursos Humanos, llevándose a cabo el objetivo, la meta y la estrategia en un plazo de 1 año. Y el último objetivo es el fortalecimiento del modelo de operaciones de bajo costa, a través de la estrategia de aplicar el plan de austeridad en gastos de operación, teniendo como meta disminuir los costos de operación

de un 15% a un 20%, el responsable el Gerente de Planta, llevándose a cabo el objetivo, la meta y la estrategia en un plazo de 6 meses.

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# MODELO MATEMÁTICO DE INTELIGENCIA DE ENJAMBRE

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## RESUMEN

*Este artículo presenta la propuesta para un modelo de enjambre en una organización. Este modelo tiene como objetivo promover el mejoramiento continuo de las organizaciones, se presenta a través del modelo autoorganizativo. Además, este modelo se construye a partir de un análisis comparativo en el que se involucraron las diferentes teorías encontradas para adecuarse para su posterior aplicación. En el artículo se definen los diferentes enfoques organizacionales, las ventajas del modelo de enjambre y se describen los principios y conceptos básicos, que direccionan su aplicación, los resultados esperados, el proceso y los requerimientos generales que son necesarios para ponerlo en funcionamiento.*

**PALABRAS CLAVE:** Mejoramiento Continuo, Modelos Administrativos, Autoorganización, Enjambre

## MATHEMATICAL MODEL SWARM INTELLIGENCE

### ABSTRACT

*This paper presents the proposal for an organization in general swarm model. This model aims to promote the continuous improvement of organizations, is presented through self-organizing model. In addition, this model is constructed from a comparative analysis which involved different theories found to conform in order to apply .. The article defines the various organizational approaches, the advantages of swarm model and describes the principles and basic concepts, objectives and principles that address implementation, expected outcomes, process and general requirements that are necessary to put in operation.*

**JEL:** L14, L16, L19, L22, L29, L69, M14

**KEYWORDS:** Continuous improvement, administrative models, self-organization, swarm.

## INTRODUCCION

Las interacciones que se desarrollan al interior de una organización están basadas en las actividades de inteligencia que adelantan los individuos que pertenecen a ella, donde es relevante la obtención, tratamiento y análisis de la información destinada a la planeación y la toma de decisiones que permitan asegurar la perfecta ejecución del trabajo, disminuyendo el riesgo de cometer errores. En el contexto de la inteligencia como actividad de un grupo de individuos que interacciona con su entorno, esta investigación pretende hacer una identificación sobre los enfoques y teorías de organizaciones y el estado actual de los sistemas organizacionales, así como enmarcar conceptualmente las actividades y los procesos de interacción, para identificar las interacciones, que regulen el proceder, el comportamiento y forma de actuar en el quehacer, en

una organización, en el ámbito de los fundamentos, naturaleza, alcances y medios de control de estos factores. Durante la investigación se analizaron una serie de modelos que brindan las bases para diseñar y poner en marcha una propuesta organizada para el establecimiento y desarrollo de un Modelo de Gestión de Calidad. De igual forma se revisó la literatura de algunos de los modelos de calidad, de excelencia de calidad y de acreditación más reconocidos a nivel mundial – incluyendo implícitamente el enfoque a la gestión por procesos–, como referencias útiles para ser tenidas en cuenta en el desarrollo de la propuesta. Esta investigación tiene la siguiente organización. En la sección de revisión de la literatura se plantean los argumentos relacionados con la inteligencia de enjambre. Posteriormente se presenta la metodología utilizada, en donde se describe cómo debe aplicarse a una organización. Después de lo anterior se presentan resultados generales de la investigación. Finalmente las conclusiones, limitaciones y futuras recomendaciones de investigación.

## REVISIÓN LITERARIA

Los sistemas de Inteligencia de Enjambre (Stacey, 1995) están constituidos por agentes simples que interactúan localmente unos con otros y con el ambiente. Siguen reglas simples sin tener un control centralizado, como resultado de sus interacciones se produce la emergencia de una conducta global inteligente. La perspectiva clásica de la administración (1890), estudió la anatomía de la organización formal, la organización era vista como un medio racional para alcanzar metas y objetivos. El dirigente organizacional visto como un profesional líder que direcciona procesos de desarrollo humano y organizacional tendientes al aumento de la productividad y competitividad, con énfasis en resultados, en esta perspectiva está enmarcado en el enfoque sustancialista, donde eran líderes por sus condiciones personales, ya que el liderazgo se consideraba como un atributo de pocos elegidos. Además se encontraban bastante escépticos respecto a la posibilidad de crecimiento del potencial del liderazgo de las personas mediante la educación. En esta perspectiva, se manejan las siguientes teorías:

### Teoría de la Administración Científica

Elaborada por Frederick W. Taylor a finales del siglo XIX. El nombre de esta teoría obedece al intento de aplicar los métodos de la ciencia a los problemas de la administración para alcanzar elevada eficiencia industrial, los principales métodos científicos aplicables a los problemas de la administración son la observación y la medición. Las características principales son: entrenamiento en reglas y rutinas, —una mejor manera de hacer las cosas, motivación financiera y división del trabajo. El énfasis de esta teoría es las tareas, enfocado en el empleado, donde las personas eran consideradas como máquinas especializadas para realizar una función que estaba preestablecida y era parte de un resultado final. Como seguidores de Taylor están: Henry Metcalfe, Henry R. Towne, Frank y Lilian Gilbreth, Henry Gantt, Harrington Emerson, Moris Cooke, entre otros.

### Teoría de la Administración

Su pionero fue Henri Fayol, la cual se distinguía por el énfasis en la estructura. En esta teoría se parte del todo organizacional y de su división para garantizar la eficiencia en todas las partes involucradas, sean ellas órganos (secciones, departamentos), o personas (ocupantes de cargo y ejecutores de tareas). Las características principales son: definición de las funciones administrativas, división del trabajo, jerarquía, autoridad y equidad. La empresa se debe encargar de seis actividades: técnicas, comerciales, financieras, seguridad, contables y administrativas. Estas últimas teniendo en cuenta la planeación, organización, dirección, coordinación y control.

Como seguidores de Fayol están: Luther Gulick, Lyndall F. Urwick, James D. Money y Alan C. Reiley, entre otros.

### Teoría de la Burocracia

La teoría de la burocracia tuvo su origen en la necesidad de organizar la empresa, cuyo tamaño se incrementaba generando complejidad en la operación e integración de los diferentes recursos. Max Weber realizó el estudio sistemático de la burocracia, donde estableció la estructura, el equilibrio y el orden de las organizaciones por medio de la jerarquía integrada de actividades, definidas por reglas y/o normas. Las características de la burocracia son: división del trabajo, jerarquía de la autoridad, racionalidad, reglas y normas, compromiso profesional, registros escritos e impersonalidad. En énfasis es la estructura con enfoque en la organización global. Como seguidores de esta teoría están: Robert K. Merton, Philip Selznick, Alvin W. Gouldner, Richard H. Hall, Nicos Mouzelis, entre otros.

*Perspectiva humanística:* Esta perspectiva hace énfasis en el elemento humano y en las motivaciones que impulsan, estimulan e influyen en el comportamiento humano dentro y fuera del entorno laboral. El líder organizacional para esta perspectiva debe poder generar motivación entre sus colaboradores, es por eso, que el enfoque comportamentalista es el más adecuado. Ya que sería difícil obtener buenos logros a largo plazo sin un personal comprometido y motivado. Siempre se deben tener en cuenta los sentimientos, actitudes y cualidades humanas y emocionales de los empleados. Dentro de esta perspectiva, están:

*Teorías de la transición:* Mary Parker Follet basó sus estudios en la función de coordinación, como núcleo central de la disciplina administrativa y, por ello, llamo la atención sobre el tema mediante cuatro principios: Coordinar por medio de un contacto directo, coordinar el proceso de planeación, coordinar por medio de relaciones recíprocas y coordinar en forma de proceso continuo. Los aspectos relevantes que exploró son: reducir el conflicto, obedecer la ley de la situación y elaborar procesos psicológicos básicos. Su enfoque fue principalmente en las personas y en la forma en que éstas podían dirigir sus esfuerzos hacia sus objetivos. Chester Irving Barnard, propuso un análisis lógico de la estructura de las organizaciones y la aplicación de conceptos sociológicos a la administración de las mismas. Sostenía que las funciones del ejecutivo eran: proveer un sistema de comunicaciones, promover la garantía de los esfuerzos personales y formular y definir los objetivos de la organización que permitieran lograr la eficiencia.

*Escuela de las relaciones humanas:* Las interacciones que se desarrollan al interior de una organización están basadas en las actividades de inteligencia que adelantan los individuos que pertenecen a ella, donde es relevante la obtención, tratamiento y análisis de la información destinada a la planeación y la toma de decisiones que permitan asegurar la perfecta ejecución del trabajo, disminuyendo el riesgo de cometer errores. En el contexto de la inteligencia como actividad de un grupo de individuos que interactúa con su entorno, esta investigación pretende hacer una identificación sobre los enfoques y teorías de organizaciones y el estado actual de los sistemas organizacionales, así como enmarcar conceptualmente las actividades y los procesos de interacción, para identificar las interacciones, que regulen el proceder, el comportamiento y forma de actuar en el quehacer, en una organización, en el ámbito de los fundamentos, naturaleza, alcances y medios de control de estos factores.

En particular, la disciplina se enfoca en las conductas colectivas que resultan de las interacciones locales de los individuos entre sí y con el ambiente. La inteligencia de enjambres es una tendencia

informática inspirada en la teoría de enjambres, que forma parte de la rama de sistemas multiagentes de la inteligencia artificial. Los comportamientos se pueden modelar para solucionar problemas eficazmente, sin recurrir a implementaciones complejas, basado en los comportamientos sociales descentralizados y autoorganizativos. La inteligencia de enjambres corresponde a un grupo de técnicas que están basadas en el estudio del comportamiento colectivo en sistemas autoorganizados y descentralizados (distribuidos). Estos sistemas están conformados típicamente por una población de agentes computacionales simples capaces de percibir y modificar su ambiente de manera local. Tal capacidad hace posible la comunicación entre los individuos que detectan los cambios en el ambiente generado por el comportamiento de sus semejantes. Aunque normalmente no hay una estructura centralizada de control que dictamina como los agentes deben comportarse, las interacciones locales entre los agentes usualmente llevan a la emergencia de un comportamiento global. Otra característica adicional es la inexistencia de un modelo explícito del ambiente. Según Muñoz (2008) dentro de esta rama las técnicas principales son la optimización por enjambre de partículas (Partile Swarm Optimización PSO) y la optimización por colonia de hormigas (Ant Colony Optimización). Los sistemas de Inteligencia de Enjambre (Muñoz, 2008) están constituidos por agentes simples que interactúan localmente unos con otros y con el ambiente. Siguen reglas simples y sin tener un control centralizado, como resultado de sus interacciones se produce la —emergencia de una conducta global inteligente. Los objetivos más frecuentes para la conformación de enjambres son: La búsqueda de comida o pareja, la protección ante actividad predatoria, y el seguimiento de rutas migratorias. Aun cuando los individuos del enjambre no son inteligentes, las interacciones de estos, permiten al enjambre cumplir con su objetivo de manera inteligente, beneficiando a todos los individuos en una actividad que no pueden hacer por sí solos o cuya realización demandaría un gran esfuerzo individual. Las ventajas de la inteligencia de enjambre (Bonebau, 1999) son: Flexibilidad. El grupo se adapta con rapidez a un ambiente cambiante. Robustez. Incluso cuando uno o más individuos fallan, el grupo todavía puede realizar sus tareas. Auto-organización.

El grupo requiere poca supervisión o control de arriba hacia abajo. Los algoritmos más conocidos que se basan en inteligencia de enjambres son: optimización por colonia de hormigas (ACO), el cual se desarrolló en la segunda fase de Bioescenarios; enrutamiento basado en el comportamiento de termitas; colmena de abejas artificiales (ABHA); y, el PSO; todos estos algoritmos tienen un grupo de agentes computacionales autónomos que cumplen unas reglas simples, determinadas por el algoritmo particular. Las reglas están formuladas para que dichos agentes funcionen sin la necesidad de una estructura de control centralizada, de manera que interacciones locales de cada agente y sus vecinos permitan la emergencia de comportamientos globales inteligentes.

La inteligencia de las hormigas está basada en encontrar el camino más corto desde el sitio donde está su colonia hacia la fuente de alimentos, las hormigas envían varias exploradoras en diferentes direcciones. Cada hormiga va emitiendo una substancia química: feromona, que atrae a otras hormigas. Cuando encuentran alimento, las hormigas regresan a su colonia. La hormiga que encontró alimento regresa primero al hormiguero, ése será el camino más corto, y la ruta utilizada tendrá entonces el doble de feromona (viaje de ida y vuelta) que las demás rutas, ya que las demás hormigas aún no regresan a la colonia. Sus hormigas compañeras serán atraídas por el camino que tiene más feromonas, y al pasar por ese camino, lo impregnarán con más feromonas, y lo harán todavía más atractivo para las restantes hormigas. En este caso las reglas simples que han conducido a la conducta beneficiosa para toda la colonia de hormigas son dos: emita feromonas y siga el camino con más feromonas. Este método ha sido adaptado y seguido por empresas tales como France Telecom., British Telecom y MCI WorldCom en sus redes de

## Comunicaciones

Otro ejemplo de la inteligencia de enjambre, es la división del trabajo que tienen las abejas. Los individuos se especializan en ciertas tareas, pero cuando las circunstancias lo exigen, por ejemplo, cuando el alimento está escaso, ellos tienen flexibilidad y pueden asumir tareas diferentes. La regla de Utilizar Reglas Simples, es considerada también como una de las formas más poderosas e inteligentes que podemos aprovechar del comportamiento de los insectos. Las técnicas de inteligencia de enjambre más exitosas es la Optimización de la existencia en Colonia de Hormigas (ACO) y optimización de enjambre de partículas (PSO); el ACO es un algoritmo de optimización de meta-heurísticos que pueden ser utilizados para encontrar soluciones aproximadas a los difíciles problemas de optimización combinatoria. En ACO las hormigas pueden construir soluciones al problema y que, identificando el depósito artificial de feromonas en el de tal manera que el futuro de hormigas pueden construir mejores soluciones.

## **METODOLOGIA**

Durante la investigación se analizaron una serie de modelos que brindan las bases para diseñar y poner en marcha una propuesta organizada para el establecimiento y desarrollo de un Modelo de Gestión de Calidad. De igual forma se revisó la literatura de algunos de los modelos de calidad, de excelencia de calidad y de acreditación más reconocidos a nivel mundial —incluyendo implícitamente el enfoque a la gestión por procesos—, como referencias útiles para ser tenidas en cuenta en el desarrollo de la propuesta.

De acuerdo a los Dres. Marco Dorigo y Mauro Birattari, de la Université Libre de Bruxelles, Bélgica, se llama inteligencia de enjambre a —la disciplina que trata con sistemas naturales y artificiales compuestos de muchos individuos que se coordinan utilizando control descentralizado y auto-organización. En particular, la disciplina se enfoca en las conductas colectivas que resultan de las interacciones locales de los individuos entre sí y con el ambiente (Bonebau, 2001).

Una vez analizadas varias fuentes de información se propone la identificación de las interacciones de los sistemas de controles endógenos y exógenos, que se desarrollan en diferentes etapas de tiempo, los cuales se aplican a una organización basada en un sistema de inteligencia de enjambre. Al establecer un sistema basado en la descentralización de funciones, es necesario definir la estructura, procedimientos y prácticas, y a su vez establecer los sistemas de control endógenos y exógenos del sistema. Los sistemas de Inteligencia de Enjambre están constituidos por agentes simples que interactúan localmente unos con otros y con el ambiente. Siguen reglas simples y sin tener un control centralizado, como resultado de sus interacciones se produce la —emergencia de una conducta global inteligente. Los objetivos más frecuentes para la conformación de enjambres son: La búsqueda de comida o pareja, la protección ante actividad predatoria, y el seguimiento de rutas migratorias. Aun cuando los individuos del enjambre no son inteligentes, las interacciones de estos, permiten al enjambre cumplir con su objetivo de manera inteligente, beneficiando a todos los individuos en una actividad que no pueden hacer por sí solos o cuya realización demandaría un gran esfuerzo individual.

Las ventajas de la inteligencia de enjambre son: Flexibilidad. El grupo se adapta con rapidez a un ambiente cambiante. Robustez. Incluso cuando uno o más individuos fallan, el grupo todavía puede realizar sus tareas. Auto-organización. El grupo requiere poca supervisión o control de arriba hacia abajo.

Los algoritmos más conocidos que se basan en inteligencia de enjambres son: optimización por colonia de hormigas (ACO), el cual se desarrolló en la segunda fase de Bioescenarios;

enrutamiento basado en el comportamiento de termitas; colmena de abejas artificiales (ABHA); y, el PSO; todos estos algoritmos tienen un grupo de agentes computacionales autónomos que cumplen unas reglas simples, determinadas por el algoritmo particular. Las reglas están formuladas para que dichos agentes funcionen sin la necesidad de una estructura de control centralizada, de manera que interacciones locales de cada agente y sus vecinos permitan la emergencia de comportamientos globales inteligentes.

## RESULTADOS

El sistema organizacional de una organización basado en un sistema de inteligencia de enjambre, se compone de muchas personas, que pertenecen a una misma tipología donde la interacción de los individuos espacialmente vecinos o de la percepción local de la vecindad actúa sobre la base de reglas simples como objetivos, planes, parámetros de las actividades de inteligencia. Este sistema tiene la capacidad para actuar de forma coordinada, sin la presencia de un coordinador o de un controlador, donde cada persona es consciente de la conducta del grupo en general, instituido en unas reglas simples, aprovechando la información que intercambian directamente o a través del medio, para tomar decisiones y auto-organizarse. El número de interacciones no tiende a crecer con el número total de personas en el sistema, por lo tanto la relación del tamaño de sistema organizacional no afecta su función ni la interacción entre las personas. Cada persona del sistema, debe conocer los objetivos, planes programas y analizar la interacción con sus vecinos, para que no se presenten conflictos entre las actividades a realizar.

Un aspecto importante y fundamental del sistema es el alto grado de conectividad o conexión entre las personas, la cual tiene una relación directa con el flujo global de información o influencia o interacción. Las personas que componen el sistema pueden realizar diferentes actividades en diferentes lugares sin que se afecten las funciones del sistema, así mismo puede ayudar a hacer más flexible el sistema, para lo cual el sistema es capaz de autoorganizarse en grupos que se ocupan simultáneamente de diferentes aspectos de

### Una Tarea Compleja

El sistema debe tener establecida sus objetivos, la interacción de las personas y su entorno, las interacciones empiezan cuando cada integrante del sistema percibe su entorno y realiza una relación entre las reglas simples, la información en base de datos y la disponibilidad que tiene; y establece la necesidad o no de realizar una actividad determinada como planear, buscar, analizar, divulgar, retroalimentar información. Al finalizar la actividad, realiza una relación entre las funciones, la información en base de datos y la actividad realizada, para determinar si esta culminada con éxito dicha actividad o si hay necesidad de realizar otra actividad. Como ventajas podemos considerar que se reduce la congestión en las comunicaciones, aumenta la fluidez en la información recibida y procesada, el sistema puede adelantar varias funciones al mismo tiempo por medio de niveles y, procesos sinérgicos continuos de interacción e iteración de ciclos, el sistema es capaz de ajustar su asignación de tareas a una perturbación externa, sin dejar a un lado sus funciones, gracias a la comunicación directa entre las personas, hay una reacción rápida a los problemas imprevistos, las personas se motivan por tener la libertad de ejercer su propia iniciativa y creatividad y eficiencia a través de la competencia personal con características de la función, la disciplina fiscal y los gastos. La alta dirección puede dedicarse a los temas estratégicos en lugar de la toma de decisiones diaria. La acción de los sistemas complejos adaptativos se exploró mediante simulaciones por ordenador en el que cada agente es un programa de ordenador, es decir, un conjunto de reglas de interacción expresado en instrucciones de computadora.

Debido a que cada instrucción es una cadena de bits, una secuencia de símbolos en forma de 0 y 1, que se deduce que un agente es una secuencia de símbolos, dispuestas en un determinado patrón que especifica una serie de algoritmos. Estos algoritmos determinan cómo el agente va a interactuar con otros agentes, que son también los acuerdos de los símbolos. En otras palabras, el modelo no es más que un gran número de los patrones de símbolos colocados de forma que interactúan unos con otros. Es esta la interacción local entre los patrones de símbolo que organiza el patrón de interacción por sí misma, ya que no existe un patrón de interacción o instrucciones de la organización. El programador especifica los patrones de símbolo inicial, entonces el programa de ordenador se ejecuta y los patrones de interacción se observan. Las simulaciones de este tipo demuestran la posibilidad de lo simbólico la interacción, en el medio de símbolos digitales dispuestos a normas algorítmicos. El modelo cuando sus interacciones son buenas, tiene la capacidad inherente espontánea de producir un patrón coherente en sí mismo, sin ningún tipo de plan o programa. Es así que, las interacciones tienen la característica de la continuidad y novedad, identidad y diferencia, al mismo tiempo.

*Características:* Están constituidos por agentes simples homogéneos, que interactúan localmente unos con otros y con el ambiente. Cada agente tiene una importancia equivalente, sin tener un control centralizado. Como resultado de sus interacciones se producen comportamientos autogestores, de una conducta global inteligente. La formulación del modelo debe considerar 3 interacciones:

1. El de los agentes entre sí.
2. El de los agentes con el ambiente.
3. El de los agentes y las bases de datos.

1. La interacción de los agentes entre sí. Esta es una relación binaria homogénea la cual es la que se da entre los elementos de una organización, que para el caso se llamará A, tendríamos:

2. La interacción de los agentes con el ambiente. Esta es una relación binaria heterogénea la cual es la que se da entre dos conjuntos A y B, donde A es distinto de B, en este caso en la organización.

De lo anterior puede formularse una propuesta de modelo matemático a las interacciones que tiene una organización y la explicación del comportamiento del flujo de información.

## CONCLUSIONES

El campo de la estrategia organizacional, tal y como es característico de la administración, así como de la teoría administrativa y de las organizaciones, aún está lejos de ser realmente organizacional, ya que su ámbito de aplicación se ha centrado en la empresa privada capitalista, por lo cual este terreno, se encuentra aún frente a múltiples y muy variadas formas de desarrollo conceptual, teórico y práctico.

La necesidad de desarrollar un modelo matemático, para generar condiciones propicias en modelos que surjan de las interacciones que se producen como un medio, permite generar y articular agentes del sistema para responder a las necesidades planteadas del sistema; adicionalmente como un fin porque la innovación y conocimiento del sistema genera un aprendizaje y permite retroalimentación de la función del sistema. Es así que el enfoque a seguir para futuras investigaciones se debe fundamentalmente en la estrategia como unidad intermedia entre el sector y las empresas que la componen, lo cual puede verificar su convergencia en la estrategia central o de sector y está

centrada en un Plan de donde se diseñan instrumentos viables que efectivamente permitan convertir la organización deseada en una posible. En este sentido, un Plan de Desarrollo es la búsqueda de un adecuado balance entre objetivos y limitaciones, con la mira siempre puesta en tratar de incrementar el bienestar de la población. Aunque existe un amplísimo catálogo de técnicas modernas de gestión que pueden utilizarse por parte de la gerencia social casi las mismas que tiene a su disposición cualquier gerente privado, las cuales es posible adaptar.

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# DISEÑO DE UNA METODOLOGÍA PARA LA CONSTRUCCIÓN DE ESTUDIO DE CASOS EN SITUACIONES DE SOPORTE LOGÍSTICO PARA LA ATENCIÓN DE DESASTRES

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## RESUMEN

*Los estudios de caso de logística humanitaria revisados hasta el momento, han sido elaborados acorde con el criterio de los autores, sin embargo no se ha encontrado que sigan una metodología unificada para tal fin. Teniendo en cuenta lo anterior resulta conveniente construir una metodología adecuada para la construcción de casos de logística humanitaria, que sirva de guía para la comunidad académica y a las diferentes partes involucradas en la atención a desastres. De igual manera se busca que sea soporte para la toma de decisiones, a partir de la documentación de experiencias acontecidas y sirva como herramienta para la planeación en futuros eventos. Por lo tanto, el objetivo de este trabajo es diseñar una metodología para la construcción de estudio de casos en situaciones de soporte logístico para la atención de desastres, con el fin de contar con una herramienta que facilite y estandarice la forma en que se deben realizar dichos estudios, orientándolos a presentar la información precisa, completa y ordenada y así, a su vez, facilitar su posterior estudio y comparación con otros casos.*

**PALABRAS CLAVE:** Logística, logística humanitaria, desastres, prevención de desastres.

## DESIGN OF A METHODOLOGY FOR CASE STUDIES BUILDING SITUATIONS CARE LOGISTICS SUPPORT FOR DISASTER

### ABSTRACT

*The case studies reviewed humanitarian logistics so far, have been prepared in accordance with the opinion of the authors, however not found to follow a unified methodology for this purpose. Given the above it is desirable to build a methodology for the construction of cases of humanitarian logistics, to guide the academic community and the various parties involved in the disaster response. Likewise, it seeks support for decision - making, from the documentation of experiences and serve as a tool for planning future events. Therefore, the aim of this work is to design a methodology for the construction of case study situations logistical support for disaster relief, in order to have a tool to facilitate and standardize the way that must be performed these studies, guiding them to submit accurate, complete and orderly and so, in turn, facilitate further study and comparison with other cases.*

**JEL:** L11, L14, L19, L29, L69, M14, O18, P41, Q51, R11, R58

**KEYWORDS:** Logistics, humanitarian logistics, disaster cases, disaster prevention.

### INTRODUCCION

A lo largo de la historia la humanidad se ha visto amenazada por un creciente número de eventos impredecibles que son los que denominamos desastres humanitarios. Estos pueden ser naturales, como los terremotos, las inundaciones y los huracanes, o artificiales, como los ataques terroristas y las fugas químicas. Los investigadores han hecho esfuerzos para desarrollar estrategias adecuadas de logística humanitaria buscando atender de manera efectiva las necesidades generadas en dichos desastres. Igualmente, la academia busca documentar, mediante estudios de caso lo ocurrido antes, durante y después del evento. Los estudios de caso de logística humanitaria revisados hasta el momento, han sido elaborados acorde con el criterio de los autores, sin embargo no se ha encontrado que sigan una metodología unificada para tal fin. Teniendo en cuenta lo anterior resulta conveniente construir una metodología adecuada para la construcción de casos de logística humanitaria, que sirva de guía para la comunidad académica y a las diferentes partes involucradas en la atención a desastres. De igual manera se busca que sea soporte para la toma de decisiones, a partir de la documentación de experiencias acontecidas y sirva como herramienta para la planeación en futuros eventos.

Por lo tanto, el objetivo de este trabajo es diseñar una metodología para la construcción de estudio de casos en situaciones de soporte logístico para la atención de desastres, con el fin de contar con una herramienta que facilite y estandarice la forma en que se deben realizar dichos estudios, orientándolos a presentar la información precisa, completa y ordenada y así, a su vez, facilitar su posterior estudio y comparación con otros casos. Esta investigación tiene la siguiente organización. En la sección de revisión de la literatura se identifican los conceptos relacionados con catástrofes naturales. Para el desarrollo del trabajo, inicialmente se realizó una revisión bibliográfica sobre estudios de casos existentes en la teoría y documentos doctrinales publicados por organizaciones nacionales e internacionales reconocidas en atención a desastres. Posteriormente se realiza la revisión y comparación de las diferentes metodologías existentes en la teoría para el desarrollo de estudios de caso y a partir del análisis y evaluación de las metodologías encontradas se plantea la metodología para el desarrollo de estudios de caso de logística humanitaria. Finalmente se presentan las conclusiones, limitaciones y futuras recomendaciones de investigación.

## REVISIÓN LITERARIA

Debido a los desastres naturales y a los generados por la actividad humana, el mundo afronta unas situaciones permanentes de riesgos y su frecuencia ha aumentado en los últimos años, incurriendo en altos costos y pérdidas humanas (Guha, et. al., 2004) (Wassenhove, 2006). Se han creado múltiples organizaciones de ayuda humanitaria con la participación de instituciones gubernamentales, particulares y de la academia, las cuales deben coordinar sus actividades para la atención en dichos desastres. La logística humanitaria según Thomas (2004) se encarga del proceso de planificación, ejecución y control del flujo eficiente, rentable y almacenamiento de mercancías y materiales, así como información relacionada desde el punto de origen hasta el punto de consumo con el fin de aliviar el sufrimiento de las personas vulnerables. Dentro de la tipología de los eventos que pueden ser atendidos en situaciones humanitarias, se encuentran la atención a desastres y la atención a largo plazo (hambrunas, epidemias, situaciones de desplazamiento, reconstrucción). Es por lo anterior que la logística humanitaria no puede ser improvisada en el momento de la emergencia, sino que debe ser debidamente planificada, de tal manera que sea posible identificar previamente la ubicación y disponibilidad de los suministros, y posteriormente el despliegue logístico (Bará, 2006).

Las situaciones de desastre pueden presentarse por causas naturales como huracanes, terremotos, avalanchas, erupciones volcánicas, inundaciones, etc., o por acciones del hombre como ataques

terroristas o accidentes nucleares. Es de especial interés el estudio de la respuesta logística de atención a desastres debido a las características propias de este tipo de eventos. Algunos ejemplos recientes de desastres son el tifón que afectó Filipinas en el 2013, la avalancha de lodo en enero de 2011 en Brasil, el accidente nuclear tras el tsunami de Japón en marzo de 2011, las inundaciones de Tailandia en Octubre de 2011, el terremoto de Haití en enero de 2010, el caso del Huracán Katrina en Estados Unidos en agosto de 2005, el atentado a las estaciones de trenes de Madrid-España en marzo de 2004 y el ataque terrorista del 11 de septiembre de 2001 a las torres gemelas en Nueva York.

A partir del año 2002, se encuentra evidencia en la literatura científica de publicaciones enfocadas a realizar reportes del desempeño logístico en situaciones de desastre a través de estudios de casos. Algunos ejemplos son: el estudio de Ofstad (2002) que presenta la logística humanitaria y las estrategias de ayuda en el conflicto armado de Sri Lanka los reportes dados por Skipper et. al. (2010) sobre el huracán Katrina; el estudio de caso publicado por Turégano et. al. (2008) para proporcionar una evaluación general de la respuesta a los atentados terroristas de Madrid, el 11 de marzo 2004; el estudio de caso presentado por Coles et. al. (2012) que analiza las asociaciones entre las agencias en el terremoto de Haití del 2010; y estudios sobre el despliegue logístico para enfrentar la cólera en Mozambique por Rodon et. al. (2011). Los problemas sanitarios comunes a todos los desastres naturales tienen que ver con reacciones sociales, enfermedades transmisibles, desplazamientos de la población, exposición a la intemperie, alimentación y nutrición, abastecimiento de agua y servicios de saneamiento, salud mental y daños a la infraestructura. Según Bará (2006) en operaciones de emergencia, la logística es requerida para apoyar la organización e implementación de las acciones de respuesta, para que éstas sean no solo rápidas, si no también ágiles y efectivas. La movilización del personal, del equipo y del material necesario para el trabajo de las organizaciones que brindan asistencia y hasta actividades relacionadas con la evacuación de heridos o la reubicación de poblaciones afectadas por el desastre, requieren de un sistema logístico para ser llevadas a cabo eficientemente. Bará (2006) afirma que existen dos principios de los procesos logísticos en operaciones humanitarias a saber:

1. La logística humanitaria no puede ser improvisada en el momento de la emergencia, si no debe ser debidamente planificada, de tal manera que sea posible identificar previamente la ubicación y disponibilidad de los suministros, y posteriormente el despliegue logístico.
2. Existe una cadena de suministro en situaciones de emergencia o desastre, en donde existe interdependencia entre las organizaciones que atienden la emergencia, las fuentes de suministro y los mismos beneficiarios.

Thomas (2004) propone una definición más formal de la logística humanitaria, donde la define como "el proceso de planificación, ejecución y control del flujo eficiente, rentable y almacenamiento de mercancías y materiales, así como información relacionada desde el punto de origen hasta el punto de consumo con el fin de aliviar el sufrimiento de las personas vulnerables. La función incluye una serie de actividades, incluida la preparación, planificación, adquisición, transporte, almacenamiento, seguimiento y localización de aduanas, y la limpieza". Ausente en esta definición es la noción de ganancia, una característica sobresaliente del sector comercial. En lugar de beneficios, las organizaciones humanitarias buscar un equilibrio entre velocidad y el costo de su cadena de suministro (Tomasini y Wassenhove, 1999). En orden de dar respuesta efectiva ante las amenazas de los desastres, Washburn & Kress (2009) generan un marco de acción para la atención logística en situaciones de desastre para la toma de decisiones, divididas en dos niveles: El nivel estratégico o estructural, en donde se definen las decisiones antes de que

ocurra el desastre. El segundo nivel es el operacional o en tiempo real, donde se reacciona después del desastre. Adicionalmente autores como Lee and Zbinden (2003) adicionan una nivel de reconstrucción o atención de las secuelas del desastre.

A continuación se exponen los tres niveles de decisión en la atención de desastres. La validez de un estudio es la cualidad que lo hace creíble y da testimonio del rigor con que se realizó. La validez implica relevancia del estudio con respecto a sus objetivos, así como coherencia lógica entre sus componentes. La validez se va desarrollando a lo largo de todo el estudio, en cada una de sus etapas. Un caso tendrá resultados válidos si todos los procesos se monitorean adecuadamente, desde el diseño del caso y el desarrollo del trabajo de campo hasta la preparación del informe y la difusión de sus resultados (Yacuzzi, 2006). La validación (que es el aseguramiento de la validez) comienza en el diseño de la investigación. Consideramos cuatro aspectos de la validez, que se aplican en general a los estudios empíricos de las ciencias sociales: validez de la construcción conceptual, validez interna, validez externa, y fiabilidad (Yacuzzi, 2006).

## **METODOLOGIA**

Mediante la evaluación de estudios de casos existentes en la literatura y de los criterios teóricos considerados en la logística humanitaria. La metodología se diseña con el fin de contar con una herramienta que facilite y estandarice la forma en que se deben realizar dichos estudios, orientándolos a presentar la información precisa, completa y ordenada y así, a su vez, facilitar su posterior estudio y comparación con otros casos. Para el desarrollo de la investigación conducente a elaborar una metodología para la elaboración de estudios de caso de logística humanitaria, se deben abordar tres fases que son:

*Revisión bibliográfica:* En esta fase se identifican los aspectos estudiados en la logística humanitaria mediante la revisión de la literatura representativa sobre el tema. Adicionalmente se revisará una muestra de estudios de casos existentes en la teoría con el fin de identificar aspectos comunes y diferencias que puedan resultar relevantes y a su vez permitan visualizar de mejor manera el campo de aplicación de la logística humanitaria y la información que actualmente se registra en dichos estudios. Para la revisión bibliográfica se consultaron diferentes bases de datos de artículos y publicaciones científicas como: Science Direct, Springer, Emerald, ProQuest, Ebsco. ISI, Scopus; y documentos doctrinales publicados por organizaciones nacionales e internacionales reconocidas en atención a desastres. Lo anterior se realiza con el fin de establecer la información general, y específica para cada caso, que debería brindar todo estudio de caso sobre logística humanitaria.

*Construcción.* A partir del análisis y evaluación de las metodologías encontradas, y de la información y análisis de casos de la fase anterior, se plantea la metodología para el desarrollo de estudios de caso de logística humanitaria que cumpla con los requerimientos establecidos.

*Validación de la metodología.* Con el fin de validar la metodología propuesta, se aplica la metodología a un caso de estudio piloto y se evalúa su conveniencia. En esta fase se revisa que en el caso piloto se exprese toda la información requerida en un caso de estudio de logística humanitaria, y que ésta quede presentada en forma ordenada y conveniente para estudios posteriores.

Con el objetivo de encontrar una metodología común para la documentación de estudios de caso, se analizaron los documentos relacionados con el ciclón tropical Larry que azotó la costa Australiana el 20 de marzo de 2006. El resultado de la evaluación indicó la existencia de fuertes patrones de satisfacción, eficiencia y oportunidad en términos de velocidad de llegada, especialmente lo que concierne a la Australian Defense Force (ADF). El ritmo de restauración vial, así como la velocidad de entrega de los alimentos y el agua fueron percibidos favorablemente en la evaluación. También se consideró el terremoto de Yogyakarta del 27 de mayo de 2006 de 6.3 grados en la escala de Richter junto con dos réplicas de 4.8 y 4.6. El terremoto afectó una de las zonas más densamente pobladas del mundo, dejando muertes de alrededor de 58000 personas, más de 1.5 millones de personas sin hogar y 135000 viviendas totalmente arruinadas. A finales de 2004, un Tsunami arrasó el sudeste de Sri Lanka, causando la muerte de aproximadamente 35.000 personas. Las recomendaciones y los informes que se generaron una vez ocurrido el Tsunami, resaltan futuras necesidades de planificación.

Las entrevistas demostraron que había muchos problemas en la logística, un problema principal fue el caos generado por la gran cantidad de donaciones, magnificado por la falta de almacenamiento, equipos de movimiento y transporte adecuado. Las entrevistas también revelaron que la logística no fue incluida en la etapa de la planeación y toma de decisiones. Otro problema principal logístico detectado, fue la congestión del aeropuerto, esto causó retrasos en la distribución del alivio, el aeropuerto era muy pequeño y además carecía de capacidad para mantener el alto volumen de aviones. El Tsunami dejó retos logísticos como: la reconstrucción de transporte, carreteras, puentes, energía y telecomunicaciones. El 11 de marzo de 2004 España presenció uno de los ataques terroristas más graves ocurridos en ese país. El atentado consistió en una serie de ataques terroristas en 4 trenes de la red de cercanías de Madrid. La detonación de los explosivos fue por medio de celulares, dejando como consecuencia la pérdida de 177 vidas, 1800 heridos y enormes daños en la infraestructura. El reto logístico fue la atención rápida de emergencias en los diferentes hospitales.

## RESULTADOS

La estructura de caso planteada puede abordarse bajo un esquema de investigación y contener los siguientes puntos de análisis:

1. Formulación y planteamiento del estudio de caso, preguntas, propósitos y objetivos del evento humanitario.
2. Identificación del caso de logística humanitaria con sus respectivas variables.
3. Definición del alcance del estudio de caso.
4. Instrumentos de recolección.
5. Observación y/o entrevistas
6. Análisis de la información (categorización, contextualización, representaciones visuales)
7. Objetividad y calidad del estudio (validez interna, externa, fiabilidad)
8. Reporte final

El Planteamiento del problema y las preguntas de investigación conforman la introducción. Al momento de diseñar la investigación en temas de logística humanitaria, las preguntas de investigación deben estar en capacidad de: Enfocar el estudio, cuyas preguntas deben tener en consideración lo que se quiere hacer por medio del estudio (objetivos) y que se conoce acerca del fenómeno en cuestión; y por otra parte, dar una base para cómo llevar a cabo la investigación, refiriéndose a los métodos y validación. Selección de caso, tipos de muestreo. En los estudios de caso de logística humanitaria se debe partir por de una muestra teórica, cuyo objetivo es elegir los

casos que probablemente pueden replicarse o extenderse, el número de casos escogidos depende del conocimiento existente, del tema y la información que se pueda adquirir del mismo Unidad de análisis. La selección de la unidad de análisis dentro del contexto de logística humanitaria debe acoplarse a las preguntas de investigación establecidas. Ésta unidad de análisis permite delimitar el estudio e identificar lo que va a ser medido o descrito; es decir, un fenómeno contextualizado en el tiempo y el espacio. De acuerdo con el diseño puede ser holístico, en donde se examina la naturaleza global del fenómeno; o un diseño incrustado que presta mayor atención en las subunidades.

**Alcance.** La planeación de la investigación por medio de estudios de caso requiere decisiones relativas al alcance del estudio. El alcance implica tanto el área sustantiva de la investigación (los límites del tema de investigación) y las áreas a ser investigadas (la muestra). Instrumentos de recolección de datos. La combinación de múltiples fuentes de información tales como: entrevistas, observaciones directas, revisión de la literatura y el cumplimiento del principio de triangulación garantizan la validez interna de la investigación. Flujo financiero y de información, coordinación, capacidades, planes y actividades desarrolladas por parte de cada uno agentes involucrados, tales como: Organizaciones no gubernamentales (ONGs), gobierno nacional y extranjero, agencias multilaterales, sector privado y comercial, organizaciones militares, instituciones especializadas, donantes, entre otros.

Efectos socioeconómicos, culturales, físicos, políticos, psicológicos y problemas sanitarios generados por el desastre natural o causado por el hombre. Revisión de la literatura. A través de evidencia documental como publicaciones especializadas, base de datos, informes de organismos oficiales y medios de comunicación se busca: Determinar si la pregunta de investigación ya ha sido respondida, en tal caso, la investigación iniciará y terminará con la revisión de investigaciones previas. Por el contrario, si la pregunta no ha sido respondida, la revisión de la literatura proveerá ideas acerca de cómo recolectar y analizar información pertinente para dar solución a la pregunta Entrevistas. Las entrevistas son una conversación entre 2 o más personas con la finalidad de obtener información, es el método más común de recolección de datos y por lo general es la fuente primaria en los casos humanitarios de acuerdo al cuadro comparativo de los casos recientes en la literatura.

*Documentos:* Se debe seleccionar los documentos pertinentes para construir un entendimiento sobre lo que está pasando y posteriormente analizarlo. Los documentos son ampliamente útiles como entrada para la elaboración de la entrevista

*Observación:* La observación se define como el acto de recoger información escuchando y viendo. La observación aumenta su eficacia cuando es combinada con otros métodos. Las consideraciones en observaciones son: tipo de observación, cuando entrar, cuantas observaciones hacer y que grupos observar.

*Análisis de los datos recolectados:* El análisis de datos es la parte más importante de proceso, la literatura actual en estudios de casos generalmente describe métodos de recolección de información, pero no su posterior análisis.

*Estrategia de categorización:* La codificación es la principal estrategia, en ella se fraccionan los datos y se reordenan en categorías que permiten la comparación de los datos dentro de cada categoría y con las demás categorías, generando conceptos teóricos. Las categorías nacen del análisis inductivo desarrollado por el investigador durante la fase de análisis.

*Estrategias de contextualización:* A través de la vinculación de datos se pretende entender los datos en el contexto, en base a las relaciones entre acontecimientos y afirmaciones, Explicar estas relaciones mejoran sustancialmente la comprensión del fenómeno estudiado.

*Representaciones visuales:* Son una estrategia analítica complementaria que permite la reducción de datos irrelevantes y la presentación de los datos como un todo, por lo general incluyen: gráficos; matrices o tablas, permiten realizar análisis cruzados de los datos; tabulación de frecuencias, para analizar el comportamiento mediante medias y varianzas; redes o mapas conceptuales, para relacionar los datos jerárquicamente; entre otros.

*Objetividad y calidad de la investigación:* La propuesta metodológica descrita se ha elaborado detalladamente para maximizar la validez y confiabilidad tanto de las entradas como las salidas del proceso de investigación de casos en contexto de logística humanitaria.

*Validez de la construcción:* La flexibilidad y la interacción característica de la entrevista brindan un soporte a la investigación cualitativa, de tal modo, muchos ítems se podrán abordar desde diferentes perspectivas. La exploración de conceptos originados de diversas fuentes y su posterior análisis mejoran la construcción teórica. Triangulación de diferentes métodos de recolección de datos: El investigador puede verificar la veracidad de la evidencia a partir de la comparación, determinando si los datos obtenidos de diversas fuentes guardan relación entre sí.

*Ciclos de retroalimentación:* Retornar a los entrevistados con interpretaciones surgidas de la primera recolección de datos para buscar contradicción en la información Establecimiento de la cadena de evidencia: Se debe ejecutar en la fase de diseño y recolección de la información

Validez interna. Hace alusión a la validez en las relaciones postuladas entre los conceptos. La validez interna es producto de estrategias para eliminar la contradicción y ambigüedad entre los datos, asegurando el establecimiento de una fuerte conexión entre datos. Las tácticas de estudio de caso para incrementar la validez interna son:

*Construcción de la explicación del fenómeno:* Comparación sistemática de la literatura estructura en el modelo teórico

*Validez externa:* Se establece el grado en el cual los resultados pueden llegar a ser generalizados: Uso de la replicación en los estudios: La lógica replicante se evidencia en estudios de casos con múltiples unidades de análisis, derivando en la generalización analítica.

*Fiabilidad:* La fiabilidad se centra en si el proceso de estudio es consistente, lógico y estable a través de otros métodos e investigadores y si se llegan a los mismo resultados. La fiabilidad proporciona resultados consistentes y estables. La investigación por medio de estudios de casos es criticada por los métodos de recolección de datos, ya que se basa fuertemente en las entrevistas y las observaciones.

*Protocolo de estudio de caso:* La elaboración de esta guía de procedimientos necesarios en la fase de obtención de la evidencia, se convierte en el instrumento más importante para asegurar la objetividad del estudio de caso, tanto para su validez como fiabilidad. Para protocolizar las tareas, instrumentos y procedimientos a ejecutar, el protocolo de estudio de caso debe contener los siguientes elementos:

## CONCLUSIONES

La propuesta del modelo de estudio de caso ha partido de la identificación de la documentación de diferentes estudios de caso sobre logística humanitaria en el mundo. El contar con una metodología nos permite identificar la forma como pueden prepararse las diferentes ciudades, regiones y países frente a una eventualidad de las consideradas en este estudio. La logística del riesgo humanitario debe considerarse para mitigar de alguna manera las pérdidas de vidas en el evento de una tragedia. La investigación que se ha realizado tiene el objetivo principal de aportar una metodología concreta para el análisis de desastres ante la falta de un modelo de estudio de caso, en el cual se incluyan los requisitos, directrices, etapas y actividades necesarias para documentar el evento.

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# ANALISIS COMPETITIVO DE LAS PEQUEÑAS Y MEDIANAS EMPRESAS EN CUENCA ECUADOR

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## RESUMEN

*Cuenca, la tercera del Ecuador, Patrimonio Cultural de la Humanidad ha recibido múltiples distinciones a lo largo de su historia, la más reciente, la otorgada por el Magazine Financial Times, como ciudad número uno en la categoría costo-beneficio dentro de las ciudades pequeñas en el ranking Ciudades Americanas del Futuro 2013-2014; durante cinco años estuvo entre las diez urbes del mundo que se deben visitar; además ha sido considerada como el mejor destino para los jubilados del mundo por sus buenas condiciones de vida, calidad en los servicios públicos y costos accesibles; en el plano nacional fue calificada por la Asamblea Nacional como Ciudad Universitaria, por la calidad de las instituciones de educación superior en la región y dispone de la mayor cobertura de servicios públicos a nivel nacional. En el plano empresarial cuenta con la mayor densidad de unidades productivas en el país en donde se incluyen la pequeña y mediana empresa, que si bien en número no son tan importantes como la microempresa, si lo son en generación de empleo y de una fuente importante de ingresos para la economía local, aunque no en la cantidad que debería ya que su limitada competitividad les ha impedido crecer; en ello han influido tanto factores de origen interno como externo; precisamente aquello es fruto del presente trabajo investigativo, el de identificarlos y priorizarlos con el fin de orientar a la formulación de estrategias de mejoramiento a corto, mediano y largo plazo.*

**PALABRAS CLAVE:** Cuenca, pequeñas, medianas, empresas

## COMPETITIVE ANALYSIS OF SMALL AND MEDIUM ENTERPRISES IN CUENCA, ECUADOR

### ABSTRACT

*Cuenca, the third largest city in Ecuador, World Heritage Site, has received a number of awards during its history, the latest is the one it received from Financial Times Magazine, as the number one city in the cost – benefit category within the Small Cities of the Future 2013 -2014 ranking; during five years it was among the ten cities in the world that had to be visited; furthermore it is considered as the best destination in the world for retirees due to its good living conditions, quality in public services and accessible costs; nationally the Ecuadorian National Assembly labeled it as the city of Universities, because of the quality of its higher education institutions in this region and it counts with the highest national coverage of public services. At the business level, it has the highest density of production units in the country including small and medium enterprises, which in numbers are not as important as the microenterprise, but they are in fact important at generating employment and as an important source of income for the local economy, but not as much as it should because its limited competitiveness has prevented its growth; it has been influenced by internal factors as well as external ones; and that is precisely what this research project is about, to identify them and prioritize them so as to formulate strategies to improve in short, medium and long term.*

**JEL:** L26

**KEYWORDS:** Cuenca, Small, Medium, Enterprises

## INTRODUCCIÓN

Ecuador el segundo país más pequeño de Sudamérica, de gente amable y emprendedora, es uno de los siete países con mayor biodiversidad del mundo, cuenta con una innumerable variedad de especies de animales, plantas y microorganismos, que lo hacen diferente (Agencia Andes, 2010). Y aunque apenas ocupa 0.19% de la masa continental del planeta, dada su biodiversidad cuenta con el 18% de las especies de aves, 4,500 especies de orquídeas y 10% de las plantas. (Ministerio de Turismo, 2009). Cuenta con cuatro regiones, la Sierra, la Costa, el Oriente ya la Región Insular, dada sus características propias se puede pasar en poco tiempo de las frías montañas de los Andes, a climas primaverales de los valles de la Sierra y de ahí a un paso de las playas de la Costa ecuatoriana y en pocas horas se encuentra el Oriente con su exótica vegetación, es así que ha sido calificado como el mejor destino turístico de América para el 2013 (El País, 2012). Y han sido precisamente sus recursos naturales que le han posibilitado avanzar; el cacao, el banano, las flores, el petróleo han sido la fuente de ingresos que ha permitido reflotar su economía. A pesar de la riqueza de su tierra y el empuje de su gente, el país continúa con niveles altos de pobreza (a pesar de haberlos reducido significativamente en los últimos 5 años) y sobre todo de desigualdad, múltiples han sido las causas para ello desde su histórica inestabilidad política hasta los problemas de corrupción en todos los gobiernos y sobre todo la inseguridad.

Todo ello se ve reflejado en los indicadores nacionales e internacionales sobre el manejo de la economía ecuatoriana, a pesar de habernos recuperado con el actual gobierno, continuamos a la saga de nuestros vecinos Colombia y Perú, nuestra competitividad es una de las más bajas no solo de América Latina sino del mundo (World Economic Forum, 2012). Situación similar sucede con el Índice para hacer Negocios, históricamente nos encontramos en los últimos lugares a nivel mundial estamos adelante tan solo de Venezuela y Bolivia, en América del Sur (International Finance Corporation, 2012). Lo señalado se ha dado por una serie de factores tanto endógenos como exógenos que no han permitido un despegue total del aparato productivo nacional. Sin embargo al estar inmersos en la crisis mundial fundamentalmente de Europa y Estados Unidos a pesar de ello los países de la región estamos en crecimiento unos más que otros, pero a diferencia de los países vecinos este “crecimiento de la economía no se asienta en el dinamismo del sector privado y la inversión extranjera, sino a través de la expansión del gasto y la inversión pública”. (Mantilla, 2012). Con referencia a la inversión extranjera es una de las más bajas de América del Sur (ocupa el penúltimo lugar en el 2012); contrasta con las expectativas de crecimiento de la Inversión Extranjera directa que según las previsiones de la Comisión Económica para América Latina y el Caribe (Cepal) será muy alta en la región (Universo, 2012). No tiene comparación alguna (en términos porcentuales con nuestros vecinos) en donde han tenido una mayor crecimiento y a pesar de todos los elementos que juegan alrededor de ello (a favor y en contra) su ausencia de hecho influye en el desempeño y oportunidades del sector productivo.

Más aún si tomamos en cuenta que nuestra economía por su carácter de dolarizada tiene dependencia directa de la cantidad de divisas que ingresan al país, contando con el petróleo como uno de los aliados fundamentales por su valor tan alto registrado en los últimos años; pero a pesar de la bonanza petrolera el país no ha logrado mejorar la productividad y competitividad; como tampoco ha logrado un mayor acceso a los mercados financieros. La dependencia petrolera es tal que si no consideramos sus exportaciones la balanza comercial es negativa; se agrava el

panorama si tomamos en cuenta que el flujo de remesas provenientes del exterior está en descenso fruto de la crisis mundial (Araujo, 2013).

Todos los factores abordados inciden en gran medida en el aparato productivo ecuatoriano y sobre todo en las unidades productivas de menor tamaño que serán fruto de estudio, elemento clave y dinamizador de la economía que no ha estado atendido adecuadamente por parte de las políticas de los gobiernos de turno, quienes han fijado sus objetivos generalmente en las grandes empresas. En este sentido los principales grupos económicos del país cada vez han ido incrementando su participación en la economía el volumen de sus ingresos se ha incrementado en más de doce puntos en la última década, y durante el actual gobierno en cinco puntos (Martín & Varela, 2012). Frente a esta problemática se encuentra una nueva estrategia del actual gobierno, cual es la transformación de la matriz productiva del país, cuyos resultados los podremos ver en los próximos años, y que se hecho influenciará en las pequeñas y medianas empresas. Con estos antecedentes, el estudio está orientado a detectar las fortalezas y debilidades de estas unidades productivas a través de una investigación de campo efectuada en la ciudad de Cuenca.

## REVISIÓN DE LITERATURA

Las clasificaciones de micro, pequeñas, medianas y grandes empresas si bien guarda una cierta característica común a nivel mundial; existen particularidades a nivel de cada región y país. La Unión Europea clasifica como microempresa a toda unidad económica con menos de diez trabajadores, así como aquellas que tienen un nivel de ventas anuales menor a dos millones de euros. En los Estados Unidos, la entidad Micro Enterprise Works considera microempresas a aquellas con menos de cinco trabajadores. A nivel centroamericano, el criterio más utilizado en la definición de micro y pequeña empresa es el número de trabajadores; en esta región existe consenso para considerar a toda empresa con menos de diez trabajadores como microempresa (Gutierrez, 2009). En el Ecuador, también existe cierta ambigüedad al respecto, a continuación citamos la fuente que tomamos como base para la investigación:

### Plan Nacional de Desarrollo 2007-2010

De acuerdo con lo señalado en el Plan Nacional de Desarrollo, preparado por la Comunidad Andina de Naciones, las empresas se clasifican considerando las siguientes variables: el número de empleados efectivos, el valor bruto de las ventas anuales y el valor de los activos totales. (Presidencia de la República, 2007).

Tabla 1: Clasificación de las Micro, Pequeñas, Medianas y Grandes Empresas Por el Número de Empleados, Valor Bruto en Ventas Anuales y Valor de Sus Activos Totales

Clasificación	Micro	Pequeñas	Medianas	Grandes
Número	1 - 9	Hasta 49	50 - 199	Mayor a 200
Ventas anuales	100.000	1'000.000	1'000.001 - 5'000.000	Mayor a 5'000.000
Activos totales	Menor a 100.000	100.001 - 750.000	750.001 - 4'000.000	Mayor a 4'000.000

Fuente: Proyecto de Ley PYMES y Proyecto de Estatuto Andino para las MIPYMES

Elaborado por: el autor

El Ecuador es uno de los países de Latinoamérica que registra una de las mayores densidades en cuanto al número de establecimientos: 381 por cada 10.000 habitantes, México lidera la clasificación con 458; detrás del número de emprendimientos ecuatorianos están Colombia con 350 y Perú con 319. (Universo D. E., 2011); A su vez en la ciudad de Cuenca el indicador supera a todos, llega a 538, con la siguiente composición:

Tabla 2: Clasificación de las Unidades Productivas de la Ciudad de Cuenca Por el Número de Empleados, Valor Bruto en Ventas Anuales y Valor de Sus Activos Totales

Estrato	Unidades	%	Personal Ocupado	%	Ingresos Generados	%
1 - 9	26.696	94,9%	52.915	45,4%	2.384	23,8%
10 - 49	1.194	4,2%	22.312	19,2%	1.934	19,3%
50 - 199	195	0,7%	17.673	15,2%	1.092	10,9%
200 y más	46	0,2%	23.605	20,3%	4.623	46,1%
<b>Total</b>	<b>28.131</b>	<b>100,0%</b>	<b>116.505</b>	<b>100,0%</b>	<b>10.033</b>	<b>100,0%</b>

Fuente: Inec. Base de datos Censo Nacional Económico Elaborado por: el autor

De esta clasificación se desprende que el 4,7% de las unidades productivas en la ciudad son pequeñas y medianas, generan empleo en el orden del 34,4%, y aportan a la economía con ingresos que llegan al 30,2%; a diferencia de las grandes en donde a pesar de ser solo 46 es decir solo el 0,2%, aportan con el 46,1% de los ingresos generados, lo que demuestra el carácter concentrador de la economía local (Inec, 2010), situación similar se refleja a nivel del país. Con los antecedentes expuestos consideramos de fundamental importancia realizar un análisis de las Pymes en el Ecuador y particularmente en Cuenca.

Cuenca, la tercera ciudad en importancia en el Ecuador y tradicionalmente artesanal; desde la colonia reconocida por la habilidad del cuencano, “por estar dotados de capacidad para la obras y ocupaciones que necesitan acabados delicados y finos”; en donde dada la escasez de mano de obra en el siglo XIV obligó a los ciudadanos a levantar sus casas y ocuparse de innumerables labores desempeñándose como albañiles, carpinteros, agricultores, sastres, cerrajeros, zapateros entre otros oficios, en donde primaba el aporte de los manual (Hurtado, 2009). La ciudad cuenta con unos de los mejores estándares de vida del país; luego de la capital Quito ocupa el segundo lugar en necesidades básicas satisfechas; la cobertura de servicios es una de las mejores del país, su tasa de analfabetismo es la mitad de la media nacional; cuenta con indicadores sobresalientes en cuanto al índice de mortalidad infantil, nivel de educación; y su aporte importante al erario nacional vía recaudación de impuestos (Hurtado, 2009); su índice de desempleo del 3,69% se encuentra debajo de la tasa nacional. Sin embargo el costo de la canasta básica es el más alto del país, que llega a 625 dólares, entre otros aspectos por gran disponibilidad de remesas de los migrantes fruto del 3,37% oriundos de esta ciudad que viven en los Estados Unidos y Europa (Invec, 2013).

Las comúnmente denominadas Pymes, dada su importancia en todas las economías, han sido objeto de innumerables estudios a nivel mundial, latinoamericano, y particularmente en el Ecuador. Sin embargo en el caso de la ciudad de Cuenca, las investigaciones han sido menores y han carecido de un elemento común al de los estudios realizados a nivel mundial, latinoamericano y ecuatoriano; que los análisis han sido efectuados en forma conjunta con las microempresas, es decir como si tuvieran similares características, cuando la realidad es diferente. En el ámbito nacional consideramos el “Proyecto Mapa Artesanal y Oferta exportable de la provincia del Azuay” presentado en marzo de 2003, cuyo objetivo fue el de identificar las potencialidades artesanales de las provincias integrantes de la Región Austral, así como los lugares específicos en donde se encuentran ubicados los talleres, a efecto de elaborar el mapa respectivo; trabajo realizado con auspicio del Ministerio de Industrias de aquella época. Sin embargo el estudio concluyó tan solo con la descripción de los hallazgos más relevantes, ya el objetivo general planteado no permitió conocer las potencialidades y debilidades del sector.

Por otra parte, a nivel nacional, uno de los primeros estudios en el país sobre el tema lo realizó la Fundación Ecuador en donde mayoritariamente se enfoca al análisis del crédito y este sector productivo, a más de dar recomendaciones de cómo se debe apoyarlo, no maneja información cuantitativa, sin embargo nos ha servido de una primera base para la investigación. (Dávalos &

Espinel, 1997), estudios que de la mano con los realizados por la diversas cámaras de la Pequeña Industria del país, como “El Diagnóstico de la Pequeña y Mediana Industria del Ecuador” en, en donde se analiza la posición competitiva de las pequeñas y medianas en 5 provincias del Ecuador, en donde se realiza mediante encuestas un análisis global de la estructura de estas unidades productivas, al ser un análisis general no se dispone de información exclusivamente de la ciudad de Cuenca (INSOTEC, 2002). De igual manera se estudiaron los documentos de base para la elaboración del Plan Nacional de Desarrollo para los años 2007 al 2010 sobre las micro, pequeñas y medianas empresas en el Ecuador, y Plan Estratégico de Cuenca.

## METODOLOGÍA

Para efectos de esta investigación, se aplicó una encuesta con 44 preguntas cerradas (Hernández Sampieri, Fernández Collado, & Baptista Lucio, 2010), en el 2012, en la ciudad de Cuenca. El instrumento fue aplicado a 110 pequeños y medianos empresarios, con un nivel de confianza del 95%, con un error estimado del 5%, la muestra fue estratificada y clasificada por sectores y/o actividades. La información fue introducida en una base de datos, para posteriormente ser trabajada en el programa estadístico SPSS 21.

Tabla 3: Distribución del Tamaño de la Muestra del Sector de la Pequeña y Mediana Empresa de Cuenca

Sector/actividad	Universo	%	Muestra
Prendas de vestir	36	24%	26
Alimenticio	26	17%	19
Metalmecánico	23	15%	16
Substancias químicas	19	12%	14
Madera y corcho	14	9%	10
Minerales no metálicos	13	8%	9
Industrias gráficas	9	6%	6
Tics y servicios	8	5%	6
Joyería y otras	5	3%	4
Total	153	100%	110

Fuente: Cámara de la Pequeña Industria de Cuenca Elaborado por: el autor

Los resultados de la aplicación de la encuesta se clasificaron en cinco partes, cuatro de las cuales corresponden a las áreas funcionales de las organizaciones: administración, finanzas, mercado y producción, y uno referido al análisis del entorno en el que se desenvuelven las microempresas.

Tabla 4. Descripción de las variables utilizadas y su descripción

Ambito	Variable	Descripción	
ADMINISTRACION	Permanencia en el mercado	Mide el tiempo en años de permanencia del negocio en el mercado.	
	Carácter de su organización	Estable la estructura de la organización si es jurídica o es informal.	
	Tipo de local	Buscamos conocer si el local en donde se producen sus bienes y/o servicios de propio o arrendado u otra forma de posesión.	
	Equipos de computación	Buscamos conocer si cuenta con apoyo de equipos de computación en el desarrollo de su actividad.	
	Estructura organizacional	Establecer si la unidad productiva tiene definida una estructura administrativa y realiza labores de planificación.	
	Capacitación	Conocer si el personal ha recibido capacitación.	
	Motivación a la capacitación	Conocer si están dispuestos a iniciar proceso de capacitación; si están de acuerdo si las universidades del medio puedan apoyarles y en qué áreas	
	FINANZAS	Registros contables	Establecer si llevan registros contables como apoyo a su gestión financiera
		Posee cuentas bancarias	Conocer si cuenta con el apoyo de herramientas financieras que les posibilite el ahorro y el manejo de sus recursos, y de qué tipo.
		Rentabilidad de su negocio	Medir el grado de conocimiento financiero y de costos del negocio
Acceso al financiamiento		Conocer si los sectores analizados han sido sujetos de crédito, así como los motivos por los que no fueron beneficiados.	
MERCADO	Fuentes de financiamiento	Establecer cuáles han sido las fuentes de financiamiento, formales privados y públicos así como el financiamiento informal, así como los motivos por los que no fueron beneficiados.	
	Tasas de interés	Conocer las condiciones de financiamiento a las que se han beneficiado.	
	Impuestos	Conocer cuáles son los principales problemas del entorno por los que atraviesan los sectores analizados.	
	Tiene web site	Conoce si el negocio tiene una página web como herramienta de su gestión.	

PRODUCCIÓN	Investigaciones de mercado	Establecer si la unidad productiva tiene realiza estudios de mercado que le posibilites ser más competitivo.
	Calidad y precios	Conocer si la unidad productiva conoce la calidad y precios de la competencia.
	Tipo de consumidores	Define el tipo de consumidores de su negocio.
	Mercado internacional	Conocer si ha exportado en alguna ocasión y los motivos por los cuáles no lo ha hecho.
	Dispone de internet	Conocer si se apoya en las tecnologías.
	Ampliación de su negocio	Conocer las perspectivas a futuro de su negocio y cómo lo financiará.
	Volumen de producción	Conocer el comportamiento de su producción en el último año.
	Costos de producción	Establecer tanto los efectos de la inflación y especulación en su negocio, como su eficiencia en su proceso productivo.
	Acceso a materias primas	Conocer si tiene dificultades en conseguir materias primas de calidad y la procedencia de las mismas.
	ENTORNO	Sistemas de control de calidad
Sistemas de seguridad y salud		Buscamos conocer si la unidad productiva tiene implementado sistemas de seguridad y salud o si los desconoce.
Tecnología, equipos		Conocer el tipo de tecnología que utilizan.
Estado de sus equipos		Conocer el estado de los equipos que intervienen en su proceso productivo.
Acceso a servicios básicos		Conocer como aprecian el acceso a los servicios básico, agua luz, teléfono, internet, infraestructura, etc.
Afiliación a gremios		Conocer si los negocios se encuentran afiliados a los gremios de la localidad y que tipo de apoyo ha recibido de aquellos.
Apoyo de organismos		Conocer si han recibo apoyo de organismos públicos o privados del país y la región.
Desempeño del país		Establecer la percepción sobre el desempeño económico del país.
Seguridad jurídica		Establecer la percepción sobre la seguridad jurídica del país.
Clima político		Establecer la percepción sobre el clima político del país.
Seguridad pública	Cuáles son los principales problemas del entorno por los que atraviesan los sectores analizados.	

*Los reactivos empleados se clasificaron de esta manera para el análisis de las ponderaciones en base a las respuestas obtenidas.*

*Fuente: Encuesta Elaborado por: el autor*

Para cada ámbito se estableció un porcentaje similar de reactivos, respuestas a las que se establecieron ponderaciones en función del resultado de cada una de ellas, de 1 a 5 (1 la posición más crítica y 5 la posición ideal). Una vez que a cada respuesta se asignó la ponderación, se sumaron los puntajes obtenidos y se dividió para la posición ideal obteniendo el resultado porcentual para cada ámbito y del desempeño general del sector. Una vez establecido el diagnóstico de las pequeñas y medianas empresas, se procedió a la identificación de las variables como fortalezas, oportunidades, debilidades y amenazas a través de un FODA ponderado. Es así que con el fin de establecer el peso de cada variable en función que ha sido identificada como fortaleza, debilidades oportunidad y amenaza de cada sector; a éstas realizamos la prueba de independencia Chi-cuadrado.

$$\chi_0^2 = \sum_{i=1}^k \frac{(O_i - E_i)^2}{E_i}$$

Lo que nos permitirá establecer la existencia de una relación entre dos variables categóricas; los cálculos han sido realizados con un nivel de confianza del 95%, por lo que el valor de alfa es del 0,05; lo cual corresponde al complemento porcentual de confianza. (SPSS, 2013); por lo tanto se elaboraron tablas de contingencia entre las variables de cada sector tomando en consideración los valores obtenidos de Chi-cuadrado iguales o menores a 0,05; en donde se descarta la hipótesis nula de independencia y aceptando las variables que se encuentran relacionadas. Las variables que tengan una mayor relación con las otras se considerarán de mayor impacto.

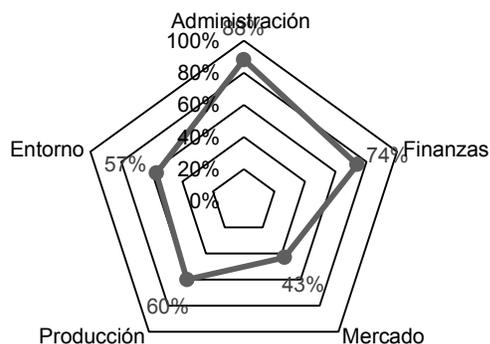
## RESULTADOS

Los resultados generales de la investigación se presentan en dos partes, la primera correspondiente al diagnóstico de las pequeñas y medianas empresas en la ciudad de Cuenca; y la segunda clasificadas las variables en un FODA ponderado. Primera parte En cuanto al diagnóstico de las pequeñas y medianas empresas, una vez realizada la respectiva ponderación se

establece que su rendimiento en el período de análisis llega al 69% de la situación establecida como ideal, con diferente desempeño en cada ámbito que lo detallamos a continuación:

Figura 1: Posición competitiva de las pequeñas y medianas empresas

POSICIÓN COMPETITIVA DE LAS PEQUEÑAS Y MEDIANAS EMPRESAS



En la figura 1 se resume la posición competitiva de las pequeñas y medianas empresas en la ciudad de Cuenca en los cuatro ámbitos correspondientes a sus áreas funcionales y al entorno en el que se desenvuelven. Fuente: Encuestas Elaborado por: el autor

**Ámbito Administrativo:** El área administrativa es la de mejor desempeño de las pequeñas y medianas empresas llegando al 88% de la situación considerada como ideal; se destacan aspectos en su mayoría positivos, entre los más relevantes: su permanencia en el mercado llega en promedio a 17 años, un importante 38% ingresó al mercado la última década; en un 97% se encuentra constituidas como empresas jurídicas ya sean sociedades anónimas o limitadas, lo cual se posibilita tener una mayor credibilidad ante el mercado, esta estabilidad se ve reflejada en que el 84% de ellas cuenta con un local propio para el desempeño de sus actividades, las mismas que se desarrollan con el apoyo de equipos de computación en un 100%, ya que todos los locales disponen de esta herramienta básica en apoyo a su gestión; un importante 80% ha recibido capacitación y casi la totalidad de quienes no la han recibido están dispuestos a capacitarse, constituyéndose el área de producción con un 38% la que más demanda tiene para procesos de formación y actualización. En su totalidad estarían de acuerdo en que las universidades del sector contribuyan a su preparación. En los aspectos por mejorar, tan solo el 45% tiene claramente definida su estructura organizacional, lo cual es indispensable para organizaciones de este tamaño.

**Ámbito financiero:** En el análisis de los factores internos del ámbito financiero buscamos conocer con qué grado de eficiencia manejan sus recursos, llegando a un cumplimiento del 74% de lo considerado como óptimo. El 100% cuenta con el manejo de cuentas bancarias, el 84% de las empresas encuestadas manejan cuentas de ahorro y corrientes; el 100% lleva contabilidad, sin embargo únicamente el 90% conoce la rentabilidad real de los productos y/o servicios que ofrece; por otra parte si bien el 100% ha tenido acceso al crédito, este no ha sido conseguido en condiciones del todo favorables en referencia a los plazos y las tasas de interés; su principal fuente de financiamiento ha sido la banca privada en un 61% y en su mayoría con intereses superiores al 15%; además debemos tomar en cuenta que este importante sector productivo en un 9% ha recurrido a la usura como mecanismo para financiar sus actividades sobre todo por problemas de liquidez (cambio de letras y/o cheques), en el tema crediticio se destaca un importante 13% que desconocían la tasa a la cuál fue otorgada la operación.

*Ámbito de mercado:* El mercado se constituye en el sector de menor desempeño de las áreas funcionales de las microempresas con un 43%. Si bien el 86% de los encuestados conoce la calidad y precios de su competencia, tan solo la mitad de ellos realizan estudios de mercado de manera formal; de ello se deriva las características de sus consumidores que se encuentran básicamente en el mercado nacional y local; tan solo el 9% exporta de manera periódica y el 16% de manera ocasional, esto a pesar que en alguna de las actividades los productos que elaboran son de muy buena calidad; entre los principales los motivos por los que no exportan el 26% respondió que tener una capacidad insuficiente de producción es un gran limitante; por otra parte el 15% señaló por qué no saben cómo hacerlo. Finalmente un importante 74% tiene planes de ampliar su negocio, y en su gran mayoría lo hará con financiamiento.

*Ámbito de la producción:* El ámbito de la producción también se constituye de cierta forma un área en donde hace falta mejorar; su rendimiento llega al 60%. El estado general de sus equipos no es de los mejores, apenas el 6% lo califica como de punta y el 53% como modernas; sus procesos productivos los llevan de forma semiautomática en un 60%, manual el 34% y un preocupante 6% señala que no conoce; sus costos de producción se han incrementado con referencia al último año, así lo afirma el 96% de los encuestados, lo que se refleja en la disminución del volumen de producción de un 44%; tan solo el 38% manifestó que incrementó sus volúmenes de producción en similar período. En cuanto a la aplicación de las normas de seguridad y salud ocupacional, se refleja su cumplimiento de tan solo el 58% de las unidades productivas, y del 55% en lo referente a la implementación de sistemas lo que de hecho les resta competitividad. Por otra parte se verificó que el 61% de los insumos que utilizan son importados y en el 69% de las empresas no tiene dificultades para adquirir materias primas de calidad.

*El entorno:* El entorno no favorece a un cabal desempeño de las pequeñas y medianas empresas en la ciudad de Cuenca, su desempeño llega al 57% de lo establecido como un ambiente ideal; en lo que se encuentran más afectados lo constituye el clima político por el que atraviesa el país en donde el 54% lo calificó como malo y el 24% como regular; de igual manera con el tema de la seguridad jurídica que entre malo y regular lo calificaron con el 84%; en cuanto al desempeño económico del país se tiene una posición un poco más favorable, en donde el 2% lo calificó como excelente y el 49% como bueno, el tema de la inseguridad también se vio reflejado en la investigación, en donde el 13% manifestó su preocupación sobre los problemas de la delincuencia en la ciudad. En el aspecto económico uno de los principales temas expuestos es el tributario motivado por las constantes reformas en dicha área en los últimos años. Un factor importante se refleja en la afiliación a los gremios productivos, encontrándose el 98% afiliado a diversas organizaciones empresariales; de donde han recibido algún tipo de apoyo en un 53%, fundamentalmente en capacitación; por otra parte el 39% de los encuestados manifestó que no reciben apoyo de ninguna entidad pública ni privada del medio.

*Segunda parte:* Una vez que llegamos a esta fase y con el fin de poder aportar con elementos que posibiliten a nuevas investigaciones la definición de estrategias de mejoramiento en función de los principales problemas detectados, se ha clasificado las variables analizadas en Fortalezas, Oportunidades, Debilidades y Amenazas en función de las respuestas a los reactivos aplicados de la siguiente manera:

Tabla 6: Clasificación FODA de las Pequeñas y Medianas Empresas

Pequeñas y medianas			
F	O	D	A
14	5	11	5

Fuente: Encuestas Elaborado por: El autor

Las 35 variables analizadas fueron clasificadas utilizando la matriz FODA; el 40% de ellas son fortalezas, el 31% son debilidades y el 14% son oportunidades y amenazas. Bajo las condiciones señaladas coincidimos con el análisis anterior en donde se refleja que la posición competitiva de las pequeñas y medianas empresas de la ciudad de Cuenca no es de las mejores. Una vez obtenida la clasificación la siguiente acción fue la priorización, es decir listamos las fortalezas, oportunidades, debilidades y amenazas en función de su mayor impacto en la gestión competitiva de las organizaciones, obteniendo el siguiente resultado:

Tabla 7: Clasificación FODA de las variables de mayor impacto del sector de las pequeñas y medianas empresas de la ciudad de Cuenca, en función del número de variables relacionadas.

VR	FORTALEZAS	VR	OPORTUNIDADES
20	Tipo de consumidores	24	Desempeño del país
20	Materia prima	21	Apoyo de organismos
17	Personal capacitado	16	Fuentes de financiamiento
16	Conocimiento de la rentabilidad del negocio	11	Acceso a servicios básicos
15	Tipo de local	4	Ampliación de su negocio
15	Calidad y precios de la competencia		
10	Dispone de internet		
VR	DEBILIDADES	VR	AMENAZAS
24	Estructura organizacional	23	Impuestos
22	Tecnología	22	Seguridad jurídica
22	Tasas de interés	20	Clima político
21	Sistemas de seguridad y salud	19	Seguridad pública
21	Sistemas de control de calidad	6	Costos de producción
20	Investigaciones de mercado		
15	Volumen de producción		
10	Estado de sus equipos		

VR: Hace referencia al número de variables con las que tiene alguna relación. Dato obtenido al relacionar entre cada una de las variables mediante el cálculo de chi-cuadrado. Fuente: Base de datos SPSS (cálculo de chi-cuadrado) Elaborado por: El autor

Fueron consideradas como fortalezas 14 de las variables analizadas; la primera variable que es considerada como tal “que tiene cierto grado de relación con la mayoría de las otras” pertenece al área de mercado y se refiere a la clara identificación del tipo de consumidores del negocio, seguida por la facilidad de acceso a materias primas de cualquier origen; en tercer lugar por tener personal capacitado su gestión. En cuanto a las oportunidades que fueron identificadas se destaca en primer lugar el desempeño económico del país, seguido por apoyo que reciben por parte de organismos fundamentalmente de los gremios a los que pertenecen y a los que se encuentran afiliados en su mayoría; luego el acceso a los servicios básicos y a las diversas fuentes de financiamiento que disponen; y finalmente por las perspectivas de ampliación.. Sus debilidades son menores y de éstas la más relacionada hace referencia a la parte administrativa, particularmente a la limitada estructura organizacional, la ausencia de planificación, seguida por el aspecto tecnológico que se constituye en una fuerte debilidad; en la parte financiera se destaca las tasas de interés, que en general son altas y que tienen relación con las entidades que les financian y el riesgo de la operación en función de su calificación como sujeto de crédito, aspecto en donde necesariamente se deberá plantear estrategias de mejora.

Finalmente en cuanto a las 5 amenazas la que se relaciona con un mayor número de variables es la referida al tema impositivo que fue identificado como uno de los mayores problemas que tenía los pequeños y medianos productores; la seguridad jurídica, el clima político y la inseguridad que afecta a todos. En general, estos han sido los hallazgos más importantes de la investigación que se encuentran respaldados en la encuesta realizada.

## CONCLUSIONES

Al analizar los resultados sobre la posición competitiva de las pequeñas y medianas empresas en la ciudad de Cuenca podemos concluir que si bien son reducidas en número se constituye en un aporte para la economía local en cuanto a la generación de empleo y generación de ingresos; sin embargo su posición competitiva no es de las mejores lo que le impide crecer y abrirse a nuevos mercados y poder constituirse en un referente del austro del país. Sus dificultades no solo se evidencian en su estructura interna, en donde determinados factores propios de la dinámica del negocio no son manejados adecuadamente, sino en la influencia del entorno que limita su consolidación y expansión, situación que va de la mano de las decisiones políticas y económicas por parte del gobierno. El área administrativa es una de sus mayores fortalezas, basadas en una presencia en el mercado de muchos años, una adecuada capacitación del personal y sobre todo posibilidades de especializarse en determinadas áreas; se destaca la formalidad con la que llevan adelante sus negocios, sin embargo se refleja la ausencia de herramientas básicas de planificación y especialización. Si bien cuentan con herramientas para el apoyo de su gestión financiera que posibilite llevar adelante una estructura de costos que permite conocer la rentabilidad de los bienes y servicios que ofrecen, el tema financiero es uno de sus limitantes al no contar con un oportuno apoyo sobre todo de la banca pública. Las pequeñas y medianas empresas cuentan con un mercado reducido enfocado casi exclusivamente al ámbito local y nacional, no tienen visión de exportación y peor aún, no cuentan con posibilidades efectivas en el corto plazo para exportar, al no contar con los recursos tecnológicos y de producción para lograrlo.

El área de producción se ve influenciada negativamente por la aplicación de una tecnología no adecuada; una limitada renovación de sus equipos, lo que repercute en la capacidad de producción, si a ello le sumamos su escasa aplicación de normas internacionales de calidad y en procesos reglamentados de seguridad y salud ocupacional, les resta competitividad en el mercado. El entorno no colabora adecuadamente en el desarrollo de estos sectores productivos, ya que el ambiente político, jurídico y, sobre todo, la inseguridad les afectan ostensiblemente. En términos generales la ausencia de innovación y el aporte de valor agregado es una constante en las unidades productivas analizadas y la adopción de correctivos a su manejo interno se vuelven acciones improrrogables en el corto plazo.

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# **ANÁLISIS DE LAS ESTRATEGIAS DE MERCADERO DE LA EXPERIENCIA IMPLEMENTADAS POR LAS MARCAS DE PRENDAS DE VESTIR DIRIGIDA AL TARGET JOVEN, EN DOS CENTROS COMERCIALES DE LA CIUDAD DE CALI – COLOMBIA**

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## **RESUMEN**

*El mercadeo de la experiencia corresponde a la etapa del marketing en la cual la demanda del consumidor respecto a las marcas y la forma de relacionarse con las mismas se ha transformado. Así pues, en el mercado existe un gran abanico de marcas que ofrecen al consumidor beneficios similares; por tanto la búsqueda y obtención de la fidelidad es un reto muy grande para las marcas. De acuerdo con lo descrito, se evidencia que el cliente no elige un producto o servicio sólo por la relación costo - beneficio, sino que lo elige por la vivencia que ofrece antes y durante la compra. Por lo tanto, los productos ya no son un conjunto de características funcionales sino medios para facilitar experiencias al cliente y fortalecer la relación con estos. El presente estudio tuvo como objetivo identificar las estrategias de mercadeo de la experiencia implementadas por las marcas de prendas de vestir, tanto nacionales como internacionales, ya fuera, en forma estratégica o intuitiva, Así también, se identificaron los estímulos que excitan cada uno de los sentidos, para finalmente, determinar el nivel de estimulación a cada sentido por cada marca, el nivel de involucramiento emocional y establecer el promedio de estimulación de la categoría. Entre los hallazgos más destacados de esta investigación se encuentran los siguientes: primero, las marcas, especialmente las internacionales no solo implantan estrategias de marketing de la experiencia en sus tiendas, sino que también a nivel online. Segundo, en una escala de 1 a 5, las marcas implementan un nivel de experiencia en promedio de 3,2. Tercero, el órgano sensorial más estimulado en puntos de venta es el visual, olvidando un poco los demás, lo cual impide la vivencia de una experiencia integral de marca.*

**PALABRAS CLAVES:** Mercadeo de la experiencia, niveles de experiencia, impacto sensorial, involucramiento emocional

## **ANALYSIS OF THE MARKETING EXPERIENCE STRATEGIES IMPLEMENTED BY CLOTHING BRANDS FOR THE YOUNG IN TWO SHOPPING CENTER IN CALI CITY**

### **ABSTRACT**

*Marketing experience corresponds to a stage of marketing in which consumer demand towards brands and the way as the consumer relates to them has changed. So, in the market there is a wide range of brands that offer similar benefits to the consumer. Therefore, the search and retrieval of fidelity is a big challenge for brands. According to this description, it appears that the customer doesn't choose a product or service just for the cost benefit, but I choose the experience that offers before and during purchase. Therefore, the products aren't a set of*

*functional features, but that they are means for facilitating customer experiences and strengthen the connection with these. The aim of this study was to identify the marketing experience strategies implemented by clothing's brands, both national and international, either strategic or intuitively. So also, were identified stimuli that excite each of the organs of the senses, finally, was identified the level of stimulation to each organ of the senses, and de level of emotional involvement by brand and establish the average stimulation of the category.*

*Among the most significant findings of this research are the following: first, the marks, especially internationally, are only implemented marketing strategies experience in their stores, but also online at. Second, on a scale of 1 to 5, marks an experience level implanted in average of 3.2. Third, the more stimulated sensory organ selling points is the visual, forgetting some others, which prevents living a holistic brand experience.*

**JEL:** M3, M31, M37

**KEYWORDS:** Marketing experience, levels of experience, sensory impact, emotional involvement

## INTRODUCCIÓN

Actualmente las marcas de prendas de vestir se han visto en la necesidad de diversificar sus estrategias de mercadeo y publicidad para superar las expectativas de los actuales consumidores, quienes han transformado su demanda debido a la cantidad de opciones presentes en el mercado, la variedad de tendencias y modas a las que tienen acceso, y el contacto con marcas internacionales a precios accesibles.

Adicionalmente, hay que reconocer la importancia que tienen los centros comerciales en la vida del target joven, quien acude a estos lugares no solo con el ánimo de realizar comprar, sino de socializar y de realizar una gran variedad de actividades en las cuales invierten la mayor parte de su tiempo libre.

Además, es sorprende ver en los centros comerciales la variedad de estrategias a las que recurren las diferentes marcas, con el fin de lograr la atención y la posterior conquista del cliente, tratando de orientar su decisión de compra, en especialmente con el target joven. Sin duda alguna, alcanzar este objetivo no es fácil, más aún, cuando los jóvenes se identifican con estilos, tendencias y modas nacionales o extranjeras, que tienen una representación subjetiva, pero basada en tendencias colectivas.

Esta investigación se llevó a cabo en los Centros Comerciales Chipichape y Unicentro ubicados en la ciudad de Cali y la elección de dichos sitios tuvo como base la publicación en la revista "Acción" de la Cámara de Comercio de Cali en su Edición No. 126 de octubre de 2010. En dicha publicación se reconocen estos centros comerciales como los de mayor recordación y posicionamiento en la ciudad. Adicionalmente, en la observación preliminar no estructurada se logró establecer que las marcas de prendas de vestir tienen tiendas en estos dos centros comerciales. Por otra parte, es claro que la experiencia es un nuevo estadio en la progresión de valor agregado que ofrecen las marcas, y esta propuesta estratégica descansa sobre la capitalización del significado que el consumidor atribuye a dicha experiencia. Teniendo en cuenta lo anterior, esta investigación tuvo como pregunta problema la siguiente: ¿Qué características tienen las variables del mercadeo de la experiencia implementadas por las marcas de prendas de vestir dirigida al target joven, en los centros comerciales Chipichape y Unicentro de la ciudad de Cali? El estudio en una primera etapa, identificó si las tiendas de ropa de marcas dirigidas al target joven implementaban estrategias de mercadeo de la experiencia, ya fuera en forma

planeada; estratégicamente determina en la búsqueda de objetivos de mercadeo o si las implementaban en forma intuitiva. En una etapa posterior se identificaron los sentidos que se privilegiaban en estas estrategias, lo cual permitió determinar un nivel de impacto sensorial, el nivel de involucramiento emocional generado por las mismas, para posteriormente determinar el nivel de experiencia generada por la marca. Lo que finalmente conduciría a la experiencia de marca, lo que implica analizar las estrategias de mercadeo de la experiencia desde el consumidor. Por lo tanto, la experiencia de marca podría ser conceptualizada como el conjunto de sensaciones, sentimientos, cogniciones y conductas provocadas por los estímulos sensoriales diseñados por la marca a través de los diferentes elementos de la comunicación de marca: diseño de marca, empaques, estrategias de merchandising y vitrinismo y otras comunicaciones a través de diferentes entornos.

## REVISIÓN LITERARIA

El marketing de la experiencia es un concepto nuevo y excitante, a tal punto que entender las experiencias del consumidor es la esencia de las actividades de la investigación del consumidor. Aunque, la experiencia como concepto y como fenómeno empírico no está aún tan fuertemente establecido como otros conceptos de marketing o de investigación del consumidor. Como lo planteó Chris Janiszewski en el discurso presidencial en la conferencia de la Asociación de Investigación del Consumidor en el 2009 (Schmitt, 2011): en esta área de investigación, la oportunidad es estudiar la experiencia de consumo, la cual se convierte en una ventaja diferencial, pues en este momento lo más importante no son los beneficios de los productos, sino la experiencia de consumo o sea el valor subjetivo que el consumidor le atribuye al consumo. Así, el estudio de la experiencia es beneficiado por el hecho de que múltiples disciplinas realizan investigaciones sobre el efecto de la experiencia. Por ejemplo el comportamiento del consumidor tiene tres áreas fundamentales de especialización: los procesos de información, la teoría de la decisión comportamental y la teoría de la cultura del consumo.

Ahora bien, empecemos por el concepto de experiencia: ¿qué es experiencia? El término experiencia puede ser definido de varias formas, pero todas estas definiciones pueden ser reunidas en dos categorías: las que se refieren al pasado; como conocimiento y experiencia acumulada en el tiempo y la otra hace referencia a las percepciones y sentimientos en curso y que pueden ser observados directamente. Esta investigación está focalizada en el marketing de la experiencia, el cual se refiere a la experiencia en el aquí y el ahora; en las percepciones, sentimientos y pensamientos que las estrategias de marketing pretenden generar en el consumidor cuando éste se encuentra con el producto, con la marca en el punto de venta y se dispone a las actividades de consumo y también, al recuerdo de estas experiencias. La experiencia en la gestión de marketing: mientras el marketing tradicional está orientado a los beneficios y características del producto o marca y asume que los consumidores toman decisiones racionales, identificando el máximo de beneficios que derivan de la comparación entre diferentes productos o marcas. El marketing de la experiencia, en contraste, asume que los consumidores desean ser estimulados, entretenidos, educados y retados por los productos que ellos compran. Así, los consumidores buscan las marcas que les proveen experiencias memorables.

De acuerdo con lo expuesto anteriormente en el mercadeo tradicional, las estrategias de branding son usadas para crear conocimiento y atención. Y en marketing de la experiencia, la actividad central es desarrollar formas eficientes para crear y entregar experiencias. El marketing de la experiencia, contrario al marketing tradicional, no está centrado en los beneficios de producto

sino en la situación de consumo y en cómo los productos y las marcas pueden mejorar la experiencia de consumo. Así, el marketing de la experiencia es ampliamente definido como cualquier tipo de actividad de marketing enfocada al cliente que crea una conexión con el consumidor. Basados en este planteamiento, las experiencias pueden ser evocadas por productos, interacciones dentro de la tienda, relaciones de venta, eventos. Ellas pueden ocurrir como resultado de actividades online u off line.

Algunos autores ven el marketing de la experiencia o la experiencia de consumo de una forma más estrecha y aplican el concepto de experiencia solamente a las interacciones, las relaciones o eventos dentro del contexto. Dentro de este enfoque están las afirmaciones de Pine and Gilmore (1999) quienes se refieren a la experiencia como aquellos eventos que involucran individuos de forma personal. Gentile et al (2007, pág. 397) consideran que la experiencia de consumo se origina a partir de un conjunto de interacciones entre un consumidor y un producto, una compañía, o parte de ella, lo cual provoca una reacción. Esta experiencia es estrictamente personal e implica un involucramiento del consumidor en diferentes niveles: racional, emocional, sensorial, física e intelectual. Esta evaluación depende de las expectativas del consumidor y del estímulo que proviene de la interacción con la compañía y su oferta, en correspondencia con los diferentes momentos de contacto.

Por lo tanto, se denomina Mercadeo de la Experiencia al proceso holístico que se inicia desde la sensación (contacto de los órganos de los sentidos con el estímulo), continua con la percepción, donde se involucran la interpretación y la valoración emocional de la experiencia, dando como resultado una vivencia. Este concepto abarca el marketing sensorial, de los sentidos y emocional, porque reconoce los impulsores racionales y emocionales y asume la experiencia como resultado de vivir una situación.

Así, lo importante del Mercadeo de la Experiencia es el significado que el consumidor atribuye al producto con la vivencia de la marca, convirtiéndose, desde lo comercial, en el mayor valor percibido por el cliente. Cuando un cliente compra un producto, lo que busca es disfrutar de él; lo que compra es la experiencia que le proporciona el producto. No se venden productos, se venden experiencias.

Lo difícil es evaluar lo intangible de la experiencia. Además, hay que tener en cuenta que las experiencias siempre son diferentes para el consumidor y cada vez que el consumidor está frente a un producto, desarrolla un momento de verdad. Lo clave es igualar y/o superar las expectativas en cuanto a calidad de la experiencia vivida. El marketing experiencial, también conocido como marketing sensorial, marketing poli-sensorial y marketing emocional y definido como “última frontera del marketing”, nació al comprobar que los consumidores no se comportan siempre de forma racional, por lo tanto, la implementación de este enfoque implica una verdadera revolución interna; *es necesario emocionar al cliente*: todos los estímulos deben proyectar los valores de la marca en un círculo auto-referencial que implique e involucre al cliente. Las actividades de marketing y de gestión de los clientes se centran en la búsqueda de nueva fuente de ventajas competitivas basadas en la diferenciación e implicación emocional de los clientes y en la creación de experiencias positivas ligadas a la marca y/o establecimiento. Los consumidores comparan la experiencia percibida con sus expectativas. Si el cliente percibe que su experiencia es inferior a las expectativas se genera desinterés hacia la marca. Brend Schmitt (1999) – Acuñó el concepto de Mercadeo de la experiencia. Proponiendo cinco formas de promover la experiencia, a través de lo:

*Sensorial – Sense (percepción) – Mercadeo de los sentidos*

*Emocional – Feel (sentimiento) – Mercadeo Emocional*

*Físico y estilo de vida – Act (actuación)*

*Cognitivo y creativo – Think (pensamiento)*  
*Identidad social – Relate (relación) – Mercadeo relacional.*

En la misma línea, Brakus et al. (2009) definen la *Experiencia de Marca* como un conjunto de respuestas internas subjetivas y de comportamiento suscitado o provocado por los estímulos relacionados con la marca que forman parte de su diseño, identidad, presentación, comunicación y entorno de venta. A partir de la pertinente revisión de trabajos en distintas disciplinas (filosofía, ciencia cognitiva, gestión, marketing experiencial) categorizan estas respuestas en 5 dimensiones (sensoriales, afectivas, de pensamiento, sociales y de actuaciones) que están muy estrechamente relacionadas con los módulos experienciales propuestos por Schmitt (1999, 2000) para crear experiencias de marca:

*La dimensión sensorial:* apela a las respuestas relacionadas con los sentidos (vista, oído, tacto, gusto y olfato) y pueden venir provocadas no sólo por elementos de la identidad visual de la marca (símbolos visuales, color, eslogan, música, diseño, etc.) sino también por los aspectos sensoriales del producto físico y del núcleo de un servicio.

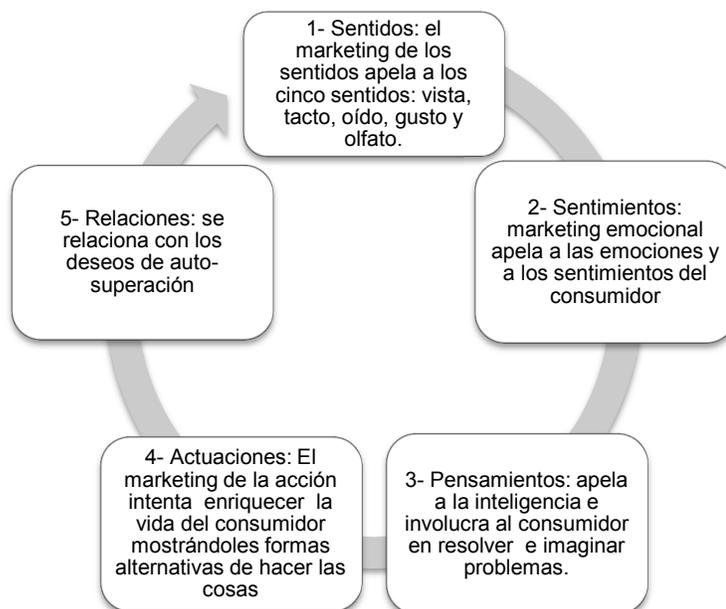
*La dimensión afectiva:* tiene que ver con los sentimientos y emociones más internos del sujeto y varían desde la dirección positiva hasta la negativa. Además se vinculan fuertes emociones a la marca como: la alegría, diversión u orgullo, nostalgia, frustración, etc.

*La dimensión de pensamiento:* está relacionada con experiencias que invitan al consumidor a pensar y que despiertan su creatividad y su curiosidad.

*La dimensión social o de relaciones:* apela a las experiencias relacionadas con la interacción con otros e implica una conexión con otras personas, grupos sociales, de referencia o una entidad social

*La dimensión de actuaciones:* tiene que ver con las experiencias relacionadas con el cuerpo, pautas de comportamiento más a largo plazo e imitación de modelos y estilos de vida.

Figura 1: Cinco Tipos de Experiencias del Marketing Experiencial



Fuente: elaboración propia

Sin duda, hoy día las empresas del mundo están siendo participes del nacimiento de una nueva era, en la cual la economía desempeña papeles diferentes pero adaptados a roles más integrales y analíticos de la organización; prácticamente todas las empresas, independientemente de cuál sea su categoría deben enfrentarse a los efectos del cambio acelerado y la nueva competencia, buscando conseguir, a toda costa, la fidelidad de sus clientes. En este sentido es importante resaltar que para conservar y fomentar la fidelidad de los consumidores se necesita más que generar una satisfacción profunda con un producto o servicio; es decir, el servicio no garantiza el compromiso por parte de los clientes. Se evidencia, entonces, la necesidad de algo más; una conexión que eleve la relación cliente - empresa a una dimensión más allá de lo racional y funcional: se está haciendo referencia a una dimensión afectiva.

En el mundo de los negocios dicha relación establece una fuente de valor, una conexión que, de una u otra forma, ofrece al consumidor cada vez más posibilidades de encontrar lo que necesita, como lo necesita y al precio que puede pagar. Por su parte, el empresario encuentra opciones de reconocimiento, posicionamiento y, por qué no decirlo, rentabilidad, cuando puede satisfacer la expectativa del consumidor que da por sentado el estándar de calidad y proclama por encontrar identidad, arraigo, algo de exclusividad. Las experiencias siempre han formado parte de la vida de las personas, y para el caso que nos ocupa, de los consumidores, por lo que esta nueva tendencia denominada *Mercadeo de la Experiencia* podría definirse como la búsqueda de una conexión sostenible que lleva a los clientes a sentirse atendidos, valorados, consentidos y cuidados, respondiendo con una actitud de lealtad cuando así se requiera. Lo que implica reconocer que el ser humano posee la facultad de asociar y relacionar las sensaciones procedentes de cada uno de sus sentidos, relacionándolas con ideas y conceptos que, a su vez, generan emociones y sentimientos, haciendo de sus vivencias experiencias memorables.

## DISEÑO METODOLÓGICO

El presente estudio requirió el abordaje desde un enfoque de investigación mixto, dadas las fases que tuvieron curso durante el proceso. En una primera etapa se realizó un censo en los centros

comerciales para identificar la presencia de locales comerciales con marcas de prendas de vestir dirigidas al target joven, en total se identificaron 32 puntos de venta en cada centro comercial. Posteriormente se efectuó observación libre de vitrinas e interiores de los almacenes. Esta etapa de tipo exploratorio permitió identificar las marcas de prendas de vestir que implementaban estrategias de marketing de la experiencia. Finalmente, al seleccionar las marcas (muestra) de la investigación, se procedió a realizar entrevistas en profundidad con administradores de los almacenes y gerentes de mercadeo y a efectuar la observación sistemática en los locales comerciales y en los sitios web de las marcas con la implementación de una plantilla para el registro de los datos. Y por último se realizaron entrevistas a compradores de las marcas.

Para el análisis de los resultados se establecieron las dimensiones de las variables de mercadeo de la experiencia implementadas por las tiendas en los dos centros comerciales, pudiendo, a partir de un análisis estadístico, determinar el peso de las variables a partir de las tácticas implementadas. Las variables asociadas con cada uno de los sentidos se operacionalizaron, estableciendo indicadores de su presencia. Adicionalmente, se ponderaron las variables a través de indicadores de impacto sensorial, involucramiento emocional y nivel de experiencia. Las ponderaciones dispuestas en esta investigación se basaron en los siguientes indicadores de impacto de experiencia desde lo sensorial.

- a. La ponderación de cada variable se estableció de 0 a 5 siendo; 0 Inexistente, 1 Muy Bajo, 2 Bajo, 3 Neutra, 4 Alto, 5 Muy Alto. Para explicitar estas ponderaciones se consideraron los siguientes enunciados.
- b. El desglose de las variables ponderadas con los valores arriba mencionados se les asignó un peso porcentual según el impacto en el desarrollo del estímulo, los resultados que arrojó cada una de las variables se totalizaron y se promediaron generando como resultado la incidencia de cada uno de los estímulos tipificados en sentidos de la siguiente manera:

Sentido Visual: En esta categoría se encuentran todos los estímulos que afectan la visión (colores, formas, tamaños, iluminación).

Tabla 1: Variables visuales

Variables visuales	Colores	Material predominante	POP	Señalética	Decoración	Accesorios	Estantería	Maniquies	Vestier	Iluminación	Fachada/aviso	Vendedores
Porcentajes	5%	5%	18%	5%	11%	2%	10%	5%	9%	12%	12%	6%

*Fuente: elaboración propia*

Sentido Auditivo: En esta categoría se encuentran todos los estímulos que afectan el oído (música, aislamiento de ruido, verbalizaciones de personal de la tienda)

Tabla 2: Variables Auditivas

Variables auditivas	Musica	Ritmos musicales	Volumen de la música	Discurso empleado	Aislamiento ruidos
Porcentajes	35%	20%	10%	20%	15%

Fuente: elaboración propia Sentido Olfativo: En esta categoría están incluidos los estímulos asociados a las fragancias utilizadas por las tiendas.

Tabla 3: Variables Olfativas

Variables olfativas	Existencia de olor	Tipo de olor	Intensidad del olor	Aplicación olor
Porcentajes	60%	20%	5%	15%

Fuente: elaboración propia Sentido del tacto: Se incluyeron en la estimulación de este sentido la interacción del consumidor con las prendas y la regulación de la temperatura de la tienda.

Tabla 4: Variables Táctiles

Variables Táctiles	Interacción con las prendas	Control de temperatura
Porcentajes	70%	30%

Fuente: elaboración propia Sentido Gustativo: Se incluyen en esta categoría el ofrecimiento de bebidas o golosinas ofrecidas o a disposición del cliente.

Tabla 5: Variables Gustativas

Variables Gustativas	Bebidas	Dulces
Porcentajes	60%	40%

Fuente elaboración propia La anterior ponderación fue aplicada a las más de 142 variables sensoriales agrupadas en clusters descriptivos para cada uno de los sentidos (vista, oído, olfato, tacto y gusto), en donde cada una aportaba a visión cuantitativa global con el fin de determinar:

- Nivel de Experiencia por sentido; que se extrae de la sumatoria de las ponderaciones de las variables de cada sentido en donde:  $\Sigma = (sv + so + sg + st + sa)$

Sv= Sentido Visual Sa=Sentido Auditivo St=Sentido Táctil So=Sentido Olfativo  
Sg=Sentido Gustativo

- Nivel de Involucramiento Emocional; valor estimado a partir del grado de impacto sensorial expuesto de cada una de las tiendas a partir de los sentidos y como estos refuerzan una imagen asociativa en la mente del consumidor. Esta ponderación surge la extracción del nivel de experiencia por sentido multiplicado por el porcentaje de peso de cada sentido de involucramiento emocional según la siguiente tabla de valores:

Tabla 6: Ponderaciones De Los Sentidos En Relación Al Nivel Involucramiento Emocional

Sentidos	Sentido de la vista	Sentido del oído	Sentido del olfato	Sentido del tacto	Sentido del gusto
Involucramiento sensorial	30%	10%	50%	8%	2%

Fuente: elaboración propia

Fórmula:  $ie = (s * \%)$  Dónde:  $ie$  = involucramiento emocional  $S$  = Total Sentido Nótese que el sentido del olfato es tipificado por ser el sentido que más involucramiento emocional ofrece para reforzar la recordación de una marca (Lindstrom 2008); así mismo las tiendas que invierten dinero en el desarrollo de un aroma distintivo para su marca, así como el olor del pan caliente asociado a la sensación de placer en el paladar de las personas que circulan cerca de una panadería, el impacto de una esencia u aroma impregnado y asociado a un producto es uno de los estímulos más predominantes para las estrategias de marketing de la experiencia. El rango de análisis de esta variable va de 0,00 como muy bajo a 1,00 como muy alto.

- *Nivel de Impacto Sensoria*: valor estimado a partir del grado de impacto sensorial expuesto de cada una de las tiendas teniendo como referencia el nivel de estímulos que reciben los sentidos, siendo el sentido de la vista el que recibe el peso de la mitad del involucramiento emocional, nótese como la marca, la decoración de la vitrina, la iluminación, los avisos de ofertas y promociones en material P.O.P son denotativos del involucramiento de este sentido. Esta ponderación surge la extracción del nivel de experiencia por sentido multiplicado por el porcentaje de peso de cada sentido de impacto sensorial según la siguiente tabla de valores:

Tabla 7: Ponderaciones de los Sentidos en Relación al Nivel Impacto Sensorial

Sentidos	Sentido de la vista	Sentido del oído	Sentido del olfato	Sentido del tacto	Sentido del gusto
Impacto sensorial	60%	30%	10%	8%	2%

Fórmula :  $is = (s * \%)$ . Dónde:  $is$  = impacto sensorial  $S$  = total Sentido

El sentido de la vista es tipificado por ser el sentido que más impacto sensorial que ofrece para reforzar la recordación de una marca para este caso la influencia publicitaria desde lo gráfico y lo iconográfico es relevante; así mismo las tiendas invierten mucho dinero en publicidad y promoción ya que el impacto visual es uno de los estímulos más predominantes para las estrategias de marketing de la experiencia. El rango de análisis de esta variable va de 0,00 como muy bajo a 1,00 o superior como muy alto.

## RESULTADOS

Una vez ponderadas las variables y agrupadas por clusters para complementar una perspectiva global por cada uno de los estímulos sensoriales se encontraron frecuencias que marcaban indicadores de experiencia y que aportaban a la construcción de una percepción de la marca. Las variables si bien pueden ser interpretadas de manera individual, vistas en conjunto favorecen la labor concluyente sobre el grado de experiencia por marca en cada uno de los centros comerciales

objetos de este estudio. Los rangos de interpretación corresponden a los resultados consolidados de todas las tiendas evaluadas en Unicentro y Chipichape según el siguiente Tabla:

Tabla 9: Promedio Total Experiencia en Dos Centros Comerciales

Sentidos	Sentido de la vista	Sentido del oído	Sentido del olfato	Sentido del tacto	Sentido del gusto
Promedio total marcas	0.45	1.15	0.56	0.34	0.73

Es importante destacar que el promedio de experiencia de las tiendas de prendas de vestir dirigidas al target joven los dos centros comerciales de 3.2 en una escala de 1 a 5. Posteriormente la sumatoria de las frecuencias arrojó como resultado final el nivel de experiencia por marca y el nivel de experiencia en cada centro comercial. El estudio finalmente arrojó ponderaciones a partir de la sumatoria y el peso de cada una de las variables designadas para cada sentido y permitiendo mapear el estado de la marca y el centro comercial en grado de influencia. La siguiente tabla organiza el total de las marcas en función de los sentidos en cada centro comercial, destacando el impacto de cada uno de los sentidos

Tabla 10: Experiencia Sensorial de las Marcas en el Centro Comercial Unicentro y Chipichape Cali

UNICENTRO	SENTIDO VISTA	SENTIDO AUDITIVO	SENTIDO OLFATO	SENTIDO TACTO	SENTIDO DEL GUSTO	TOTAL SENTIDOS	
TOTAL SENTIDO	5,47	13,33	11,19	3,58	7,11	40,69	<b>Total Experiencia</b>
PROMEDIO SENTIDO	0,55	1,33	1,12	0,36	0,71	4,07	<b>Promedio experiencia</b>
CHIPICHAPE	SENTIDO VISTA	SENTIDO AUDITIVO	SENTIDO OLFATO	SENTIDO TACTO	SENTIDO DEL GUSTO	TOTAL SENTIDOS	
TOTAL SENTIDO	6,37	17,86	10,88	2,23	10,19	47,54	<b>Total Experiencia</b>
PROMEDIO SENTIDO	0,49	1,37	0,84	0,17	0,78	3,66	<b>Promedio experiencia</b>

Fuente: Los autores.

## CONCLUSIONES

A nivel general el aporte de las marcas internacionales con presencia en los centros comerciales al desarrollo de estrategias de marketing de la experiencia ha sido positiva para las marcas nacionales. El presente estudio aborda 9 marcas de tiendas de ropa internacionales y 4 marcas de tiendas de ropa nacionales. Donde se puede destacar que el desarrollo de estrategias de marketing de la experiencia por parte de marcas nacionales puede llegar a ser mucho más fuerte y planificado que el de las mismas marcas internacionales presentes. El estudio finalmente arrojó ponderaciones a partir de la sumatoria y el peso de cada una de las variables designadas para cada sentido y permitiendo mapear el estado de la marca y el centro comercial en grado de influencia. La estrategia del mercadeo de la experiencia más utilizada por todas las marcas objeto de estudio, es el uso de elementos visuales; la exhibición y decoración de las prendas de las marcas en las vitrinas. Dentro de los elementos visuales se destacan: los accesorios decorativos, mobiliarios, iluminación y los colores representativos en la identidad de la marca. La musicalización en las tiendas de prendas de vestir se caracteriza por el uso de determinados géneros musicales, dependiendo del estilo de la marca y público al cual va dirigido. Las marcas dirigidas al target

joven observadas no utilizan mucho la ambientación olfativa en las tiendas de prendas de vestir, sólo en dos de las marcas actualmente aplican aromas definidos como elemento corporativo.

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# CARACTERIZACIÓN DE LAS PEQUEÑAS Y MEDIANAS EMPRESAS EN LA REGIÓN COSTA SUR DE JALISCO, MÉXICO

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## RESUMEN

*El presente trabajo incluye un análisis de las características de las micro, pequeñas y medianas empresas que se localizan en la región Costa Sur de Jalisco, en México. El estudio de estas unidades económicas ha cobrado importancia a través del tiempo, su dinámica difiere de la gran empresa, ya que enfrentan condiciones diferentes en cuanto a organización interna, procesos productivos y recursos. Derivado de lo anterior, los aspectos relacionados con el ambiente externo, tales como mercados, ambiente político, económico, social y tecnológico representan retos diferentes para este tipo de organizaciones.*

**PALABRAS CLAVE:** PyMEs, Factores de la empresa, factores del entorno

## CARACTERIZATION OF SMALL AND MEDIUM ENTERPRISES IN REGION COSTA SUR OF JALISCO, MÉXICO

### ABSTRACT

*This paper presents an analysis of characteristics of small and medium enterprises located at Costa Sur of Jalisco, México. The study of these business units has gained importance through time, their dynamic is different from big companies, and they face unique conditions related to internal organization, productive processes and resources. The aspects related with external environment, such as, markets, political, economic, social and technological environment, represent a challenge for them.*

**JEL:** M10

**KEYWORDS:** SMEs, Firm factors, External factors.

## INTRODUCCIÓN

Las micro, pequeñas y medianas empresas desempeñan un papel fundamental en la economía mexicana. El 99% de las unidades económicas en México pueden clasificarse como PyMEs, estas son generadoras de empleo y riqueza, teniendo un impacto en especial en el desarrollo regional. El estudio de las características de estas unidades económicas ha cobrado importancia a través del tiempo, su dinámica difiere de la gran empresa, ya que enfrentan condiciones diferentes en cuanto a organización interna, procesos productivos y recursos. Derivado de lo anterior, los aspectos relacionados con el ambiente externo, tales como mercados, ambiente político, económico, social y tecnológico representan retos diferentes para este tipo de organizaciones. Es por ello que resulta importante analizar las condiciones en las que operan estas unidades económicas, el ambiente que enfrentan, así como, los recursos con los que cuentan para la realización de sus operaciones, considerando la tasa de mortalidad elevada que tienen las mismas. El objetivo que persigue este

trabajo es analizar las características de las micro, pequeñas y medianas empresas en la región Costa Sur de Jalisco, con el fin de identificar aquellos factores internos y externos que afectan su desarrollo. Con el fin de cumplir el objetivo se diseñó un instrumento para ser aplicado a una muestra de 320 empresarios de la región.

El documento se organiza como sigue, a continuación se presenta una revisión de la literatura relacionada con estudios sobre las condiciones de la micro, pequeña y mediana empresa; en el siguiente apartado se define la metodología empleada para realizar la investigación. En la tercera sección se presentan los resultados para posteriormente concluir.

## REVISIÓN LITERARIA

Aun cuando las PyME revisten de gran importancia para la economía de un país, no existe una definición única que comprenda a este tipo de entidades. La clasificación de las micro, pequeñas y medianas empresas atiende a diversos criterios, tales como ingresos o personal ocupado. Existen criterios que consideran a la microempresa como un término independiente de las PyME, sin embargo esto no es universal (Pavón, 2010). Para el caso del presente trabajo se incluye dentro del término PyME a las microempresas. Según la clasificación de INEGI, que atiende al número de trabajadores por empresa; el 95% de las unidades económicas pueden considerarse como microempresas, con un número de trabajadores que oscila entre 0 y 10. El 4% de las empresas se clasifica como pequeñas (11-50 trabajadores), en el rango de empresas medianas se encuentra el 0.8% de las entidades (51-250 empleados) y como empresas grandes (mas de 251 trabajadores) se clasifica solo el 0.2% de las compañías. Como puede verse en la tabla 1, el 99.8% de las empresas mexicanas se considera como PyME, su producción bruta es menor que la de las grandes empresas, aun cuando el personal ocupado por estas pequeñas unidades representa el 73% del personal ocupado total.

Tabla 1: Tamaño, Personal Ocupado y Producción Bruta de las Empresas en México

Personal ocupado	% de unidades	Producción bruta	Personal ocupado
0-10	95%	8.3%	41.8%
11-50	4%	9.0%	15.3%
51-250	0.8%	17.4%	15.9%
251 y mas	0.2%	65.3%	27.0%

Fuente: INEGI, Censos económicos 2009.

El tamaño promedio de las unidades económicas en México, atendiendo al personal ocupado es de 5.4 personas, la industria manufacturera ocupa en promedio a 10 personas por unidad, mientras que el comercio ocupa 3.3 personas (Censos económicos, 2009). Las PyME han sido estudiadas a lo largo del tiempo como unidades homogéneas, sin embargo, debe ponerse especial atención a sus características particulares, que las hacen diferentes a las grandes empresas y a la vez distintas entre sí; comprendiendo que el término abarca unidades económicas con características propias que han sido agrupadas en razón de tamaño. Las PyME operan en un contexto empresarial, en donde generalmente la dirección y la toma de decisiones le competen al propietario o a un líder administrador (Mintzberg, et al, 1996).

Cuentan con una estructura organizacional simple que les permite una mayor agilidad en la toma de decisiones (Pavón, 2010). Sin embargo este factor puede jugar en contra de ellas, al incrementar el riesgo de fracaso debido a la poca profesionalización de las actividades administrativas, problemas en el área de producción, falta de acceso a financiamiento; aspectos

que se ven reflejados en la elevada tasa de mortalidad de estas empresas (Tan, et al, 2007). El carácter familiar de la PyME ha sido analizado como un factor importante en el desempeño de la misma, los resultados no han sido concluyentes, si bien algunos estudios señalan una ventaja para aquellas empresas de propiedad familiar cuya administración recae en un miembro de la familia fundadora, otros autores señalan esto como una desventaja con relación a la rentabilidad (Sánchez, et al, ). Aragón y Rubio (2005) consideran que la competitividad de una PyME depende tanto de factores internos, tales como recursos físicos, habilidades y conocimientos; como de factores externos que derivan del entorno de actuación de la empresa, entre ellos están los factores políticos, económicos y sociales. Si bien el desempeño empresarial se analiza desde diferentes dimensiones, tales como, supervivencia, rentabilidad, incremento de las ventas, número de empleados, reputación, entre otros (Islam, et al, 2011); existen diversos enfoques para analizar los aspectos que inciden en el desempeño empresarial (Di Tomasso y Dubinni, 2000). Para Zevallos (2006) las áreas consideradas como relevantes o problemáticas en el desarrollo de las PyMEs son el área financiera, la infraestructura (servicios públicos), la política, los problemas sociales y culturales, el mercado interno, el comercio exterior, la tecnología y la información, el medio ambiente.

Bechetti y Trovato (2002) analizan el crecimiento de las pequeñas empresas contrastando la edad y tamaño de las mismas con aspectos externos como los subsidios que otorga el estado, la capacidad exportadora y el racionamiento del crédito. Dussel (2004) señala el crecimiento económico y mercado interno, la sobrevaluación del tipo de cambio y la falta de acceso y elevado costo del financiamiento como factores críticos para el desarrollo de las PyMEs. Para Rutherford y Oswald (2000) el desempeño de las pequeñas empresas se clasifica en tres categorías de antecedentes: Las características individuales del empresario/gerente; las características de la empresa y los aspectos ambientales.

La figura del empresario es importante en las pequeñas empresas, su comportamiento y decisiones influyen en el desempeño empresarial (Di Tomasso y Dubinni, 2000, Velarde, *et al*, 2013). Atributos como la edad, género, educación, know how gerencial, experiencia y habilidades del empresario o director han sido analizados en estudios recientes (Islam, et al, 2011; Capeller y Greene, 2008). Otro aspecto que ha sido considerado en el análisis del desempeño es la propiedad familiar tiene un impacto en la toma de decisiones y el rumbo que seguirán las organizaciones (Sánchez Gardey, et al, 2009).

En este contexto se identifica al financiamiento como un factor un factor determinante para el crecimiento y desarrollo empresarial en empresas localizadas en países emergentes (López, 1999; López-Gracia y Sogorb-Mira, 2008). Aspectos relacionados con la dificultad de las empresas de obtener recursos financieros debido a elevadas tasas de interés, exceso de garantías colaterales que exigen las instituciones crediticias, numerosos trámites, costos de capital, entre otros (Zevallos, 2006) consisten barreras para que la PyME busque financiamiento proveniente de la deuda, por lo que limita su crecimiento y desarrollo al limitarse al empleo de recursos propios, ya sea generados internamente por la empresa o bien provenientes del capital del empresario (Psillaki y Daskallaris, 2009).

## **METODOLOGÍA**

El presente trabajo se basa en información obtenida de una muestra de empresas que operan en los seis municipios que integran la región Costa Sur del estado de Jalisco: Autlán de Navarro, Casimiro Castillo, Cuautitlán de García Barragán, La Huerta, Villa de Purificación y Cihuatlán. Para obtener los datos se diseñó un instrumento conformado por 80 ítems basados en escala líkert,

agrupados en 5 bloques, relacionados con el perfil del empresario y empleados, la actividad innovadora desarrollada por la empresa, los procesos internos y tecnología, aspectos de mercado y financiamiento de la inversión. El instrumento se validó con el Alfa de Cronbach con un resultado de 0.74.

Con el objetivo de definir la muestra objeto de estudio se solicitó en el registro público de comercio los datos de las licencias municipales de las empresas que operan en cada uno de los municipios. Estos padrones de licencias fueron analizados y depurados con el fin de eliminar de la población total los registros duplicados, giros negros, entidades de reciente creación o registros menores a los cinco años de antigüedad. Una vez depurados los padrones de licencias, se definió el tamaño de la muestra en 320 unidades económicas. Se empleó un muestreo aleatorio estratificado. La tasa de respuesta fue de 67% en promedio, siendo más alta en el municipio de Autlán de Navarro y Villa de Purificación.

Se logró entrevistar en total a 210 empresarios y administradores de empresas en seis municipios de la región. La muestra se compone de 98 empresas del sector comercio, 25 empresas industriales y 87 empresas de servicios.

Tabla 2: Número de Empresas Que Componen la Muestra

Municipio	Clasificación sectorial		
	Comercio	Industrial	Servicios
Autlán	38	9	32
C. Castillo	14	3	4
Cihuatlán	18	1	16
Cuahtitlán	2	0	0
La Huerta	15	11	18
Purificación	11	1	17

Las empresas que conforman la muestra tienen una antigüedad mínima de 5 años, la más antigua en la que se aplicó el cuestionario ha operado por 70 años. El número de empleados va desde micro negocios sin empleados hasta empresas con 99 empleados a tiempo completo. A continuación se presentan los resultados obtenidos del análisis de la información proporcionada por los empresarios de la región empleando el programa SPSS versión 20.

## RESULTADOS

La muestra se compone de micro y pequeñas empresas que en su mayoría son de propiedad familiar, en donde las actividades de dirección y gestión recaen en manos de miembros de la familia, así como las actividades operativas en algunos casos. El nivel de formación de los administradores/propietarios oscila desde formación básica hasta universidad. Considerando el género de la persona que realiza las actividades de dirección, se encuentra para el caso de empresas comerciales que las mujeres tienen un nivel educativo más alto que los hombres, de igual manera sucede para las empresas del sector industrial. En el caso de las empresas del sector servicios los hombres que llevan a cabo las tareas de dirección son quienes tienen un nivel educativo mayor (tabla 2).

Tabla 2: Características del Director General/Administrador de la Pyme

Género del director general	Nivel de Formación	Sector		
		Comercial	Industrial	Servicios

Femenino	Básica	8.3%	66.7%	29.7%
	Bachillerato	16.7%	0.0%	21.6%
	Técnico	16.7%	16.7%	5.4%
	Universidad	58.3%	16.7%	43.2%
Masculino	Básica	33.3%	60.0%	21.3%
	Bachillerato	22.2%	30.0%	4.3%
	Técnico	11.1%	0.0%	10.6%
	Universidad	33.3%	10.0%	63.8%

Sin embargo, las actividades de dirección/administración recaen mayormente en personas que no tienen una formación profesional en el área económico – administrativa, especialmente en los casos en los que son los propietarios quienes dirigen la empresa. Se encontró con administradores/propietarios con formación profesional diversa, desde médicos veterinarios, abogados, ingenieros en sistemas, agrónomos, entre otras. Algunos señalan haber iniciado con la empresa como una opción de autoempleo, en donde lograron insertarse en una actividad económica como alternativa a la búsqueda de un empleo en el área de su formación.

Tabla 3: Nivel de Formación de Administradores/Propietarios y Tipo de Propiedad

Nivel de formación	Propiedad		
	Familiar	Propietario único	Sociedad
Básica	31.4%	29.8%	16.7%
Bachillerato	12.9%	21.1%	0.0%
Técnico	11.4%	7.0%	8.3%
Universidad	44.3%	42.1%	75.0%

Si se considera el tipo de propiedad, en las empresas constituidas como personas morales el nivel educativo de las personas que realizan la función de administrador es más alto, el 75% de ellas cuenta con estudios universitarios, en comparación con las empresas familiares y las de propietario único. La mayoría de las empresas entrevistadas señalan percibir problemas con respecto a las condiciones del mercado. El área de operación de las mismas es mayormente local, el 3.6% señala operaciones a nivel estatal, 0.7% operan a nivel nacional y el 4.3% a nivel internacional. Cabe señalar que estas últimas se ubican en el sector turismo. Las empresas entrevistadas financian sus actividades de inversión mayormente con recursos propios, una minoría señala recurrir a financiamiento proveniente de deuda, ya sea con instituciones bancarias, cajas populares o bien de crédito con proveedores. Se les preguntó a los empresarios si conocen programas de financiamiento a lo que el 56.1% señala que si y el 43.9% señala no conocer ningún programa. Los entrevistados que señalaron tener conocimiento de la existencia de programas de apoyo a las PyME ubicaron el programa denominado FOJAL, solo el 8% de los entrevistados han aplicado para un crédito de este tipo.

Los entrevistados tienen preferencia por el empleo de recursos propios, solo el 46% ha solicitado algún crédito en los últimos cinco años, el 53.2% restante no ha solicitado financiamiento externo durante la vida de su empresa. Los motivos más comúnmente señalados para no recurrir a algún préstamo son el exceso de trámites, el desconocimiento de los tipos de productos que ofertan las instituciones crediticias y la desconfianza en el entorno económico. De los entrevistados que solicitan crédito de manera regular la mayor parte lo hace recurriendo a Instituciones de Crédito Popular. La percepción de los empresarios sobre la situación económica en la región es mala. Señalan percibir una disminución en sus ventas durante el 2011 y 2012. Sin embargo, no todos los empresarios tienen la misma percepción. Aquellas empresas que realizaron cambios en sus procesos productivos o de servicios, reportan una mejora en sus ventas con respecto al año anterior. En especial las empresas del sector turismo que mejoraron o ampliaron sus instalaciones,

perciben un incremento en el volumen de clientes en el año inmediato a la inversión. Sin embargo es de hacer notar que al cuestionarles sobre el comportamiento de sus ventas en los años de 2008 a 2012 ninguna empresa señala un nivel excelente. Con respecto a la contratación de personal durante el 2012, los entrevistados en su mayoría señalan no haber contratado personal. Aquellas empresas que realizaron alguna inversión que incrementó su capacidad de atención, si realizaron alguna contratación, el promedio es de 1.5 nuevos empleados.

## CONCLUSIÓN

Las empresas de la región costa Sur de Jalisco son organizaciones familiares en las cuales las actividades de dirección son realizadas por los propietarios o miembros de la familia de estos. El nivel educativo promedio es de bachillerato. Las organizaciones constituidas como personas morales con un nivel mayor de formalidad en su estructura son dirigidas en su mayoría por personas con formación universitaria, aun cuando no necesariamente esta formación es en el área económico – administrativa. Las empresas han financiado sus actividades de inversión con recursos autogenerados, existe una renuencia a emplear financiamiento externo, debido a las condiciones económicas o a la percepción del empresario con respecto a las entidades financieras. Es necesario el apoyo encaminado a lograr la formalización de la operación de este tipo de entidades, que son generadoras de empleo, pero que enfrentan un ambiente dinámico que puede incrementar su probabilidad de fracaso.

Una limitante que debe considerarse es el acceso a la información, el ambiente de inseguridad que se percibe en algunos municipios generan desconfianza y renuencia a compartir información relacionada con sus finanzas o producción. En el presente trabajo se considera la percepción del empresario sobre ciertos aspectos, no se tuvo acceso a datos contables.

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## **RECONOCIMIENTOS**

El presente trabajo es parte de los resultados del proyecto de investigación “Factores que inciden en el desarrollo y desempeño de las PyME en la Región Costa Sur de Jalisco” financiado por PROMEP.

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# RELEVANCIA VALORATIVA DE LA INFORMACIÓN FINANCIERA EN LAS EMPRESAS QUE COTIZAN EN LOS MERCADOS EMERGENTES DE MÉXICO Y BRASIL

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## RESUMEN

*En este trabajo se muestra que la relevancia de la información financiera ha sufrido cambios en el transcurso del tiempo. En el marco de valoración de Ohlson (1995), el patrimonio neto y los resultados han sido sugeridas como dos variables contables fundamentales para tratar de explicar el precio de los títulos de las empresas que cotizan en los mercados de capitales de México y Brasil, por consiguiente el propósito del estudio sigue la perspectiva valorativa de explicar el valor intrínseco de la compañía y evaluar en que grado las variables contables pueden ser utilizadas para la evaluación del precio de mercado. Para lograr nuestro objetivo, se mostrarán y compararán los resultados que se desprenden de la aplicación dos metodologías alternativas. La primera de ellas toma como medida de relevancia el coeficiente de determinación ( $R^2$ ) de una regresión en la que el resultado y el valor contable figuran como variables independientes y, como variable dependiente, el precio de mercado; la segunda, los modelos se estimaran para las muestras de corte temporal y de sección cruzada conjuntamente (panel de datos).*

**PALABRAS CLAVES:** Modelo de Ohlson, relevancia valorativa, precio de la acción

## VALUE RELEVANCE OF THE FINANCIAL INFORMATION ON LISTED COMPANIES IN THE EMERGING MARKETS OF MEXICO AND BRAZIL

### ABSTRACT

*In this study it is shown that the value relevance of the financial information has changes over time. In the Ohlson valuation framework (1995), earnings and book value have been suggested as two fundamental accounting variables to try to explain the stock Price of the companies listed on capital markets of Mexico and brazil, therefore the purpose of the study is the evaluative perspective to explain the intrinsic value of the company and assess to what degree the accounting variables can be used to evaluate the market price. To achieve our goal, we show and compare the results arising from the application two alternative methodologies. The first measure of relevance taken as the coefficient of determination ( $R^2$ ) from a regression in which the outcome and the book value listed as independent variables and the dependent variable, the market price and the second, the models were estimated for cutting samples and cross-sectional time together (panel data).*

**JEL:** G15, M16, M41

**KEYWORDS:** The Ohlson model, value relevance, stock market price

## INTRODUCCIÓN

La investigación contable de los Mercados de Capitales surge en la década de los sesenta, siendo su principal objetivo evaluar en qué medida la información contable es útil para la toma de decisiones de inversión, ello hace que los investigadores se centren en un grupo concreto de usuarios, los inversores en el mercado de valores. Además, incide sobre una de las características cualitativas de la información financiera, su relevancia o capacidad para predecir o corregir expectativas (García Meca y Martínez, 2003). Por tanto, con la finalidad de entender el funcionamiento de los mercados de capitales, es importante reconocer que los estados financieros proporcionan datos sobre las actividades económicas de las empresas y los inversores confían en estos estados financieros para evaluar los planes y rendimientos de las compañías. Sin embargo, ¿cómo podemos medir la relevancia de los mismos sobre los precios de los títulos en el mercado de valores? En los estudios contables, los estudios de relevancia valorativa son utilizados para este propósito. En un contexto contable, cuando hablamos de relevancia valorativa, nos referimos a la habilidad de los números contables para explicar las diferencias en el precio de mercado de las acciones de las empresas. Si el importe de las cifras contables presenta relación con el valor de los títulos durante un periodo determinado, aceptaríamos la idea de que la información contable posee valor relevante para el inversor ya que es tenida en cuenta en el proceso de toma de decisiones.

Los estudios de relevancia valorativa tratan, por tanto, de ver si la información financiera recoge acontecimientos de interés para el mercado, analizando entre otros aspectos, cuales son las variables contables más relevantes para la valoración de los títulos. Estos estudios se consolidan bajo el amparo del trabajo de Ohlson (1995), quien proporciona el sustrato teórico contable necesario para el desarrollo de los estudios de medición o valoración, ofreciendo un modelo teórico de valoración basado en datos contables conocidos y no en expectativas, y además, revelando la necesidad del análisis fundamental para determinar el valor, condición necesaria para el análisis. En el marco de valoración de Ohlson (1995), el patrimonio neto y los resultados han sido sugeridas como dos variables contables fundamentales para tratar de explicar el precio de los títulos en los mercados de capitales. Por consiguiente, el objetivo principal del presente estudio es el análisis de la evolución temporal de la relevancia valorativa de la información contable en México y en Brasil. De acuerdo con el objetivo fundamental que se pretende alcanzar, a continuación se describen los objetivos concretos del estudio empírico:

- Analizar la relación que existe entre las variables contables, resultado y valor contable del neto patrimonial, y el valor de mercado de las empresas mexicanas así como de las empresas brasileñas
- Evaluar en qué medida un componente del resultado, en concreto el “Resultado Operativo”, puede presentar mayor relevancia valorativa que la variable “Resultado Neto”.

## REVISION LITERARIA

El modelo propuesto por Ohlson (1995) ha sido el modelo más utilizado en los estudios de relevancia, marcando un hito en la investigación contable basada en el mercado de capitales al considerar la información financiera como un componente de valor y proporcionar el sustrato teórico contable necesario. Este modelo resume las propuestas teóricas hechas por Peinreich (1938), Edwards y Bell (1961) y Peasnell (1982), convirtiéndose en un modelo de valoración completo ya que valora la empresa no sólo con base a su patrimonio y su capacidad de generar beneficios futuros, sino también considerando aquellos aspectos de la compañía no identificados

en sus estados financieros y relacionados fundamentalmente con los factores clave de creación de valor.

Según Aboody *et al.* (2002), dentro de los de estudios que han servido como patrón a la mayoría de los estudios de relevancia valorativa en los años recientes se encuentran aquellos que se basan en: 1) la relevancia valorativa de los resultados y el patrimonio neto (e.g. Collins, *et al.* 1997; Lev y Zarowin, 1999, o Francis y Schipper, 1999, entre otros); 2) la relevancia valorativa del valor intrínseco del resultado (e.g. Frankel y Lee, 1998). Aunque los resultados de estos estudios han sido, en algunos casos, ambiguos, parecen sugerir que en las últimas décadas se ha producido un deterioro en la asociación entre el valor del mercado de las empresas y diversas cifras contables. En este sentido, Lev (1997) y Francis y Schipper (1999), entre otros, han sugerido que en el mercado americano el poder explicativo de las cifras contables ha decrecido significativamente en las dos últimas décadas, comprobándose una relación con los precios menos significativa que en años anteriores. Uno de los estudios pioneros es el de Collins *et al.* (1997), quienes investigaron la relevancia valorativa de los beneficios y el valor contable a través del tiempo usando el marco teórico de valuación proporcionado por Ohlson (1995) en un período de 41 años (1953-1993). Sus resultados sugerían que la relevancia valorativa conjunta de las cifras de beneficios y el valor de Fondos Propios no había disminuido a lo largo del tiempo, al contrario, aprecian que ha tenido un pequeño incremento. Además, mientras el poder explicativo de los beneficios declina, se incrementa el poder explicativo del valor contable. Esta evidencia la explican por un aumento en las empresas con pérdidas, un aumento en la presencia de intangibles, de partidas excepcionales y a un mayor número de empresas de menor tamaño.

Francis y Schipper (1999) elaboraron modelos utilizando medidas sobre la relevancia valorativa que analizan la capacidad de los beneficios, del neto y de ambos para explicar el valor del mercado de la compañía, en el periodo 1952-1994. Sus resultados muestran un declive en la relevancia de los beneficios y un incremento en la relevancia de los Fondos Propios para explicar el valor de mercado de la empresa. Nuevamente una evidencia consistente con la de Collins *et al.* (1997).

Core *et al.* (2003), realizaron su estudio durante el periodo de 1975-1999 en los Estados Unidos. Sus resultados determinaron que el poder explicatorio ha declinado en las empresas de la Nueva Economía. En el estudio realizado por Dontoh *et al.* (2004), los resultados indican que los estados financieros han perdido su relevancia valorativa debido a un cambio de una economía de capital a una economía de alta tecnología orientada al servicio, basándose en estudios que encuentran un declive temporal en la asociación entre los precios y la información contable. En otros países, Cañibano *et al.* (2000) analizan la relevancia valorativa de los beneficios y el valor contable sobre los precios en el mercado de capitales español durante el periodo de 1983-1997. Los resultados indican que el valor en libros parece haber perdido relevancia, pero los beneficios capturan información de utilidad en la valoración de la empresa, resultados contrarios a las evidencias obtenidas en otros mercados, principalmente el americano. En México, Duran *et al.* (2007) analizan la relevancia valorativa de las cifras contables en la Bolsa Mexicana de Valores durante los años 1991 a 2003. Sus resultados proporcionan evidencia de que el patrimonio neto y los beneficios son relevantes para la valoración de empresas mexicanas y además, de los resultados obtenidos con el modelo de Ohlson (1995), se presenta evidencia de un modelo alternativo que arroja mayor poder explicativo incorporando como tercera variable explicativa los flujos de caja.

## METODOLOGÍA

El objetivo de este estudio es proporcionar evidencia sobre la relevancia valorativa de la

información contable para la formación de los precios de las empresas que cotizan en la Bolsa Mexicana de Valores y en el mercado de valores en Brasil. En este sentido, las hipótesis planteadas para ser contrastadas son las siguientes:

### Hipótesis

H1: Las variables contables fundamentales, resultado y Fondos Propios, no son relevantes en la valoración bursátil de empresas cotizadas en los mercados de capitales de México y Brasil.

H2: La variable “Resultado Neto” es más relevante en la formación de los precios que la variable “Resultado operativo”.

### Modelo Empírico

Las medidas contables que más atención han recibido en el estudio de la relevancia de la información han sido la cifra de resultados y el neto patrimonial, en gran medida apoyadas por el marco conceptual de valoración que resurge desde la publicación del trabajo de Ohlson (1995). En este contexto son innumerables los trabajos (Lev y Zarowin, 1999; Collins et al., 1997; Francis y Schipper, 1999), que tratan de determinar la relevancia de las variables contables utilizando regresiones del precio de mercado sobre estas dos variables contables, considerando la siguiente regresión de niveles:

$$MV_{it} = \beta_0 + \beta_1 BV_{it} + \beta_2 X_{it} + \varepsilon_{it} \quad (1)$$

Siendo,  $MV_{it}$  el valor de mercado de la empresa  $i$  en el tercer mes posterior al cierre de ejercicio (El periodo de carencia de 3 meses tiene como finalidad garantizar la disponibilidad de la información por parte de los inversores.),  $BV_{it}$  el valor contable de los Fondos Propios de la empresa  $i$  en el periodo  $t$ ;  $X_{it}$ , es el valor del Resultado Neto del ejercicio para la empresa  $i$ . Por lo anterior, la relevancia valorativa de las cifras contables queda definida como la capacidad de éstas para resumir información que influye o afecta a los precios del mercado. Para medir esta capacidad se utilizará un análisis de regresión que combina como explicativas de los precios estas dos variables; los Fondos Propios y la cifra de resultados, con base en modelos empíricos aplicados anteriormente por otros autores (Joos y Lang 1994; Collins, *et al*, 1997; Francis y Schipper, 1999). Con el fin de analizar la capacidad explicativa de una medida de resultado distinta al Resultado Neto, se llevará a cabo el análisis de regresión en el que la variable Resultado Neto se sustituirá por la variable  $EBIT$ , midiendo como tal el valor del resultado operativo antes de partidas extraordinarias del ejercicio para la empresa  $i$  en cada periodo, tal y como se recoge en la siguiente expresión:

$$MV_{it} = \beta_0 + \beta_1 BV_{it} + \beta_2 EBIT_{it} + \varepsilon_{it} \quad (2)$$

La estimación de las regresiones se realizará para las muestras de corte temporal y de sección cruzada conjuntamente. Además, para la depuración de datos atípicos que pudieran influir en los resultados de las estimaciones fueron eliminadas las observaciones para las que los residuos estandarizados de la regresión son superiores a tres desviaciones típicas. Con la finalidad de mitigar los inconvenientes de potenciales efectos de escala en las estimaciones de este tipo de modelos de precios, las regresiones son reestimadas deflactando todas las variables por el valor

del Activo Total (Brown, *et al.*, 1999; Dantoh, *et al.*, 2004), por tanto la ecuación de regresión queda finalmente definida como sigue:

$$\frac{MV_{it}}{AT_{it}} = \beta_0 + \beta_1 \frac{BV_{it}}{AT_{it}} + \beta_2 \frac{X_{it}}{AT_{it}} + \varepsilon_{it} \quad (3)$$

Donde  $MV_{it}$  = Es el valor de mercado de la empresa  $i$  en el tercer mes posterior al cierre de ejercicio;  $AT_{it}$  = Es el valor del Activo Total de la empresa  $i$  al término del ejercicio cerrado en el periodo  $t$ ;  $BV_{it}$  = Fondos Propios de la empresa  $i$  en el periodo  $t$ ,  $X_{it}$ , es el valor del Resultado Neto del ejercicio para la empresa  $i$  al término del ejercicio cerrado en el periodo  $t$ . Variables utilizadas en el estudio empírico Las variables independientes utilizadas en este estudio son las siguientes: Fondos Propios “*Book Value*” y Resultado Neto “*Earnings*” y “Resultado operativo” “*EBIT*”. La variable dependiente utilizada es el Valor de Mercado “*Market Value*”. Selección de la muestra La muestra objeto de estudio está constituida por empresas cuyos títulos han sido públicamente negociados durante el periodo 1990-2011 en los mercados de valores de México y Brasil. Para la selección de las empresas y su posterior clasificación se utilizó la base de datos ECONOMÁTICA. De ellas se eliminaron las empresas para las que no se dispone de información contable (cifra de resultados y Fondos Propios) durante el periodo analizado y aquellas que presentan un valor negativo de los Fondos Propios, así como aquellas empresas que pertenecen al sector financiero. Los datos se obtuvieron en miles de dólares a valor constante. Finalmente se eliminaron aquellas observaciones atípicas para cada variable. Como resultado de este proceso de selección la muestra final ha quedado compuesta por un total de 101 empresas mexicanas y 334 empresas brasileñas.

Análisis de resultados obtenidos El análisis que se presenta a continuación va a tratar de determinar la relación que existe entre el valor de mercado de los títulos de las empresas que componen la muestra y dos variables independientes, los Fondos Propios y el Resultado Neto de las empresas de la misma muestra. Para ello, el primer modelo que se estima es el que se corresponde con la ecuación:

$$MV_{it} = \beta_0 + \beta_1 BV_{it} + \beta_2 X_{it} + \varepsilon_{it} \quad (1)$$

Las estimaciones se realizan para el conjunto de años del período utilizado y se lleva a cabo la prueba de corte temporal y sección cruzada 1990-2011. Tomándose los datos una vez que se eliminaron observaciones para los residuos estandarizados de la regresión superior a tres desviaciones típicas, quedando conformada la base de datos por 22 años y con 1149 observaciones para las empresas mexicanas y 1391 observaciones para las empresas brasileñas. Dichos resultados evidencian que las variables independientes utilizadas son relevantes en las empresas seleccionadas, siendo estadísticamente significativas al nivel del 1% y mostrando un  $R^2$  de 36.7 % para las empresas mexicanas y en las empresas brasileñas se observa un  $R^2$  13.4%, la variable de patrimonio es significativa al 1% y la variable de Resultado neto no es significativa.

Tabla 1: Resultados de la Estimación de la Ecuación 1

País	Año	$R^2$	Variables Independientes	Coefficiente	T-stat	Sig.
México	1990-2011	36.7%	$BV_{it}$	0.320	10.926	0.000
			$X_{it}$	0.101	3.435	0.001

Brasil	13.4%	$BV_{it}$	0.144	4.850	0.000
		$X_{it}$	-0.027	-0.918	0.359

En el siguiente paso del estudio, se reestiman las ecuaciones deflactando las variables por el Activo Total, con el objetivo de tratar de mitigar los problemas derivados de las diferencias de escala. Por lo tanto, las tres variables del modelo son deflactadas por el valor del Activo Total quedando definida de la siguiente manera:

$$\frac{MV_{it}}{AT_{it}} = \beta_0 + \beta_1 \frac{BV_{it}}{AT_{it}} + \beta_2 \frac{X_{it}}{AT_{it}} + \varepsilon_{it} \quad (2)$$

Se realizó la prueba de corte temporal y sección cruzada 1990-2011. Cabe mencionar que se eliminaron observaciones para los residuos estandarizados de la regresión superior a tres desviaciones típicas, quedando conformada con 1152 observaciones para las empresas mexicanas y 1356 observaciones para las empresas brasileñas.

Tabla 2: Resultados de la Estimación de la Ecuación 2

País	Año	R <sup>2</sup>	Variables Independientes	Coefficiente	T-stat	Sig.
México	1990-2011	2.5%	$BV_{it}$	0.013	0.407	0.684
			$X_{it}$	0.017	0.531	0.595
Brasil		10.2%	$BV_{it}$	0.013	0.395	0.693
			$X_{it}$	-0.109	-3.333	0.001

Los resultados obtenidos proporcionan evidencia de que los coeficientes asociados a la variable Fondos Propios deflactados por el Activo Total Resultado Neto deflactado por el Activo Total no son estadísticamente significativos y se obtiene un R<sup>2</sup> del 2.5% para las empresas mexicanas y las empresas brasileñas obtienen un R<sup>2</sup> del 10.2% y únicamente la variable de resultado neto deflactada por el activo es significativa al 1%. Realizando un análisis global a los resultados obtenidos al aplicar los diferentes modelos (sin deflactar y deflactados) se detecta que los valores obtenidos por las regresiones el valor del R<sup>2</sup> ajustado es mayor en el modelo sin deflactar y la variable de Resultado Neto es significativa al 1%.

Para probar la hipótesis 2 que dice que la variable “Resultado neto” es más relevante en la formación de los precios que la variable “Resultado operativo” realizamos un análisis de los datos obtenidos al aplicar el modelo de la ecuación (1), modificado por el *EBIT*.

Es importante considerar que el resultado neto incorpora los componentes transitorios que pueden inducir a equivocarse a los inversores a la hora de valorar las acciones y tomar decisiones (Collins et al., 1997; y Hand y Landsman, 1999; Barth et al., 1998). Sin embargo, es pertinente mencionar que la definición de partidas extraordinarias es coincidente en todos los países lo que podría beneficiar el resultado. Pero por otro lado, la definición de resultado operativo capta mejor el componente permanente de los resultados. En base a estos argumentos, se ha realizado la sustitución del resultado neto por el resultado operativo para comparar los resultados obtenidos.

Así pues, el próximo paso es analizar los resultados arrojados por el modelo de la siguiente ecuación:

$$MV_{it} = \beta_0 + \beta_1 BV_{it} + \beta_2 EBIT_{it} + \varepsilon_{it} \quad (3)$$

Donde sustituimos la variable de resultado neto “ $X_{it}$ ” por la variable de resultado operativo “ $EBIT_{it}$ ”. Los resultados proporcionan evidencia de que los coeficientes asociados a la variable Fondos Propios es estadísticamente significativo al 1%, no así la variable de resultado operativo “ $EBIT$ ” y se obtiene un  $R^2$  del 28.3% para las empresas mexicanas y las empresas brasileñas obtienen un  $R^2$  del 14.5% y las variables utilizadas en el modelo son estadísticamente significativas al 1%..

Tabla 3: Resultados de la Estimación de la Ecuación 3

País	Año	$R^2$	Variables Independientes	Coefficiente	T-stat	Sig.
México	1990-2011	28.3%	$BV_{it}$	0.245	6.021	0.000
			$EBIT_{it}$	0.233	1.295	0.196
Brasil		14.5%	$BV_{it}$	0.110	3.881	0.000
			$EBIT_{it}$	0.064	2.252	0.024

Con respecto a los resultados obtenidos por las variables deflactadas por el activo total (ecuación 4), se observa que en las empresas mexicanas evidencian un  $R^2$  de 6.4% y sólo los Fondos propios deflactados por el activo total de la empresa son estadísticamente significativos al 1%. Sin embargo, las empresas brasileñas muestran un  $R^2$  del 16.9 y a diferencia de las empresas mexicanas, la variable de resultado operativo es estadísticamente significativa al 1%.

$$\frac{MV_{it}}{AT_{it}} = \beta_0 + \beta_1 \frac{BV_{it}}{AT_{it}} + \beta_2 \frac{EBIT_{it}}{AT_{it}} + \varepsilon_{it} \quad (4)$$

Realizando un análisis global a los resultados obtenidos al aplicar los diferentes modelos (sin deflactar y deflactados) se detecta que los valores obtenidos por las regresiones, el valor del  $R^2$  ajustado es mayor en el modelo sin deflactar y con respecto a las variables son estadísticamente significativas en forma contraria, es decir, la variable de fondos propios es estadísticamente significativa para las empresas mexicanas y la variable de resultado operativo es estadísticamente significativa para las empresas brasileñas.

Tabla 4: Resultados de la estimación de la ecuación 4

País	Año	$R^2$	Variables Independientes	Coefficiente	T-stat	Sig.
México	1990-2011	6.4%	$BV_{it}$	0.000	-0.005	0.996
			$EBIT_{it}$	0.065	2.022	0.043
Brasil		16.9%	$BV_{it}$	-0.007	-0.273	0.785
			$EBIT_{it}$	-0.167	-6.099	0.000

## CONCLUSIONES

En este trabajo se ha analizado la importancia de la relevancia valorativa de la información contable en la formación de precios de los títulos de empresas en dos países emergentes. De esta

manera, los resultados obtenidos permiten extraer las siguientes conclusiones, como resultado de contrastar las hipótesis planteadas en el trabajo. Se rechaza la hipótesis de que las variables contables fundamentales no son relevantes en la valoración bursátil de empresas cotizadas en los mercados mencionados (H1). La relevancia valorativa muestra que los coeficientes asociados a las variables fundamentales presentan una relación estadísticamente significativa con los precios de los títulos.

Los resultados arrojados por la prueba de corte temporal y sección cruzada 1990-2011 proporcionan evidencia de que las variables fundamentales utilizadas son relevantes en las empresas, siendo estadísticamente significativas al nivel del 1%. Para el caso de H2, esta hipótesis no es rechazada. Al llevar a cabo el análisis a los resultados arrojados al sustituir la variable de Resultado Neto por la variable de Resultado Operativo, se evidencia que las empresas obtienen mayores valores en los  $R^2$  ajustados del Resultado Neto en las empresas mexicanas, pero la significatividad asociada a los coeficientes es similar en ambos casos. Con respecto a las variables deflactadas, en términos generales podemos decir que obtienen mejores resultados en los  $R^2$  obtenidas al sustituir el modelo con el resultado operativo.

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# INDICADORES DE DESEMPEÑO CON ENFOQUE DE EFICIENCIA Y EFICACIA APLICADOS A LA PEQUEÑA EMPRESA AGRICOLA MEXICANA BENEFICIADOS CON FINANCIAMIENTO DEL GOBIERNO

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## RESUMEN

*El Sector Agrícola, y en especial las pequeñas empresas, han ido experimentado mejoras, debido a que el gobierno les ha apoyado a través de programas de financiamiento. Los programas de financiamiento que el gobierno ofrece al sector agrícola son de gran importancia, porque de ello depende que este mejore, ya que es uno de los sectores muy importantes debido a que nos proveen de el recurso necesario tan indispensable como es la producción de alimentos. De tal manera que es fundamental que se de a conocer que se aprovecha al máximo este recurso cuando se otorgan diferentes financiamientos a los agricultores. Por otra parte, surge la necesidad de que los resultados que se obtienen se comprueben que realmente se mejoraron a través de la aplicación de indicadores. Por lo anterior, se parte de la necesidad de medir la evaluación del desempeño de los programas de Financiamiento al sector agrícola en el contexto mexicano a través de la aplicación de indicadores. Por tanto, el presente trabajo pretende aplicar indicadores (previamente diseñados) de evaluación del desempeño de los proyectos de programas de financiamiento gubernamentales a nivel local para el desarrollo de pequeñas empresas agrícolas con enfoque de eficiencia y eficacia . La aplicación de estos indicadores posibilita que se realice un análisis y que se brinde mayor información, de tal manera que es muy útil conocer los resultados que se obtienen una vez aplicados estos indicadores, por lo tanto nos sirven de apoyo en la toma de decisiones para conocer que efectivamente se aprovecha el recurso y se logra que se asigne de una mejor manera estos financiamientos.*

**PALABRAS CLAVE:** indicadores del desempeño, programas de financiamientos Gubernamentales, pequeña empresa agrícola, eficiencia, eficacia

## PERFORMANCE INDICATORS WITH EFFICIENCY AND EFFECTIVENESS APPROACH APPLIED TO THE MEXICAN AGRICULTURAL BENEFIT SMALL BUSINESS WITH GOVERNMENT FUNDING

### ABSTRACT

*The agricultural sector, especially small businesses, have been experiencing improvements, because the government has supported through financing programs. Funding programs that the government offers to the agricultural sector are of great importance because it depends that this improves, as it is one of the important sectors because we provide the necessary resource is as indispensable as food production. Thus it is essential that becomes known that maximizes this resource when granting various financing to farmers. Moreover, the need arises that the results obtained are checked actually improved through the application of indicators. Therefore, it is*

*part of the need to measure the performance evaluation of financing programs for the agricultural sector in the Mexican context through the application of indicators. Therefore, this paper attempts to apply indicators (previously designed) performance evaluation of the draft programs of local government funding for the development of small agricultural enterprises with focus on efficiency and effectiveness. The application of these indicators makes it possible to perform an analysis and to provide more information, so it is very useful to know the results obtained after applying these indicators, therefore they support us in making decisions know that the resource is used effectively and is assigned is achieved in a better way this funding.*

**JEL:** O13, Q00, Q14

**KEYWORDS:** performance indicators, financing programs Governmental small agricultural enterprise, efficiency, effectiveness.

## **INTRODUCCIÓN**

En el siglo XXI, la agricultura continúa siendo un medio esencial para el desarrollo sostenible y la reducción de la pobreza. En México es un sector tan importante que el gobierno busca la manera de apoyarlo ofreciendo diferentes opciones, ya sea mediante la banca múltiple o la banca de desarrollo a través de programas de financiamiento que cubren la totalidad o parte de las necesidades requeridas para la producción de alimento, indispensables no sólo para reducir la pobreza sino también como fuente de crecimiento para la economía nacional. El Sector Agrícola, y en especial las pequeñas empresas, han ido experimentado mejoras, debido a que el gobierno les ha apoyado a través de programas de financiamiento. Los programas de financiamiento constituyen apoyos financieros otorgados por instituciones nacionales e internacionales a los agricultores, empresarios y emprendedores pequeños y medianos para beneficiarse de la economía de mercado. La economía de la región se sustenta principalmente en el sector agrícola y ganadero, así como en micro, pequeñas y medianas empresas, las cuales contribuyen generando empleos y riquezas. En este contexto, las empresas enfrentan situaciones económicas y sociales diferentes a las que se encuentran en la zona metropolitana.

## **REVISIÓN LITERARIA**

Los programas de financiamiento que el gobierno ofrece al sector agrícola son de gran importancia, porque de ello depende que este mejore, ya que es uno de los sectores muy importantes debido a que nos proveen de el recurso necesario tan indispensable como es la producción de alimentos. De tal manera que es fundamental que se de a conocer que se aprovecha al máximo este recurso cuando se otorgan diferentes financiamientos a los agricultores. Por otra parte, surge la necesidad de que los resultados que se obtienen se comprueben que realmente se mejoraron a través de la aplicación de indicadores. Las condiciones que enfrentan las pequeñas empresas las hacen vulnerables a los cambios en su ambiente de negocios, en este contexto el acceso al financiamiento se convierte en un recurso valioso para mejorar sus condiciones competitivas. Es importante señalar la importancia de estas empresas para el desarrollo local, nacional y global (Di Tomasso y Dubbini, 2000) y por lo tanto la importancia de crear políticas que impulsen el desarrollo de las Pymes y las fortalezcan. En la administración pública el desempeño es un concepto relativamente nuevo. Según (Hernández, 2002) “desempeño implica la consideración de un proceso organizacional, dinámico en el tiempo y refleja modificaciones del entorno organizativo, de las estructuras de poder y los objetivos”.

El concepto de desempeño en el ámbito gubernamental normalmente comprende la eficiencia y la eficacia de una actividad o de un proyecto específico de carácter gubernamental. En este contexto la eficiencia se refiere a la habilidad para desarrollar una actividad o programa al mínimo costo posible, en tanto que la eficacia mide si los objetivos predefinidos para la actividad o programa se están cumpliendo. El concepto de eficacia equivale al “cumplimiento de metas y objetivos o a la satisfacción de la necesidad que motivó el diseño y desarrollo de la iniciativa, sin importar los costos y el uso de recursos (Mokate, 2001).

La eficiencia es la relación entre resultados e insumos. Esta relación se puede medir desde dos ángulos distintos:

- a) Si se está produciendo la mayor cantidad de productos o prestaciones posibles ante el nivel de recursos de que se dispone
- b) Cómo alcanzar un nivel determinado de servicios utilizando la menor cantidad de recursos posibles.

El indicador de eficiencia por tanto relaciona resultados contra gastos; además de estas dos dimensiones tradicionales Juan Cristóbal Bonnefi incorpora dos dimensiones del desempeño público: desempeño presupuestario y calidad en la prestación de los servicios públicos (Bonnefi y Armijo, 2005). La evaluación del desempeño encuentra su escenario en indicadores que son capaces de medir el grado de cumplimiento o no de las principales acciones de estos programas, precisamente en el siguiente epígrafe se hace un análisis de los mismos en su concepción teórica. Los indicadores de desempeño son instrumentos de medición de las principales variables asociadas al cumplimiento de los objetivos, que a su vez constituyen una expresión cualitativa o cuantitativa concreta de lo que se pretende alcanzar con un objetivo específico establecido. (Bonnefi y Armijo 2005). La evaluación del desempeño se asocia al juicio que se realiza una vez culminada la acción o la intervención. Busca responder interrogantes claves sobre cómo se ha realizado la intervención, si se han cumplido los objetivos (concretamente, la medida en que éstos han sido cumplidos), el nivel de satisfacción de la población objetivo, entre otras. En suma, se busca evaluar cuán bien o cuán aceptable ha sido el desempeño de determinado organismo público con el objetivo de tomar las acciones necesarias para perfeccionar la gestión” (Ministerio de Economía y Finanzas del Perú , 2000).

## **METODOLOGÍA**

La introducción de indicadores de evaluación del desempeño genera múltiples puntos de apoyo para la implementación de una gestión orientada a los resultados. En primer lugar, los indicadores apoyan el conocimiento y el aprendizaje del accionar que a menudo se desarrolla en forma bastante irreflexiva y rutinaria. Si el proceso de construcción de los indicadores se realiza en forma amplia y participativa, tanto los directivos públicos como los funcionarios inician un proceso de reflexiones e introspección acerca del quehacer institucional que los lleva a determinar las fortalezas y debilidades de los resultados de cada unidad y de la institución en su conjunto. Este proceso de aprendizaje tiene su vertiente más rica en el cambio del eje de análisis que realizan los funcionarios desde una visión centrada en los procesos hacia una visión que se orienta a los resultados e impactos del accionar institucional.

El apoyo que proveen los indicadores para adoptar medidas de mejoramiento que se refieren al rediseño de los programas modificando sus estrategias. De igual modo, las conclusiones que emanan de la evaluación del desempeño permiten realizar ajustes en la operación y valorar la

pertinencia de las acciones realizadas en pos del logro de los objetivos propuestos. Otro punto de apoyo es que la utilización de los indicadores favorece la competencia por recursos públicos. Con la finalidad de romper la inercia presupuestaria, los distintos programas y sectores compiten en igualdad de condiciones para obtener fondos durante la fase de formulación presupuestaria. Si bien la contestabilidad en el ámbito público inicialmente se concentró en el uso de proveedores privados para entregar bienes y servicios, recientemente se ha incorporado la noción de comparar los impactos y gestión entre distintos servicios públicos como un medio de utilizar en forma más eficiente los recursos.

Finalmente, el último punto de apoyo tiene relación con la transparencia y rendición de cuentas. La búsqueda de la eficiencia no se puede desatender de la participación ciudadana, particularmente en lo que se refiere a los niveles de cobertura y criterios de focalización de los programas públicos. Existen muchas técnicas para la generación de índices de desempeño y la mayoría de ellas se apoya en los juicios de expertos para la determinación de los pesos relativos de los indicadores dentro de la formación del índice. (Arriagada, 2002). Los indicadores que se aplicaron fueron previamente diseñados y tomados de un trabajo de investigación (Cobián 2012). En este contexto dichos indicadores se aplicaron en un proyecto de financiamiento en donde se apoyó a la pequeña empresa agrícola para la instalación de un sistema de riego tecnificado por goteo, siendo los siguientes:

Indicadores de Eficacia:

Nombre del indicador: Incremento de la producción de caña por hectárea

Fórmula de cálculo:

$$IPch = P_{c1} - P_{c0} / HBRT$$

Dónde:

$IP_{ch}$  = Incremento de la producción de caña por hectárea

$P_{c1}$  = Producción de caña real.

$P_{c0}$  = Producción de caña según proyecto.

HBRT: hectáreas beneficiadas con riego tecnificado.

Interpretación: Expresa los volúmenes en que se ha incrementado la producción de caña de azúcar por 1 hectárea beneficiada con el riego tecnificado.

Unidad de medida: t/ h.

Fuente informativa: Beneficiarios del proyecto y proyecto archivado en SAGARPA.

Usuarios: SAGARPA.

Indicadores de eficiencia:

Nombre del indicador: Incremento de ventas sobre insumos.

Fórmula de cálculo:

$$IVI = V_1 - V_0 / In_1 - In_0$$

Dónde:

IVI= Incremento de las ventas sobre insumos.

$V_1$ = Ventas del año real.

$V_0$ = Ventas anuales según proyecto.

$In_0$ = Insumos proyectados.

$In_1$ = Insumos reales.

*Interpretación:* Expresa los volúmenes en que se han incrementado las ventas por peso gastado y como resultado del beneficio con el riego tecnificado.

*Unidad de medida:* pesos.

*Fuente informativa:* Beneficiarios del proyecto y proyecto archivado en SAGARPA.

Usuarios: SAGARPA.

*Nombre del indicador:* Resultado bruto del financiamiento.

Fórmula de cálculo:

$$RBF = V_1 - V_0 / F$$

Dónde:

RBF= Resultado bruto del financiamiento.

$V_1$ = Ventas reales acumuladas.

$V_0$ = Ventas anuales acumuladas según proyecto.

F= Monto del financiamiento recibido.

*Interpretación:* Expresa los volúmenes en que se han incrementado las ventas por peso de financiamiento recibido.

*Unidad de medida:* pesos.

*Fuente informativa:* Beneficiarios del proyecto y proyecto archivado en SAGARPA.

Usuarios: SAGARPA.

## RESULTADOS

### Cálculo de los Indicadores al Cierre del Año 2011

Indicadores de eficacia:

Incremento de la producción de caña por hectárea

$$IPcp = P_{C1} - P_{C0} / HBRT = 487,5 - 463,2 / 3,86 = 6,30t / h$$

Como se observa se ha incrementado en 6,30 t la producción de caña de azúcar prevista en el proyecto por 1 hectárea beneficiada con el riego tecnificado lo cual es favorable.

Indicadores de eficiencia:

Incremento de ventas sobre insumos

$$IVI = V_1 - V_0 / I_{n1} - I_{n0} = 331500,00 - 185280,00 / 89362,50 - 107362,50 = (8,12) \text{ pesos}$$

Tabla 1: Datos del Proyecto de Financiamiento

UM: pesos mexicanos

No	Conceptos de insumos	Año 2011	Proyecto
1	Requerimiento de mano de obra	\$ 18 000,00	\$ 36 000,00
2	Costo de producción	71 362,50	71 362,50
	TOTAL	\$ 89 362,50	\$ 107 362,50

Como se observa se han incrementado las ventas en \$ 8,12 por cada peso de disminución del gasto insumido y como resultado del beneficio con el riego tecnificado, o sea el riego tecnificado ha provocado una disminución de los insumos al tener que contratar menos empleados por \$18 000,00 y un incremento de las ventas en \$ 146 220,00.

Resultado bruto del financiamiento

$$RBF = V_1 - V_0 / F = 331500,00 - 185280,00 / 78513,00 = 1,86 \text{ pesos}$$

Se han incrementado las ventas en \$ 1,86 por peso de financiamiento recibido en relación con lo proyectado, lo cual es favorable.

## CONCLUSIONES

La pequeña empresa agrícola mexicana tiene un bajo nivel de éxito empresarial, donde influye la falta de financiamientos y la dificultad de acceder a las fuentes de financiamientos tradicionales, por lo que constituye una necesidad y una oportunidad aprovechar los programas de financiamientos gubernamentales existentes en la agricultura, mediante un uso eficiente y eficaz del mismo. La aplicación realizada de indicadores, permite que las instituciones gubernamentales especializadas en otorgar estos financiamientos creen sus grupos de expertos y especialistas que evalúen periódicamente el desempeño de estos financiamientos, buscando las causas de las desviaciones negativas que le permitan asesorar adecuadamente a los beneficiarios, amén de ser un criterio valorativo para otorgar nuevas ayudas.

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# **LA RELACION DE LA GESTION DE LA CADENA DE SUMINISTRO Y LAS TECNOLOGIAS DE LA INFORMACION Y COMUNICACIÓN EN LOS PROCESOS PRODUCTIVOS PARA UNA MAYOR COMPETITIVIDAD DE LA PYME MANUFACTURERA EN MEXICO**

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## **RESUMEN**

*En el presente trabajo de investigación, con los resultados obtenidos se muestra claramente que existe una relación clave para la competitividad de la Pyme manufacturera entre la Gestión de la Cadena de Suministro y el uso de las Tecnologías de la información y comunicación en los Procesos Productivos, puesto que en la actualidad, no solamente las empresas tienen el objetivo de elegir un buen proveedor sino que es elemental que la comunicación y gestión con ellos sea efectiva, y para ello, es necesario que se comparta información para que los suministros estén siempre disponibles y con las características que las empresas siempre requieren. En este sentido, a través del tratamiento estadístico de ecuaciones estructurales utilizando el software EQS versión 6.1, se obtuvieron resultados obtenidos de los datos facilitados por los empresarios a través de una encuesta personalizada en un periodo entre marzo y abril del 2012 que determinan que la Pyme manufacturera en Aguascalientes, es Competitiva al tener una estrecha relación de parte de los procesos productivos con la GCS y uso adecuado de las TIC's. Para esta investigación se ha utilizando una muestra de 120 empresas las cuales contienen de 11 a 250 trabajadores.*

**PALABRAS CLAVES:** Gestión de la Cadena de Suministro, Tecnologías de la Información y Comunicación, Procesos Productivos, Competitividad, Pyme Manufacturera.

## **RELATIONSHIP OF SUPPLY CHAIN MANAGEMENT AND INFORMATION TECHNOLOGY AND COMMUNICATION IN PRODUCTION PROCESSES FOR GREATER COMPETITIVENESS IN MANUFACTURING SMEs IN MEXICO**

### **ABSTRACT**

*This research work, with the obtained results shows clearly that a relationship key to the competitiveness of manufacturing SMEs between the management of the supply chain and the use of information and communication technologies in productive processes, since currently, companies not only have the goal of choosing a good provider but it is elementary that the communication and management with them be effective, and so, it is necessary that will share information so that the supplies are always available and with the features that businesses always need. In this sense, through the statistical treatment of structural equations using the EQS software version 6.1, were results of the data provided by employers through a survey in a period*

*between March and April 2012 that determine that manufacturing SMEs in Aguascalientes, is competitive to have a close relationship on the part of production processes with the GCS and proper use of information and communication technologies. For this research has been using a sample of 120 companies which contain 11 to 250 employees.*

**JEL:** L61, L91, M11, M15, M20

**KEYWORDS:** Supply Chain Management, Information Technology and Communication, Production Processes, Competitiveness, Manufacturing SME

## INTRODUCCION

En la actualidad, la integración de las Tecnologías de la Información y Comunicación (TIC's), en la Pequeña y mediana empresa (PYME), del sector manufactura, permite que áreas importantes como los procesos productivos, sean elemento clave para que los niveles de competitividad en este tipo de organizaciones sean mayores (Radu, Ursacescu, Vladeanu, Cioc, y Burlacu 2005; Velarde, Araiza, Hernández y Tobías 2011). Para ello es importante que los empresarios tengan el enfoque de mejorar la dinámica operativas dentro de la organización para que los procesos productivos se vean beneficiados con la integración y correcto uso de las TIC's, asimismo, que el beneficio se comparta con los sistemas de suministro que de alguna manera no están al margen de los objetivos empresariales por mantener en óptimas condiciones el flujo y manejo de los recursos materiales (Gonzalvez-Gallego, Soto-Acosta, Trigo, Molina-Castillo, y Varajao, 2010; Porter, 2001)

En el presente trabajo de investigación, se tiene como objetivo analizar la relación que existe en la Pyme manufacturera al estudiar la relación de la GCS y la integración de las TIC's en los procesos productivos para obtener mejores índices de Competitividad. Para ello, es importante que el empresario se cuestione con las siguientes preguntas: ¿Qué impacto tiene la GCS en los procesos productivos para poder obtener mejores índices de Competitividad en la Pyme Manufacturera?, ¿Qué tanto impacta la relación de las TIC's en los procesos productivos para su mejor eficiencia operativa?, ¿Tener Procesos productivos controlados y abastecidos, permite a la Pyme manufacturera ser más competitiva?. Por lo tanto, la investigación realizada en el presente trabajo, muestra importantes resultados en los cuales se refleja con apoyo del tratamiento estadístico del software EQS 6.1 (Análisis de Ecuaciones Estructurales), los efectos positivos que tiene la relación de la GCS y las TIC's en los Procesos Productivos para una mayor Competitividad en la Pyme manufacturera en Aguascalientes la cual ha trabajado con una muestra de 120 empresas a través de una encuesta personalizada con los gerentes de las organizaciones.

## REVISIÓN DE LA LITERATURA

### La Gestión de la Cadena de Suministro y los Procesos Productivos

Considerando que en los años 80's se le dio una especial importancia a definir los conceptos sobre la cadena de suministro y su relación con áreas específicas dentro de las organizaciones, la Pyme manufacturera en México integró de inmediato su interés por maximizar el valor agregado en el manejo de los recursos materiales a través de un adecuado control de los costos de operación, una controlada gestión en la cadena de suministro (GCS) y una relación estrecha con las actividades operativas en base a las necesidades de los planes de producción (Maldonado, Hernández y Aguilera et al., 2012). Y para ello, la GCS desde un punto administrativo y

operativo requiere tener comunicación y coordinación con los actores involucrados en el manejo de los suministros desde la proveeduría, el servicio outsourcing si es que se requiere, con los apoyos de las políticas públicas y con el responsables de los procesos productivos (Aguilera, Hernández, López, 2012; Delgado, Portillo y Burciaga, 2012).

### Las Tecnologías de la Información y Comunicación en los Procesos Productivos

Para la Pyme manufacturera hoy en día, el uso de las TIC's es básico puesto que su integración permite darle mayor efectividad a la actividad operativa en empresas de este importante sector, en especial con proveedores y clientes, sin dejar a un lado detallistas, servicio outsourcing y mayoristas (Bocanegra y Vázquez, 2010). Para ello, la aplicación y uso de las TIC's a través de redes de comunicación, permite a las empresas involucradas en el manejo y suministro de los recursos materiales mejorar la gestión que se tenga con la proveeduría con la finalidad de no tener problemas de demora o paro de actividades en los procesos productivos (Clemons y Kimbrough, 1986; Porter, 1998). Desde luego es necesario para este tipo de organizaciones que el personal involucrado con el manejo y aplicación de las TIC's esté capacitado puesto que el uso de las TIC's no solo se integra en la parte administrativa y de gestión sino también en los procesos productivos directamente en los equipos o en los sistemas de información que deben manejarse para eficientar el suministro de los recursos materiales (Mora, Lerdon, Torralbo, Salazar, Boza y Vázquez 2012; Gómez, Salazar y Vargas, 2012).

### Los Procesos Productivos y la Competitividad

Desde siempre ha sido importante para la Pyme manufacturera, que los procesos productivos tengan controles con la finalidad de tener un mejor sistema administrativo para que aspectos relacionados con el control de inventario y con los planes de producción estén controlados de manera coordinada con los responsables de los suministros y así evitar al máximo las demoras de materiales y de paros de línea (Daniel y Rajendran, 2005), en este sentido, los empresarios deben tener claro que es necesaria la coordinación entre los suministros de los recursos materiales y la capacidad de los procesos productivos, con ello, el una relación positiva entre los procesos productivos y la mejora en las ventajas competitivas, permitirá a este tipo de empresas cumplir con los objetivos de suministro que tenga con sus clientes (Blumenfeld, Burns, Daganzo, Frick y Hall 1987; Arntzen, Brown, Harrison y Trafton 1995). Considerando que para la Pyme manufacturera es importante que la GCS sea elemento clave para que los procesos productivos no tengan problemas de cumplimiento y de productividad (Ramírez y Peña, 2011; Kadadevaramath, Mohanasundaram, Sarath Chandra y Rameshkumar, 2008; Singh y Urvashi, 2010), se plantea la siguiente hipótesis:

***H<sub>1</sub>***: A mayor GCS, mejor eficiencia de los Procesos Productivos en la Pyme manufacturera.

Así mismo, para la Pyme manufacturera es importante que el uso y adopción de las TIC's permita que los procesos productivos sean confiables y eficaces (Gonzalez, et al., 2010; Bardhan, Whitaker y Mithas 2006), y para ello, se plantea la siguiente hipótesis:

***H<sub>2</sub>***: A mayor integración y uso de las TIC's, mayor eficiencia de los Procesos Productivos de la Pyme manufacturera. Finalmente, es importante resaltar que en la Pyme manufacturera, su competitividad en gran medida se presenta por tener un mejor control y eficiencia de los

procesos productivos (Maldonado et al., 2012; Cho *et al.*, 2008; Gardiner, Martin y Tyler, 2004), y para ello se plantea la siguiente hipótesis:

**H<sub>3</sub>:** A mayor control y eficiencia de los Procesos Productivos, mayor Competitividad en la Pyme manufacturera.

## METODOLOGÍA

En el presente trabajo de investigación, se analiza la relación que tiene el uso de las Tecnologías de la Información y Comunicación y la Gestión de la Cadena de Suministro en los procesos productivos en la Pyme manufacturera de Aguascalientes para que se continúe con altos índices de competitividad. Para llevar a cabo el presente trabajo de investigación se tomó de referencia la base de datos que ofrece el Directorio Empresarial de Aguascalientes (SIEM, 2010) el cual refiere que en Aguascalientes, se cuenta con el registro de 8661 empresas en donde 584 son PYME manufacturera. El trabajo es de carácter empírico con una muestra de 120 Pymes del sector manufacturero donde se aplicó un instrumento de medición tipo encuesta personalizada para los gerentes o responsables de la actividad operativo de este tipo de organizaciones.

En el instrumento de medición, se utilizaron 3 bloques con escala Likert 1-5 los cuales refieren desde total desacuerdo hasta total acuerdo descritos de la siguiente manera: Bloque de Gestión de la Cadena de Suministro (GCS) con 20 ítems de Wisner (2003). El segundo bloque de Tecnologías de la Información y Comunicación (TIC's) compuesto por 10 ítems de Gonzalvez et al., (2010). El tercer bloque está compuesto por 3 secciones las cuales son: la automatización de los procesos compuesto por 6 ítems; la confiabilidad de los procesos de producción compuesto por 8 ítems; el control administrativo compuesto por 8 ítems y 4 ítems de desarrollo de personal de operaciones, adaptada de Machorro et al. (2007). Y por último, para el tercer bloque, la medición de la escala de la competitividad se tomo en cuenta tres factores elementales: desempeño financiero compuesto por 6 ítems; la reducción de los costos de las compras compuesto por 6 ítems; y el uso de tecnología compuesto por 6 ítems, adaptada de Buckley, Pass y Prescott (1988) y Chang, Lin, Chen y HUang (2005). Así mismo en el presente trabajo de investigación, se realizó un Análisis Factorial Confirmatorio (AFC) con la finalidad de evaluar la fiabilidad y validez de las escalas de cada uno de los bloques. Para ello, se utilizó un Modelo de Ecuaciones Estructurales, para comprobar si la estructura del Modelo teórico está correctamente diseñado, con el apoyo del software EQS versión 6.1; para ello, la fiabilidad se ha evaluado considerando el coeficiente  $\alpha$  de Cronbach y del índice de fiabilidad compuesta (IFC) (Bagozzi y Yi, 1988).

## CONCLUSIONES PRE-ELIMINARES

Las empresas manufactureras como la Pyme, en la actualidad requieren de implementar estrategias que les permita tener mejores gestiones con la proveeduría para evitar tener problemas de consideración en sus procesos productivos y con las entregas a los clientes. Para ello, es importante que el manejo de los recursos materiales sea eficaz y justo a tiempo ya que una falla en el manejo de los materiales, además de generar paros de producción, genera costos de importancia que con seguridad pondrían en riesgo el aspecto competitivo de este tipo de organizaciones. Desde luego, que los empresarios tendrían problemas serios con el suministro, con la confiabilidad a la proveeduría, con los clientes y con los aspectos de distribución de materiales con todos los actores involucrados en el proceso de suministro.

En este sentido, es importante que los gestores tengan especial atención en atender los detalles relacionados con la Gestión de la cadena de suministro y su relación con los procesos productivos. Para ello, es necesario que toda la estrategia de distribución este centrada en la gestión con la proveeduría, con sus capacidades de abastecimiento, con los controles logísticos y de transporte, con el control de los costos de operación, con la integración de actores externos como es el caso del servicio outsourcing y con el manejo claro de la información con respecto a las necesidades de los Procesos productivos para que la Gestión del suministro sea confiable y en tiempos solicitados de entrega de los recursos materiales.

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# ASPECTOS CONCEPTUALES Y METODOLÓGICOS PARA MEJORAR LAS HABILIDADES DE COMUNICACIÓN DE LOS ALUMNOS COMO PARTE DE UNA EDUCACIÓN INTEGRAL

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## RESUMEN

*El presente trabajo se ha realizado con el objetivo de tener un mejor desarrollo de las habilidades de comunicación entre los alumnos y los docentes, prevaleciendo el dialogo, sus derechos y el reconocimiento de la diversidad de los alumnos del nivel universitario, reconociendo las barreras que les impiden lograr una comunicación eficaz y desarrollando herramientas que faciliten un mejor proceso de comunicación alumno-docente. Comprender los términos de desarrollo, calidad, motivación, inclusión y reconocimiento, en la educación superior universitaria requiere una explicación de las dimensiones y los ejes fundamentales, en donde la comunicación juega un papel medular en un sistema educativo. Esto implica reconocer que en lugar de un problema teórico, nos enfrentamos con el paradigma de distinguir que el reconocimiento de los problemas de comunicación en el proceso de enseñanza-aprendizaje, es parte ineludible del compromiso profesional académico, a fin de brindar una educación integral e inclusiva, la cual debiera estar a la búsqueda permanente de la calidad, de la equidad, y de poner a disposición de los responsables de la toma de decisiones, información actualizada para mejorar los procesos de comunicación en las aulas, y contribuir a la excelencia del proceso educativo. En el proceso de investigación e interacción con los alumnos de nuevo ingreso al nivel universitario se detecta que **no tienen aún las suficientes** habilidades de comunicación eficaz, lo que es causa de problemas en sus procesos de aprendizaje y desarrollo, por lo que se pueden establecer estrategias por parte de los docentes para mejorar la comunicación y la motivación en las aulas, siendo importante que los directivos puedan aplicarlas dentro de los programas académicos para mejorar la calidad de la educación integral e incluyente que como compromiso tenemos que ofrecer a los alumnos .*

**PALABRAS CLAVE:** Educación, comunicación, diálogo, motivación, desarrollo, inclusión, reconocimiento.

## CONCEPTUAL AND METHODOLOGICAL ASPECTS TO IMPROVE STUDENTS' COMMUNICATION SKILLS AS PART OF AN INTEGRAL EDUCATION

### ABSTRACT

*This work has been carried out in order to have a better development of communication skills between students and teachers, dialogue prevail, their rights and recognition of the diversity of students in the college level , recognizing the barriers that impede effective communication and developing tools to facilitate a better process student-teacher communication . Understand the terms of development, quality, motivation , inclusion and recognition in university education requires an explanation of the dimensions and the fundamental , where communication plays a*

*central role in the education system . This means recognizing that instead of a theoretical problem , we are faced with the paradigm of distinguishing that recognition of the problems of communication in the teaching-learning process is an inevitable part of the academic professional commitment , in order to provide a comprehensive education and inclusive , which should be in constant search of quality , equity , and make available to those responsible for making decisions , updated information to improve communication processes in classrooms, and contribute to the excellence of educational process . In the process of research and interaction with new students at the university level is detected still have not enough skills of effective communication , which is causing problems in their learning and development , so that strategies can be drawn by teachers to improve communication and motivation in the classroom and it is important that managers can apply within academic programs to improve the quality of comprehensive and inclusive education as a commitment that we have to offer students .*

**JEL:** I20, I21, Z00

**KEY WORDS :** Education, communication, dialogue, motivation, development, inclusion, recognition.

## **INTRODUCCIÓN**

El problema general de la comunicación ha sido abordado desde la antigüedad por diversas disciplinas, entre ellas la filosofía, psicología, sociología y administración. En cada una se la estudia de acuerdo con su objeto peculiar y en correspondencia con el enfoque o modelo adoptado. Si se tiene en cuenta la complejidad que involucra un proceso que focaliza en personas, significados y símbolos, es comprensible que en torno al concepto de comunicación no exista unidad de criterios, por el contrario, hay discrepancias a partir de los enfoques generales de los que se parte.

## **REVISIÓN DE LITERATURA**

El concepto de comunicación se asocia a diferentes términos que contribuyen a su definición, no sin discrepancias por parte de algunos investigadores, como por ejemplo, mutualidad, reciprocidad, comunión, comunidad, posesión de algo en común, participación, transmisión, información, contaminación, expresión, codificación, accesibilidad, decodificación, similitud, trato, expansión, sociabilidad, afabilidad, afectividad, regulación y simpatía. Estos términos no son sinónimos, pero permiten describir mejor la compleja fenomenología comunicativa, pues solo existe comunicación cuando entre los sujetos ocurre un continuo, ininterrumpido y mutuo intercambio, no solo de mensajes, sino de cierta afectividad y afinidad. Comunicar, según indica la Real Academia Español es: hacer a otro partícipe de lo que uno tiene. De ahí la gran importancia de la academia en relación a dar lo mejor que tenemos de nuestros conocimientos, ideas y vivencias a nuestros alumnos. Las concepciones más recientes de la comunicación educativa la definen como un proceso inseparable de la actividad docente, donde intervienen diversas prácticas de interacción.

El lenguaje de los alumnos tiene dos formas de manifestación, en dependencia de donde transcurre la actividad del alumno: en el salón de clases o en el círculo de sus iguales. Es frecuente encontrar contradicciones entre el lenguaje de los alumnos y el contenido en el currículum oficial. En el proceso docente los alumnos aprenden a expresar el tipo de comportamiento lingüístico que se espera de ellos y que puede ser muy diferente del aprendido en su grupo social. La educación tradicional limita las posibilidades de expresión propia de los

educandos, los cuales dicen aquello que quiere oír el maestro, responden a sus preguntas, pero raras veces dicen lo que piensan, se expresan con sus propias palabras. El uso por el docente de códigos desconocidos para los alumnos da lugar a barreras que dificultan el aprendizaje. El lenguaje es indispensable para la producción del pensamiento. Entre ambos existe un círculo genético tal, que uno de ambos términos se apoya necesariamente en otros en una formación solidaria y en una perpetua acción recíproca. (J. Piaget, 1970, p80).

## METODOLOGIA

El presente trabajo se ha realizado con el objetivo de favorecer un mejor desarrollo de las habilidades de comunicación entre los alumnos y los docentes, prevaleciendo el dialogo, sus derechos y el reconocimiento de las formas diversas que tienen los alumnos y docentes del nivel universitario, a través de identificar la serie de formas de comunicación y cuáles son las barreras que les impiden lograr una comunicación eficaz, desarrollando herramientas que ayuden a facilitar un mejor proceso de comunicación alumno-docente, promoviendo que el nivel directivo pueda aplicarlas dentro de un marco curricular para mejorar la calidad de la educación integral e incluyente que como compromiso tenemos que ofrecer a los alumnos . Este proyecto se ha realizado en la Facultad de Contaduría y Administración de la Universidad Autónoma de Querétaro, durante los años, 2011, 2012 y 2013, con una parte de la comunidad académica seleccionada: alumnos de nuevo ingreso del nivel superior de las carreras de contaduría, administración y administración financiera.

Tiene como objetivo general: que los alumnos de nuevo ingreso al nivel universitario, mejoren sus habilidades de comunicación, a través de identificar las barreras que les impiden lograr una comunicación eficaz, desarrollando herramientas que les faciliten el proceso de comunicación alumno-docente. Al inicio del curso el docente deberá realizar una serie de dinámicas para: conocer a sus alumnos, identificar hasta donde sea posible sus características y formas de cómo realizan la comunicación. Estas actividades deben ser vivenciales, aprovechando la relación que se tiene con el alumno al ser su maestro y tutor, lo que te permite tener una mayor cercanía con el alumno. Posteriormente y habiendo detectado la situación de los alumnos, se programan diversas actividades para mejorar la comunicación y propiciar el dialogo docente-alumno, como dinámicas, talleres, ejercicios y juegos, mejorando sustancialmente las practicas académicas, reconociendo la importancia que merecen los alumnos, buscando mejorar las formas de comunicación que permitan una mayor convivencia, motivación y desarrollo de alumno.

Así mismo con estas acciones el docente tendrá una visión más amplia del alumno y su interacción dentro del grupo social de convivencia, buscando el manejo adecuado de la inclusión, respeto y tolerancia. A fin de lograr el desarrollo de competencias: se efectúan otras actividades de apoyo con el personal especializado de la propia facultad y grupos relacionados con las habilidades sociales, realizando actividades relacionadas para mejorar la comunicación, la autoestima personal, el desenvolvimiento entre su grupo, las habilidades de búsqueda de información, de diálogo, de participación social, de trabajo en grupo, etc. Con estas estrategias se intenta lograr que los estudiantes alcancen mejores niveles de comunicación, desarrollando aún más sus habilidades de comunicación, que les permita conseguir metas comunes con una mejor convivencia, motivación y desarrollo en su proceso académico. Finalmente se efectúa la integración del reporte final de resultados que contemple la serie de propuestas que se sugieren para mejorar el proceso de comunicación alumno-docente, mismas que se presenta a los

directivos de la institución, promoviendo que se permitan el desarrollo permanente de alguna de las herramientas propuestas, como enlace al proyecto integral de educación que actualmente se brinda en la institución, mejorando aún más la calidad de la educación que como compromiso tenemos que ofrecer a los alumnos de la facultad.

## RESULTADOS

Un proceso realmente educativo y no meramente instructivo sólo tiene lugar cuando las relaciones entre profesor y alumnos no son únicamente de transmisión de información, sino de dialogo, de intercambio, de interacción e influencia mutua, de reconocimiento y de respeto a sus derechos. La falta de una buena comunicación entre los estudiantes hace posible que no se pongan de acuerdos sobre determinados puntos a la hora de desarrollar un tema específico, ocasionando un bajo rendimiento académico, frustración, pérdida de la materia y muchas veces hasta el abandono de la carrera. Se debe privilegiar en las aulas los criterios de equidad, respeto, tolerancia en términos de tener una educación de todos y para todos, incluyente y de calidad con miras a potenciar al máximo el desarrollo integral los alumnos más allá de los contenidos curriculares. Con la implementación de este tipo de programas se tiene que: Los alumnos se desarrollan mejor y van perfeccionando el manejo de la comunicación eficaz en la medida que uno como docente esté interesado en el manejo de nuevas ideas, técnicas y dinámicas. Se genera la comunicación y convivencia en armonía, en valores de igualdad, libertad, con la aplicación de este proyecto el trabajo en las aulas se convierte en un espacio de interrelación muy importante. Las actividades deben de ser de manera continua y permanente inclusive agregarlas como una actividad curricular como paso obligatorio de los alumnos al inicio de sus carreras profesionales, manejar temas de comunicación, motivación socialización, tolerancia y respeto, etc., buscando en un futuro que algunos de estos temas se incluyan en la currícula académica básica. Además, para que este proceso sea realmente útil, se considera pertinente la difusión y el compartir los procesos y resultados con otros docentes. Llevar incluso las ideas y propuestas a las academias, para su análisis y complemento de más ideas relacionadas, que permitan mejorar este proyecto. A continuación, se presenta una síntesis con algunas de las propuestas recopiladas a través de los trabajos desarrollados en las aulas para este trabajo:

- Se propicia el desarrollo de una educación en armonía y convivencia, con un manejo de estrategias para enfrentar y manejar los conflictos y mejorar su convivencia en el aula.
- Se fomenta la participación e implicación de integrantes de la comunidad educativa en las iniciativas del docente, para mejorar los procesos enseñanza-aprendizaje y convivencia, fomentando modelos de intervención educativa exitosa en el aula, modelos cooperativos y vivenciales.
- Se deberá renovar periódicamente el material de las dinámicas a fin de estar actualizados en estos procesos
- Se deberá permitir como parte de su desarrollo integral de los alumnos y docentes la realización de actividades como intercambios entre grupos, participaciones en muestras, lecturas de artículos y revistas actualizadas, juegos de interacción, participación en congresos, foros y jornadas de análisis y reflexión.
- Se deberá mantener informado de manera permanente a los directivos de estas acciones así como a las academias, dando la difusión de actividades realizadas y de los resultados a fin de que

la comunidad académica y estudiantil las conozcan y se interesen, de tal forma se vaya creciendo en la aplicación de estos programas. La educación del estudiante requiere la participación y compromiso de todos los actores fundamentales de la educación universitaria: los docentes, las redes de apoyo, orientadores, entre otros, ya que la comunicación juega un papel fundamental tanto en la identificación de problemas educacionales como en reconocimiento de sus causas. Así mismo es tarea de los directivos y docentes crear instancias para propiciar el desarrollo de una mejor comunicación que propicie el diálogo entre los alumnos y los docentes.

## CONCLUSIONES

Con la realización de este proyecto tenemos puntos importantes que resaltar: El proceso de enseñanza- aprendizaje es un proceso eminentemente interactivo y comunicativo. La comunicación eficaz, permite garantizar el contacto psicológico real con los alumnos, formar una motivación positiva hacia el aprendizaje, crear las condiciones psicopedagógicas para la búsqueda colectiva y las reflexiones conjuntas, a fin de brindar una educación integral, inclusiva, de equidad y de calidad. Comprender los términos de desarrollo, calidad, motivación, inclusión y reconocimiento, en la educación superior universitaria requiere una explicación de las dimensiones y los ejes fundamentales, en donde la comunicación juega un papel medular en un sistema educativo. Esto implica reconocer que en lugar de un problema teórico, nos enfrentamos con el paradigma de distinguir que el reconocimiento de los problemas de comunicación en el proceso de enseñanza-aprendizaje, es parte ineludible del compromiso profesional académico, a fin de brindar una educación integral e inclusiva, la cual debiera estar a la búsqueda permanente de la calidad, de la equidad, y de poner a disposición de los responsables de la toma de decisiones un marco de acción para mejorar los procesos de comunicación en las aulas, y contribuir a la excelencia del proceso educativo. Practicar la comunicación eficaz y la motivación en la educación en las aulas, nos permite colaborar en el desarrollo de un mundo mejor.

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# **FACTORES DE RETENCIÓN DE CAPITAL HUMANO EN LOS HOTELES DE CUATRO ESTRELLAS DE LA CIUDAD DE ENSENADA, BAJACALIFORNIA.**

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## **RESUMEN**

*Los hoteles hoy en día se concentran en tener en su plantilla laboral al personal que brinde el mejor servicio al cliente, y así lograr una mayor presencia en el mercado y en el competitivo mundo del sector turismo. La presente investigación se plantea como objetivo caracterizar los Factores de Retención de Capital Humano aplicados por los hoteles de cuatro estrellas de la ciudad de Ensenada, Baja California, y a su vez conocer la perspectiva de la Gestión de Recursos Humanos respecto a ello, ya que es en esta área donde se generan las estrategias para conservar a los empleados. Para alcanzar este propósito, se diseñó un estudio exploratorio descriptivo donde se elaboraron y validaron instrumentos de recolección de datos que se aplicaron a una muestra de 51 empleados y 2 gestores de los hoteles objeto de estudio. Los resultados preliminares arrojan que existen factores relevantes para que los empleados permanezcan en su trabajo, tales como la relación con el supervisor, trabajo en equipo, balance entre vida laboral y personal. Siendo estos hallazgos de importante relevancia para conclusiones y recomendaciones.*

**PALABRAS CLAVE:** Factores de Retención, Hoteles, Turismo, Gestión de Recursos Humanos

**JEL:** M20, M54, J24

## **RETENTION FACTORS OF HUMAN CAPITAL APPLIED BY 4-STAR HOTELS IN THE CITY OF ENSENADA, BAJA CALIFORNIA**

### **ABSTRACT**

*Hotels nowadays concentrate in having in their workforce personnel that brings the best customer service, that way a bigger presence in the market and in the competitive world of tourism is accomplished. This investigation has the objective of characterizing the Retention Factors of Human Capital applied by 4-star hotels in the city of Ensenada, Baja California; and in turn to know the perspective of Human Resources management on the subject, seeing how in this department is where strategies to conserve employees are generated. In order to reach this goal, a descriptive exploratory study was designed where data-gathering instruments were elaborated, validated, and implemented to a study group sample of 51 hotel employees and 2 hotel managers. Preliminary results suggest that there are relevant factors concerning employees staying in the company: Employee-supervisor relation, team work, and a balance between work life and personal life. These findings are relevant for conclusions and recommendations.*

**JEL:** M20, M54, J24

**KEYWORDS:** Retention Factors, Hotels, Tourism, Human Resource Management

## INTRODUCCIÓN

Dentro de la organización, el recurso humano representa la vida de la misma, donde éste es quien opera a los otros recursos de la empresa, técnicos, materiales o financieros, y juntos se encaminan hacia el logro de objetivos. El capital humano como recurso vivo, aporta innumerables factores intangibles a la empresa tales como, ideas, destrezas, actitudes, valores y el conocimiento mismo, para así lograr un óptimo desempeño. Los recursos materiales, son un medio para alcanzar metas y encaminarse a un fin, pero son las personas quienes los convierten en realidad, son quienes le dan sentido a las empresas, ahí radica la importancia retener al capital humano para el éxito de las compañías (Werther, 2008).

Por tal motivo retenerlo en las organizaciones, crear sentido de pertenencia, desarrollarlo, capacitarlo y optimizar sus recursos evitando la rotación, genera un interés por caracterizar las técnicas que la gestión de recursos humanos aplica a sus empleados para incentivar su permanencia y lograr resultados organizativos a corto, mediano y largo plazo (Bateman, 2009). La hotelería tiene como objetivo el dar un excelente servicio al cliente, por tal razón se torna primordial tener entre sus filas al personal que mejor realice estas acciones. Ya que de esto depende el crecimiento y supervivencia de la organización, lo cual genera una ocupación más elevada y permite obtener una mayor participación en el mercado (Libro blanco del turismo, 2008). Los datos arrojados por ésta investigación, dejarán de manifiesto conocimiento para que los hoteles de cuatro estrellas objeto de estudio, puedan aprovechar la información generada para conocer a fondo cómo se encuentra la plantilla laboral creando estrategias de mejora, cambio y seguimiento para lograr una retención efectiva. Esto a través del instrumento aplicado que abordó el estudio de diez variables que son: capacitación, desarrollo, salarios, relación empleado supervisor, evaluación del desempeño, participación del empleado, comunicación, trabajo en equipo, relación con compañeros de trabajo y balance entre vida laboral y personal.

El presente artículo está distribuido de la siguiente forma: en el apartado de la revisión de la literatura, se define el concepto de retención, capital humano, hotel de cuatro estrellas y las características para su clasificación, contexto del turismo, así como la mención de la gestión de recursos humanos, que es la teoría que le da sustento a la investigación. En la metodología se indican los criterios utilizados para definir la población, muestra, tipo de estudio, la confiabilidad y descripción general de la recolección de datos. Para concluir se indican los resultados y conclusiones de esta investigación.

## REVISION DE LA LITERATURA

En el inicio del presente siglo, se da la transformación de la sociedad de una era industrial a una era del conocimiento y con esto un nuevo enfoque de la gestión de las organizaciones, como resultado de las nuevas realidades, tanto en el mundo del trabajo y en los perfiles de las competencias laborales (Werther, 2008). En la actualidad se presenta una constante y es cómo tener en las organizaciones y a su vez retener a los mejores empleados. En un mundo donde la competitividad se ha vuelto una realidad apremiante, las empresas entran en la guerra por el talento. En primer lugar se debe saber claramente que los empleados juegan un papel primordial

para el éxito de las compañías. Querer conservar a los mejores da pie a establecer estrategias para lograrlo (Dibble, 2001).

Las organizaciones deben permitirse tener un enfoque para potenciar y desarrollar al capital humano, pues el tener una plantilla laboral comprometida, desarrollada y capacitada permite ser una empresa competitiva y con clientes satisfechos (Valencia, 2005). Las habilidades, conocimientos y aptitudes son distintivos y particulares en cada individuo, lo cual permite, estimular la innovación y por ende proporciona un impulso hacia la creación de satisfactores. En el instante en que un empleado opta por abandonar una empresa, ésta se ve afectada ya que pierde conocimientos que le fueron enseñados y es aún más perjudicial si éste decide irse a laborar con la competencia, pues ahora todo lo que se invirtió en él, el competidor será el que aproveche la formación del empleado sin invertir en ello. Situación que representa costos futuros para la empresa que pierde un elemento pues invertirá nuevamente en reclutar, seleccionar y capacitar a alguien más (Capelli, 2003).

Para Friedman, Hatch, Walker (2000), los seres humanos son considerados como objetivos de inversión en anticipación de unos beneficios. En macroeconomía, los gobiernos intervienen en educación y formación anticipando beneficios con un mayor empleo u otros signos de progreso. En microeconomía, las empresas intervienen en programas para el personal anticipado beneficios como un precio más alto de sus acciones en el largo plazo u otros indicadores de valor de la empresa.

Los empleados que las empresas buscan retener, son aquellos talentosos y que aportan valor a la organización, donde aparte de las cuestiones técnicas den algo más, ya sea compromiso con la empresa, propongan mejoras, soluciones, aporten ideas, trabajen equipo, lo cual influirá positivamente en los clientes, accionistas y compañeros de trabajo (Dibble, 2001). Según Friedman, *et.al.*, (2000), la retención se refiere a la capacidad de evitar que algo se pierda o alguien se vaya. En gestión de recursos humanos, la ausencia de bajas en un puesto o puestos de trabajo durante un tiempo determinado. La Organización para la Cooperación y el Desarrollo Económicos (OCDE), define el capital humano como los conocimientos, habilidades, competencias y atributos incorporados en los individuos y que facilitan la creación de bienestar personal, social y económico.

La Gestión de Recursos Humanos, es el conjunto de políticas y prácticas necesarias para dirigir los aspectos de los cargos gerenciales relacionados con los recursos humanos, incluidos reclutamiento, selección, capacitación, desarrollo, recompensas, evaluación del desempeño y retención de los empleados (Chiavenato, 2000). Para fines de esta investigación se tomará en cuenta sólo la clasificación de 4 estrellas. Para que un hotel ostente estas insignias, es preciso cumplir con ciertas características. La clasificación internacional de los establecimientos hoteleros, dicta que para que sea considerado de 4 estrellas debe de tener servicio de comida permanente diurno y nocturno. Contar con personal altamente calificado que posea título o certificado. Ser bilingües, dominar aparte del español otro idioma, de preferencia el inglés. Con instalaciones impecables. A demás de permanecer lejos de fábricas que generen ruido u olores desagradables. Tener estacionamientos a razón de un cajón por cada cuatro habitaciones. Tener un vestíbulo con materiales de mármol u otro tipo de finos materiales. Puede contar con bar y salas de fiestas, con estilos lujosos (Lambertine, 1988).

En México, la autoridad oficial en materia de turística, es la Secretaría de Turismo, quien brinda estadísticas y monitorea las actividades de los hoteles. Desde el año 1993, esta institución ha estado ausente en la clasificación de la calidad. Ahora sólo reporta porcentajes de ocupación,

vaciándola en su sistema de estadistas DataTur. Existe una asociación sin fines de lucro llamada Calidad Mexicana Certificada, A.C. Calmecac, quien certifica a los hoteles con su sistema de estrellas y diamantes. Las primeras se asignan por la infraestructura y los diamantes por el servicio que oferta. La Secretaría de Turismo indicó que en 2011 México recibió cerca de 20.811 millones de llegadas internacionales de turistas, lo cual dejó una derrama económica de 11.868 millones de dólares, siendo la tercera fuente de captación de divisas para el país. El turismo aporta cerca del 9% al Producto Interno Bruto (PIB). La estructura del PIB del sector turístico se compone por la actividad de otros sectores: 28.1% transporte, 20.4% hospedaje y alojamiento, 19.7 servicios inmobiliarios, manufacturas 16.2%, 6.2 comercio, 3.2% construcción y esparcimiento 1.5%.

Datos de la Secretaría de Turismo (2012), estiman que el sector turismo genera 10 millones de empleos, 2.5 directos y 7.5 indirectos, del cual el 20.4 % trabaja en el área de hospedaje. México cuenta con más de 17 mil hoteles y más de 650 mil cuartos de alojamiento. Existen 1,860 establecimientos de clasificación 4 estrellas con un total de 126,347 cuartos de hospedaje. El Turismo en Baja California genera el 7.5 % de los empleos (Guía de Inversión Turística, 2010). Se cuenta con un diverso número de elementos que a la vez, potencian, dinamizan su desempeño económico lo que se manifiesta en flujos crecientes de recursos humanos (Barajas, 2009). Actualmente en Baja California, se tiene una oferta de 43 establecimientos de hospedaje de categoría 4 estrellas lo que se traduce a 3,805 cuartos (Sector, 2011). En Baja California en el 2009 según datos de la Confederación Nacional Turística, 2170 personas en hoteles categoría 4 estrellas, lo cual ha favorecido de ventajas comparativas derivadas de su ubicación geográfica y de su capacidad de atraer inversión. Datos de la Secretaría de Economía indican que el sector servicios aporta un 64% al PIB estatal. Este sector emplea al mayor porcentaje de la población total ocupada con 61.4% (Secretaría de Desarrollo Económico, 2012).

## METODOLOGÍA

La metodología utilizada en este estudio se basó en el diseño, validación y aplicación de un cuestionario. De acuerdo a Hernández, Fernández y Baptista (2006), la investigación posee un enfoque cuantitativo descriptivo, no experimental de corte transversal fundado en la recolección de datos numéricos que han sido estudiados y examinados mediante pruebas estadísticas, donde no se manipularon los datos ni se tuvo influencia sobre ellos, recabándolos en un solo periodo de tiempo. La elección de esta muestra se realizó de manera no probabilística por bola de nieve, la cual consiste en localizar a algunos individuos, los cuales conducen a otros, y estos a otros, y así hasta conseguir una muestra suficiente (Hernández *et.al.*, 2006). Lo anterior porque se propuso la idea a 14 hoteles de cuatro estrellas de la ciudad de Ensenada, que es el sector de interés, y esto llevó a si se rechazaba la aplicación del estudio en un hotel, se contactaba a otro y así hasta conseguir el mayor número de empresas, que finalmente fueron dos las que accedieron a la aplicación del estudio.

Para la recolección de datos se elaboró un instrumento de 25 reactivos. Aplicado a una muestra de 51 empleados y 2 gestores de los hoteles objeto de estudio. Midiendo 10 variables: capacitación, desarrollo, salarios, relación con el supervisión, evaluación del desempeño, participación del empleado, comunicación, trabajo en equipo, relación con compañeros de trabajo y balance entre vida laboral y personal. La categoría de respuestas fue en escalamiento numérico tipo Likert de cinco valores, donde (1) corresponde a totalmente en desacuerdo y (5) a totalmente de acuerdo. La aplicación del instrumento se llevó a cabo en el primer trimestre de 2013. Los valores del coeficiente Alfa de Cronbach arrojan un resultado global de .930, lo que revela que las variables sí miden lo que indican medir y arrojan datos confiables (Blanco, 2000). Para la

presentación de resultados, se utilizó el programa estadístico “Statistical Package for the Social Sciences” (SPSS) en su versión 20, donde se hicieron pruebas con estadísticos descriptivos.

## RESULTADOS

En el trabajo de campo se encontraron datos oportunos, que permitieron conocer los factores de retención relevantes para los empleados y para los gestores. En primera instancia se hace mención los datos demográficos los cuales indican que de los 51 empleados encuestados, el 31.4% son del género femenino; el 66.7% son del género masculino. En cuanto a la edad el mayor porcentaje lo tienen las personas con un rango de edad entre 26 a 34 años, representado por un 27.5% y equivalente a 14 personas, seguido de un 21.6% en el rango de 18 a 24 años, lo que se traduce en 11 personas, indicando que es una población joven. La categoría de antigüedad de los empleados en los hoteles corresponde en su mayoría al rango de 1 a 3 años, con un 45.5% constituido por un total de 23 personas. Se observó que un 66.7% de la muestra labora en el turno matutino, representado por 34 personas.

Los factores más relevantes para los empleados son, en primer lugar, la relación empleado-supervisor, donde con una frecuencia de 47 empleados e igual a 92.1% de ellos, manifiestan que su relación con su jefe está en un alto nivel. Por el contrario, los gestores indican que esta se encuentra en un nivel medio. Lo cual es un hallazgo importante. El segundo puesto es para el trabajo en equipo, el 80.3% de la muestra correspondiente a 41 personas, aseguran que este aspecto se encuentra en un alto nivel, concordando con la opinión de los gestores. En tercer lugar se encuentra la participación del empleado, 40 personas traducido a un 78.4% afirman que la empresa sí pone una elevada atención en esta área. Con el mismo número de personas y de porcentaje está el balance entre vida laboral y personal, no obstante la organización indica que dicho aspecto está en un nivel medio. Los tres factores con porcentajes más bajos de un total de diez, son el desarrollo donde un 52.9% equivalente a 27 personas, consideran que la empresa sí brinda un alto desarrollo a sus empleados. De igual forma la Evaluación del desempeño con el 54.9% constituido por 28 personas, indican que los hoteles cuentan con un óptimo y eficiente sistema de evaluación del desempeño. Con el mismo número de porcentaje está el salario. Los gestores indican que esta variable tiene un nivel medio.

## CONCLUSIONES

La investigación realizada para determinar los factores de retención conlleva a afirmar que los hoteles tienen enormes posibilidades de aplicar estrategias para conservar a los empleados. Las principales prácticas para ello permiten ver un panorama diverso y con una tendencia cambiante hacia el valor que le otorga la gestión de recursos humanos. En base a los resultados se pudo observar que una relación adecuada con el supervisor genera y dinamiza un efecto positivo en la retención del trabajador, estudiado en este caso desde la perspectiva de una relación mutua basada en la ayuda, responsabilidad y respeto así como en la claridad con la que se presentan los objetivos de trabajo.

Ya que el líder ejerce su papel como interlocutor directo entre organización y empleado en tanto es él quien gestiona las recompensas vinculadas al rendimiento en el puesto y quien ofrece oportunidades de formación y carrera, así como apoyo emocional a su equipo (Mondy, 2010). Trabajar en equipo genera una influencia efectiva en la retención, con componentes en esta variable, que permiten ser de utilidad, tales como la colaboración, aportación de ideas. De acuerdo con Buller, (1986), (citado por Spector, 2002), los equipos se crean con el propósito de

enriquecer las labores en la empresa, asignando diversas tareas, proyectos, actividades para hacerlas de manera conjunta y lograr objetivos organizacionales.

La participación del empleado arroja resultados concluyentes en base a su repercusión en la retención de los empleados, lo que tiene un gran impacto y permite incentivar los aspectos estudiados en este constructo, incluye el requerimiento y valoración de la opinión del colaborador para tomar ciertas decisiones y la posibilidad de sugerir mejoras relacionadas con el trabajo

Las estrategias conciliación entre vida laboral y personal brindadas por la empresa, hacen que los empleados de la organización consideren como uno de los aspectos más relevantes el tener ese equilibrio, visto desde aspectos como flexibilidad en los horarios, facilidades para atender necesidades familiares y la propia percepción de si existe este balance. Mediante esta vía los empleados sienten bienestar y perciben a la organización de manera positiva. Las prácticas de desarrollo del empleado, se estudiaron a través de la formación, promoción y compromiso de la empresa con este aspecto. Los resultados obtenidos permiten concluir que cada uno de los componentes estudiados en esta variable, no son significativos para potenciar la permanencia de los trabajadores. Se infiere que es porque no se considera una necesidad real o porque la formación no está perfectamente orientada a las características de los empleados y sus requerimientos específicos, o porque los empleados consideran insuficiente lo hecho hasta el momento por la organización en materia de desarrollo.

El departamento de recursos humanos debe tomar especial atención en este tópico ya que los beneficios de contar con programas de desarrollo dentro de las empresas, es que las vacantes que se presenten pueden ser conectadas dentro de la misma, sin necesidad de captar capital humano externo. De igual forma fomentar el conocimiento del personal y mantener una baja tasa de rotación (Werther, 2008). El desarrollo tiene el potencial de ser a largo plazo, atravesando las fronteras de la rutina diaria de trabajo, donde la organización y el empleado deben ir a un mismo paso para el logro de objetivos (Mondy y Robert, 2005). El sistema de evaluación del desempeño, visto desde tres ángulos, como el brindar estímulos e incentivos, así como la mejora en el desempeño y la retroalimentación, esto da pie a concluir que este no es uno de los factores que retienen en su totalidad a los empleados. Creando un cuestionamiento sobre qué tan eficaces son los programas de evaluación de desempeño, pues si se cuenta con ello, pero no están asegurando la retención de los empleados. El salario, analizado desde tres vertientes, prestaciones de ley, equidad retributiva y diseño equitativo de salario según funciones desempeñadas. Los resultados, indican que si se tiene la firme intención de retener al capital humano, es necesario considerar la percepción de los empleados a través de estos resultados, puesto este aspecto no es del todo un agente determinante en la permanencia de los trabajadores, no es el factor más atractivo. Lo cual hace ver que los empleados tienen otros lazos con la organización, fundamentalmente con el supervisor con los retos y beneficios que implica laborar en equipo, así como con el balance entre vida personal y laboral.

### Limitaciones

Dentro de las limitaciones de este estudio se resaltan, en primer lugar el número reducido de empresas a las que se pudo tener acceso para la aplicación del instrumento, de igual forma se eliminó la información recabada en un hotel al evaluar con expertos, que los datos tenían un sesgo importante y que afectaría de manera considerable los resultados. Se espera que en futuras investigaciones se integren un mayor índice de hoteles de cuatro estrellas.

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# LA CONTINUACIÓN VOLUNTARIA EN EL RÉGIMEN OBLIGATORIO DE LA LEY DEL SEGURO SOCIAL

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## RESUMEN

*El Régimen de aseguramiento obligatorio, regulado en la Ley del Seguro Social, contempla el diseño de un sistema de naturaleza mixta, que permite al trabajador seguir cotizando al Seguro Social. Este sistema híbrido llamado Continuación voluntaria en régimen obligatorio; contempla la opción que tienen los trabajadores que han concluido una relación laboral y desean seguir acumulando cotizaciones semanales necesarias para obtener, los derechos de los seguros, de invalidez y vida, como los de cesantía en edad avanzada y vejez contemplados en la ley del seguro social de 1973.*

**PALABRAS CLAVES:** Trabajador, Continuación voluntaria, relación laboral.

## THE VOLUNTARY CONTINUATION IN THE OBLIGATORY REGIMEN OF THE SOCIAL SECURITY LAW

### ABSTRACT

The Regime of obligatory insurance, regulated by the Law of the Social Insurance, contemplates the design of a system of mixed nature, which allows for the worker to continue quoting to the Social Insurance. This hybrid system called voluntary Continuation in obligatory regime; contemplate the option that there have the workers who have concluded a labour relation and want to continue accumulating weekly contributions necessary to obtain, the rights of the insurances, of invalidity and life, as those of unemployment in advanced age and oldness contemplated in the law of the social insurance of 1973.

**JEL:** K1, K31, K34

**KEYWORDS:** Worker, Voluntary Continuation, Labour Relation

### INTRODUCCIÓN

La presente investigación tiene como principal objetivo, analizar el seguro de continuación voluntaria en el régimen obligatorio, contemplado en la Ley del Seguro Social, siendo éste; un sistema híbrido, el cual permite a los trabajadores que se han quedado sin empleo seguir cotizando, para seguir acumulando las cotizaciones semanales necesarias para la obtención tanto de los derechos de los seguros de invalidez y vida, así como los de cesantía en edad avanzada y

vejez. (Pérez, Fol 2011) El seguro social cubre las contingencias y proporciona los servicios que se especifican a propósito de cada régimen particular, mediante prestaciones en especie y en dinero, en las formas y condiciones previstas por la ley del seguro social y sus reglamentos. Es así como la Ley del Seguro Social de 1973 vigente hasta el 30 de junio de 1997, ya contemplaba el otorgamiento de protección a futuro, a través del seguro de pensiones, mediante las modalidades de cesantía en edad avanzada y vejez. Esta ley, promulgada en 1973, contempla que existe una cesantía en edad avanzada, cuando el asegurado quede privado de trabajos remunerados después de los sesenta años de edad. La contingencia que cubre este seguro, obliga al Instituto Mexicano del Seguro Social al otorgamiento de las siguientes prestaciones:

- a) Pensión.
- b) Asistencia médica
- c) Asignaciones Familiares
- d) Ayuda asistencial.
- e) Aguinaldo anual.

Una de las situaciones a las que se enfrenta el trabajador al quedar desempleado, es ver afectada la cotización y acumulación de semanas cotizadas para poder ejercer el derecho a una pensión por cesantía en edad avanzada y vejez; y es precisamente el seguro a la continuación voluntaria al régimen obligatorio, contemplado en la Ley del Seguro Social de 1973 y la de 1997 la que permite salvaguardar los derechos mínimos garantizados por la Constitución Política de los Estados Unidos Mexicanos, en su artículo 123 fracción XXIX el cual establece que: "Se considera de utilidad social el establecimiento de cajas de seguros populares de invalidez, de vida, de cesación involuntaria del trabajo y de otras con fines análogos, para lo cual el gobierno federal, como el de cada estado, deberán fomentar la organización de instituciones de esta índole, para difundir e inculcar la previsión popular." Así se crearon en diferentes fechas institutos especializados para la atención de los trabajadores, que de acuerdo al tipo de empresa en la que laboraban, era la naturaleza de la institución que los respaldaba. De esta forma nace el Instituto Mexicano del Seguro Social, el cual es un organismo autónomo, encargado de proporcionar tanto las prestaciones económicas así como en especie; a todos los trabajadores que son sujetos de una relación laboral entre particulares.

## **METODOLOGÍA**

La metodología utilizada consistió en una investigación documental, analizando la Ley del Seguro Social de 1973 y 1997, Los Reglamentos aplicables, Doctrina y los Acuerdos del Consejo Técnico máxima autoridad del IMSS; éste análisis permitió conocer el seguro voluntario llamado continuación voluntaria en el régimen obligatorio; así como los beneficios que tiene éste seguro, el cual permite al trabajador que ha quedado desempleado, seguir cotizando para acumular las semanas necesarias para ejercer sus derechos a los diferentes seguros que contempla la Ley del Seguro Social, así mismo se conoció el costo económico que tendría que pagar el trabajador al ser sujeto de la continuación voluntaria en el régimen obligatorio.

## **RESULTADOS**

La continuación voluntaria en el régimen obligatorio, es clasificada por el Instituto Mexicano del Seguro Social (IMSS) como la modalidad 40; ésta modalidad permite a los trabajadores, lograr completar las semanas necesarias para la obtención de una pensión por invalidez, cesantía en edad avanzada y vejez. El trabajador podrá obtener uno de estos tipos de pensión en los siguientes supuestos:

- a) Invalidez; el cual se otorga por la pérdida de la capacidad del trabajo.
- b) Por cesantía en edad avanzada; se otorga por la privación del trabajo remunerado a partir de los 60 años.
- c) Por vejez; se otorga a los 65 años y al tener reconocidas 500 semanas de cotización.

El trabajador para poder ser sujeto de la continuación voluntaria en el régimen obligatorio debe reunir las siguientes características:

1.- Debe tener como mínimo cincuenta y dos cotizaciones semanales, acreditadas en el régimen obligatorio, en los últimos cinco años al ser dado de baja.

2.- Puede continuar en los seguros conjuntos de invalidez y vida así como de retiro, cesantía en edad avanzada y vejez, quedando inscrito con el último salario o superior al que tenía en el momento de la baja del régimen obligatorio.

3.- Las cuotas de financiamiento de este régimen se pagarán por mensualidades adelantadas; El derecho establecido a elegir la opción de continuar voluntariamente cotizando en el régimen voluntario, se pierde si no se ejercita mediante solicitud por escrito dentro de un plazo de cinco años a partir de la fecha de baja. El costo económico de esta modalidad de aseguramiento se integra de la siguiente manera:

1.- Las cuotas de financiamiento ascienden en su totalidad a 10.075% sobre el salario base de cotización y está integrada de la siguiente manera;

- a) Para el seguro de invalidez y vida el 1.75% más el 0.0625%, dando un total de 2.375% sobre el salario base de cotización.
- b) Para el seguro de cesantía en edad avanzada y vejez el 2.0% más el 4.27% dando un total de 6.275% sobre el salario base de cotización.
- c) Para las prestaciones en especie de pensionado el 1.425%.

Como es de apreciarse en el párrafo que antecede solamente se cubren las cuotas referentes al seguro de invalidez y vida, cesantía en edad avanzada y vejez y las prestaciones en especie del pensionado, por lo que prácticamente existe un ahorro para el trabajador, en el costo fiscal que tendría el recibir un salario, como es el Impuesto Sobre la Renta, Impuesto Sobre Nóminas y el INFONAVIT. La continuación voluntaria en el régimen obligatorio se termina; en el momento en que el trabajador lo manifieste por escrito, deje de pagar las cuotas durante dos meses consecutivos o sea dado de alta nuevamente en el régimen obligatorio, al momento de estar sujeto a una relación laboral. El seguro de continuación voluntaria en el régimen obligatorio, como se ha analizado, permite al asegurado que ha sido dado de baja, continuar cotizando de manera voluntaria en el régimen obligatorio. Al ejercer este derecho, el asegurado obtiene los siguientes beneficios:

- a) Seguir cotizando dentro del régimen obligatorio, aun sin estar bajo la subordinación de un patrón.
- b) Cotizar en el régimen obligatorio, con un salario igual o mayor con el que venía cotizando.

- c) Al poderse dar de alta con un salario mayor al que venía cotizando, le permite al asegurado poder anticiparse a obtener un mejor monto de pensión a la hora de ejercer ese derecho, de ahí la conveniencia de cotizar bajo este régimen, puesto que se puede planear que monto de pensión desea obtener a un futuro.
- d) El costo financiero que tendría es mucho menor al que se pagaría como trabajador, por lo que es conveniente ya que las cuotas de financiamiento totales ascienden a 10.075% sobre el salario con el que cotice en este régimen.
- e) El asegurado puede adquirir el seguro familiar ya que el régimen de continuación voluntaria en el régimen obligatorio no incluye la asistencia médica, por lo tanto puede comprar el seguro familiar para él y sus familiares. Este seguro cubre las prestaciones en especie por enfermedades y maternidad, como son atención médica, quirúrgica, farmacéutica y hospitalaria.

La continuación voluntaria en el régimen obligatorio, como se ha analizado solamente contempla los seguros de invalidez y vida, cesantía en edad avanzada y vejez, dejando fuera las prestaciones en especie del seguro de enfermedades y maternidad, lo que significaría para el trabajador que opte por esta modalidad, el no recibir atención médica ni las prestaciones en especie; para ésta situación, se contempla en la Ley del Seguro Social el seguro de salud para la familia; los sujetos que cubre este seguro son: El asegurado, la esposa, hijos y padres. El seguro de salud para la familia solo cubre las prestaciones en especie por enfermedades y maternidad, como son la atención médico quirúrgica, farmacéutica y hospitalaria. Las cuotas de financiamiento para éste seguro se establecen por cada miembro de la familia tomando en cuenta la edad de cada uno. Que va de 0 a 19 años una anualidad de \$1,320.80 y de 60 años en adelante una anualidad de 3,472.10. El seguro de salud para la familia puede contratarse de forma individual, es decir por cada uno de los miembros de la familia; o de manera colectiva, es decir por toda la familia. Los requisitos para la contratación individual son:

1. Suscribir un convenio con el Instituto Mexicano del Seguro Social
2. La solicitud puede realizarse durante todo el años, pagando la anualidad correspondiente
3. La renovación se tendrá que realizar dentro de los 30 días anteriores a la fecha de vencimiento de la anualidad contratada
4. El inicio del servicio será a partir del día primero del mes de calendario siguiente al de la incorporación individual.

Para la contratación de manera colectiva deberá reunir los siguientes requisitos:

1. Comprenderá un mínimo de 50 personas
2. Se deberá suscribir un convenio con el Instituto Mexicano del Seguro Social
3. La primera inscripción deberá realizarse dentro de los 30 días naturales posteriores a la firma del convenio
4. La renovación deberá efectuarse dentro de los 30 días anteriores a la fecha de vencimiento de la anualidad contratada del convenio
5. El inicio de los servicio será a partir del día primero del mes de calendario siguiente al de la incorporación colectiva.

## CONCLUSIONES

Como se ha abordado, existe la alternativa de aseguramiento para el trabajador que ha quedado sin empleo alternativas contempladas en la Ley del Seguro Social, que le permiten al trabajador asegurado no ver obstaculizados sus derechos a la seguridad social, con respecto a la obtención de una pensión por Cesantía en Edad Avanzada y Vejez, conforme a la Ley del Seguro Social; así para poder tener acceso a este beneficio, el trabajador deberá reunir cada uno de los requisitos mencionados en la propia Ley. Bastará que el trabajador ejerza sus derechos, en tiempo y forma para no ver afectada su situación económica, una vez concluida su vida laboral.

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# ESTUDIO DEL IMPACTO DE LOS VALORES ÉTICOS EN EL DESEMPEÑO DE LAS EMPRESAS FAMILIARES

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## RESUMEN

*El objetivo de este trabajo es realizar una investigación documental para determinar el impacto de los valores éticos en el desempeño de la gestión de las empresas familiares mexicanas, contextualizadas en la ciudad de Hermosillo, Sonora. La investigación es de carácter descriptivo. Se consultaron diferentes fuentes teóricas y empíricas referentes a la cultura empresarial, así como realizado su análisis en el ámbito de la empresa familiar sonorenses. La problemática observada refiere a diversas crisis existenciales de las empresas, derivadas de prácticas anti-éticas que irrumpen la armonía familiar y empresarial, ocasionando serias consecuencias económicas y emocionales para sus socios; y con ello afectan seriamente su desempeño y posibilidad de continuidad. Los resultados muestran que esta cultura influye de manera importante en el comportamiento gerencial de las empresas familiares.*

**PALABRAS CLAVE:** Valores Éticos, Empresa Familiar, Gestión Y Continuidad

## IMPACT STUDY ETHICAL VALUES IN THE FAMILY BUSINESS PERFORMANCE

### ABSTRACT

*The aim of this paper is a literature search to determine the impact of ethical values in the performance of the management of family businesses in Mexico, contextualized in the city of Hermosillo, Sonora. The research is descriptive. Different sources were consulted concerning theoretical and empirical corporate culture and analysis conducted in the field of family business Sonora. The problems observed existential crises refers to various companies, resulting from unethical practices that break family harmony and business, causing serious economic and emotional consequences for its members, and thus seriously affect its performance and ability to continue. The results show that this culture has a significant influence on the behavior management of family businesses.*

**JEL:** M12, M14

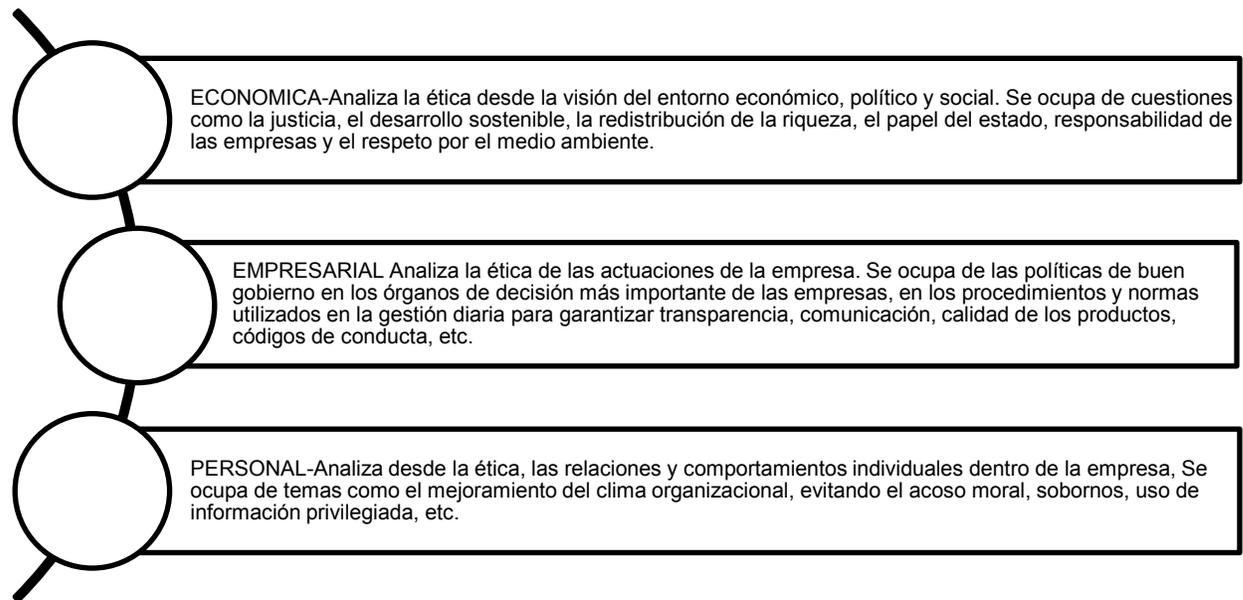
**KEYWORDS:** Ethical values, family business, management and continuity

## INTRODUCCIÓN

Los clientes, los ciudadanos y la sociedad en general, demandan a las empresas que se comporten de forma transparente, que se comprometan con el desarrollo de sus entornos, que sean honestas y responsables en sus comportamientos. Experiencias de especulación, corrupción, intoxicación alimentaria, desastres medioambientales, falta de veracidad en la publicidad, han develado a la sociedad la necesidad de que las empresas actúen conforme a principios y valores éticos. La ética

es una disciplina filosófica, cuyo objeto de estudio es la moral. Para la Real Academia de la Lengua es la parte de la filosofía que trata del bien y del fundamento de sus valores. Para la European Business Network (EBEN), la ética en los negocios es una reflexión sobre prácticas que implican normas y valores de los individuos, empresas y sociedad

Figura 1: Tipos de Ética, según su Cobertura



Es generalizada la idea de que la ética en los negocios es muy diferente a la ética personal. Por ejemplo, se suele afirmar que «yo soy muy ético, nunca robaré ni mentiré como persona; ahora bien, en la empresa puedo robar y mentir porque el entorno de la misma es propicio a la corrupción, además: todos lo hacen». Esta actitud avala el riesgo de actuar con frecuencia con comportamientos no éticos. La ética no debe consistir en el conjunto de prohibiciones, reglas y regulaciones impuestas por un código ético, por una autoridad religiosa, o por ley; sino por un compromiso genuino y voluntario con el bien común. Actualmente las grandes empresas y corporaciones definen sus propios códigos y comportamientos éticos, motivados por la necesidad de frenar los abusos y estafas que se han prodigado recientemente en todos los países, y que impactan negativamente en los resultados económicos de las mismas; razón poderosa que las impulsa a no ser perdedoras.

En América Latina, 9 de cada 10 empresas son familiares, 2 de cada 3 fracasan. En México, aproximadamente el 95% de las empresas son familiares, 8 de cada 10 empresas mexicanas mueren antes de los 2 años de vida. Entendemos por empresa familiar aquel negocio cuya propiedad pertenece –en su totalidad o en su mayoría- a miembros de una sola familia. Este tipo de negocios se caracteriza particularmente por vivenciar valores como la colaboración, lealtad, compromiso, flexibilidad y adaptación rápida ante los cambios; y en base a esto erigen su principal fortaleza empresarial. La ética en la empresa familiar se refleja en sus acciones con valor. El cuidado y mantenimiento de esos valores inculca a cada organización su propio sello. Proyecta a su vez los principios y valores de su fundador.

Esta investigación exploró fuentes teóricas y empíricas, y culminó siendo de tipo descriptiva. También se validó con investigación de campo enfocada en comprender la necesidad que tienen

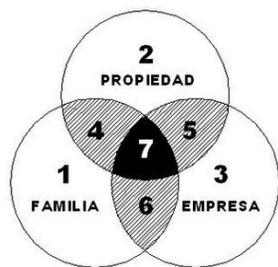
las empresas familiares de Sonora en mejorar su desempeño ético para ser rentables y competitivas. Para ello, se trabajó en el ambiente natural de 22 empresas familiares, elegidas al azar; dada la dificultad mostrada ante el tema ético. El resto de esta investigación está organizada como sigue. En la sección de revisión literaria se presentan aportaciones de autores como Belausteguigoitia Rius, Sabater Sánchez, Ruiz Mercader, Carrasco Hernández, y J. Poza. En la sección de metodología, se describe claramente el procedimiento seguido y las herramientas de investigación utilizadas para validar hipótesis y análisis de datos. Finalmente, aparecerán los resultados y conclusiones obtenidas, en las cuales se enuncian los principales hallazgos derivados de esta investigación.

### REVISIÓN LITERARIA

La cultura de la empresa familiar es el producto de sus creencias, valores y metas integradas en su historia y lazos sociales. Algunos estudios previos muestran que los diferentes comportamientos en este tipo de empresas se encuentran relacionados con variables como la cultura de la empresa familiar (Belausteguigoitia, 2006), en donde los miembros de la familia ejercen una fuerte influencia sobre el comportamiento de la empresa (Astrachan, 1988). Partiendo de estos argumentos se han planteado las siguientes preguntas de investigación: ¿Existe diferencia en la cultura de una empresa familiar y la empresa no familiar? ¿Por qué razón, la empresa familiar es más abundante en la comunidad empresarial? ¿Cuáles son las principales problemáticas de las empresas familiares que afectan su continuidad? El término cultura empresarial familiar se puede considerar como la ideología básica seguida por la familia propietaria, que se caracteriza por los valores, las normas y tradiciones o formas de actuar en la vida (Sabater Sánchez, Ruiz Mercader y Carrasco Hernández, 2003).

Poza (2009) define la cultura de la empresa familiar como la colección de valores definidos por comportamientos que existen en una empresa como resultado del liderazgo que proveen los miembros de la familia, tanto en el pasado como hasta nuestros días. La unidad familiar y la relación natural entre la familia y los negocios también definen a la cultura de la empresa familiar. Ésta juega un factor crucial en la determinación del éxito del negocio y puede manifestarse en aspectos intangibles tales como la forma de vestir, el lenguaje y los rituales; en el conjunto de ideas y acciones que un individuo utiliza para hacer frente a una situación problemática; en valores como la honestidad y el servicio al cliente, entre otros; finalmente, en los supuestos básicos del grupo que son las premisas sobre las que los grupos basan su forma de ver la vida (Belausteguigoitia, 2006). Existe una gran diferencia entre la empresa familiar y la no familiar. La empresa familiar tiene tres componentes activos que son la familia, la empresa y la propiedad.

Figura 2: Modelo de los 3 Círculos de Davis y Tagiuri, desarrollado en 1982.



La figura 2, muestra las intersecciones de los tres círculos; que representan los tipos de relaciones de los miembros que se colocan en esas áreas. Ejemplo: área numero 7 indica que la persona

labora en la empresa, es accionista y pertenece a la familia. La 4 indica que la persona aquí ubicada es miembro de la familia y accionista, pero no labora en la empresa, la 5 indica que la persona labora en la empresa y tiene acciones, pero no es familiar. La 6 indica que la persona trabaja en la empresa y pertenece a la familia, pero no posee acciones. La empresa es el conjunto de capital, administración y trabajo dedicados a satisfacer una necesidad en el mercado. La Comisión de la Unión Europea la define como una entidad independiente de su forma jurídica que ejerza actividad económica de forma regular a través de sociedades de personas sin consanguinidad ni lazos emocionales. La tabla 1 muestra datos cualitativos que señalan la relevancia de las Empresas Familiares en México. Podemos ver que el 90% de los negocios en México se manejan a nivel familiar, generan entre aproximadamente el 78.5% del empleo y aportan 52% del Producto Interno Bruto (PIB), Mas del 90% de emisoras en BMV tienen clara representación familiar, el 78.5% de los empleos en México los generan las Micro, Pequeñas y Medianas empresas, y el 80% de los nuevos empleos en la última década han sido creados por empresas familiares; según estudio realizado por Urzúa consultor de la empresa KPMG México en Enero 2012.

Tabla 1: Datos Cuantitativos de las Empresas Familiares en México

**Datos cuantitativos que muestran la relevancia de las Empresas Familiares en México**

El 90% de empresas mexicanas son familiares - EU reporta más del 95%  
 Las Micro, Pequeñas y Medianas empresas generan el 52% del PIB en México  
 Más del 90% de emisoras en BMV tienen clara representación familiar  
 El 80% de los nuevos empleos en la última década han sido creados por Empresas Familiares  
 El 78.5% de los empleos en México los generan las Micro, Pequeñas y Medianas y son Empresas Familiares  
 70% de empresas de reciente creación no durarán más de 3 años.  
 Solo 13.9% de las empresas Mexicanas obtuvieron un crédito  
 7 de cada 10 empresas familiares desaparecen en primer cambio generacional  
 Esperanza de vida de empresa familiar es de 25 años – Contrario a gestión institucional que es de 50 años.

*Fuente: KPMG. 2009. Estudio de las Empresas Familiares en México.*

Una preocupante situación es la alta tasa de mortalidad de las empresas, pues 7 de cada 10 empresas de reciente creación no duran más de 3 años, proporción similar que se da en las empresas familiares que tienden a desaparecer en el primer cambio generacional; siendo la esperanza de vida promedio de 25 años, mientras que las empresas que tienen una gestión más institucionalizada es de 50 años en promedio.

La tabla 2 nos indica la clasificación que hace la Secretaría de Economía Mexicana, por estratos o tipos de empresa; en la cual se aprecian las características de cada uno en cuanto a número de trabajadores y monto de ventas anuales. En esta clasificación están incluidas Empresas Familiares en una proporción del 90% de este censo.

Tabla 2: Estratificación Empresarial En México

Estratificación en México. Secretaría de Economía 2009.

Tipo	Sector	Trabajadores	Ventas Anuales
Micro	Todos	hasta 10	Hasta 4 millones
Pequeña	Comercio	11 a 30	de 4 a 100 millones
	Industria/Servicios	11 a 50	
Mediana	Comercio	31 a 100	de 100 a 250 millones
	Servicios	51 a 100	
	Industria	51 a 250	

*Fuete: KPMG. 2009. Estudio sobre Empresas Familiares en México*

Para efectos de esta investigación, el conocer cómo están distribuidas las empresas familiares, dentro de la economía, muestra una clara idea de la relevancia de atenderlas para conservarlas y desarrollarlas debido al fuerte aporte al Producto Interno Bruto Nacional. Según datos del Instituto Nacional de Estadística, Geografía e Informática (INEGI), el 95.2% de las empresas familiares están clasificadas como micro, y generan el 45.6% del empleo formal. Tabla 3.

Tabla 3: Datos Generales México INEGI 2009

<b>Datos Generales México INEGI 2009</b>				
<b>Tipo</b>	<b>%</b>	<b># Empresas</b>	<b>%</b>	<b>Empleos</b>
	<b>Total</b>		<b>Empleo</b>	<b>(millones)</b>
Micro	95.2	4,897,142	45.6	12.6
Pequeña	4.3	221,194	23.8	6.6
Mediana	0.3	15,432	9.1	2.5
Grande	0.2	10,288	21.5	6.0
Total	100%	5,144,056	100%	<b>27.7</b>

Fuente: KPMG. 2009. Estudio sobre Empresas Familiares en México.

La Tabla 3, también muestra que el tipo de empresas familiares Mediana y Grande son las que menos proporción representan en este estudio; figurando con un 0.3 y 0.2% respectivamente, lo que hace suponer un gran reto para la administración de empresas en el sentido de desarrollarlas, conservarlas y prevenir posibles riesgos y conflictos con el fin de lograr que las Empresas Familiares en México lleguen a ser Medianas o Grandes. Es importante subrayar que la economía de un país depende en gran medida de las empresas familiares; y que las familias, dependen de las empresas que funcionan en un país; por lo tanto, el bienestar social estará en manos de las empresas. Ahora bien, relacionar el impacto que tienen los valores éticos en la gestión de las empresas familiares implica visualizar tanto el presente como el futuro de los negocios; y determinar qué sucede a favor y en contra de estas empresas, y con ello ilustrar las mejores prácticas a realizar. Entre los principales las problemáticas que afectan la continuidad de las empresas familiares están el no tener claridad en lo que corresponde a cada uno de los sistemas (familia-empresa), lo cual obliga a tomar decisiones inadecuadas que generan tensiones y bajo rendimiento empresarial, que también transitan en el camino de la ética empresarial. Imanol Belausteguigoitia devela algunos conflictos que suceden en la empresa familiar, como es el juego de roles inadecuado dentro de la empresa; es decir, los miembros de una familia tienden a interactuar de la misma manera y bajo los mismos patrones que se dan en la familia, sin considerar los escenarios en que se encuentren, y subrayando lo curioso que es el comportamiento de las personas dependiendo la naturaleza del grupo en que se desarrollan, y su contexto axiológico.

## METODOLOGÍA

La investigación es documental y de campo; de tipo cualitativa, es un método de investigación basado en principios teóricos de interacción empresarial, empleando métodos de recolección de datos que son no cuantitativos, con el propósito de explorar las relaciones humanas de las Empresas Familiares y describir la realidad tal como la experimentan sus correspondientes protagonistas. La investigación cualitativa requirió de un profundo entendimiento del comportamiento humano y las razones que lo gobiernan. Combinó la forma de interrelacionar la investigación documental y las acciones humanas en 22 empresas familiares de la ciudad de Hermosillo, Sonora. Se acudió a bases de datos de CANACINTRA (Cámara Nacional de la Industria de la Transformación) Sonora, que contiene un universo de 890 empresas, de las cuales sólo registra a 47 empresas familiares. La mayor dificultad presentada para seleccionar la

muestra de 22 empresas fue la aceptación de los sujetos de estudio. Tabla 4. Muestra la información demográfica de la muestra objeto de estudio para medir el impacto de los valores éticos en el desempeño de las empresas familiares de Sonora.

Tabla 4: Información Demográfica de la Muestra

Giro/Edades	Directivos entrevistados para conocer aspectos Éticos de las Empresas Familiares								TOTAL
	HOMBRES (17)				MUJERES (5)				
	30-39	40-49	50-59	60 y más	30-39	40-49	50-59	60 y más	
Comercio	1	2	3	2	3	2	0	0	13
Industria	1	2	1	2	1	0	0	0	7
Servicios	0	1	1	0	0	0	0	0	2
Total	3	5	5	4	3	2	0	0	22

Fuente: Creación Propia.

El 77 % de la muestra corresponde a hombres y el 23 % a mujeres. El 59% se dedica al sector comercio,

23% a la industria, y el 18% a los servicios. La mayoría de los hombres están entre los 40 y 60 años.

El 23% de las mujeres están entre 30 y 50 años y se dedica al comercio.

En la Tabla 5, pueden apreciarse tres tipos de clasificación: por tamaño de empresas, destacando las micro empresas; proporción conservada igual que a nivel nacional. Además se tiene otra clasificación denominada por Permanencia, en la cual destacan los Comercios que tienen aproximadamente de 16 a 20 años en el mercado, seguidas de algunas Industrias que tienen de 21 a 25 años de edad; y finalmente la Etapa de Continuidad en la que se encuentran, clasificación que también señala al sector Comercio con mayor incidencia en etapa de Fundadores, seguida por Industrias que se encuentran integrando a su primera generación al negocio familiar, entre los datos más relevantes encontrados en la muestra.

Tabla 5: Información Cualitativa De Las Empresas Que Componen La Muestra Objeto De Estudio Del Impacto De Los Valores Éticos En El Desempeño De Las Empresas Familiares

**Información cualitativa de Empresas Familiares de Sonora, objeto de estudio sobre impacto de los valores éticos en el desempeño.**

Giro	Tamaño (# de empleados)			Permanencia				Etapa de continuidad			
	Micro	Pequeñas	Medianas	10 a 15 años	16 a 20 años	21 a 25 años	más de 26	Fundadores	1era. Gen.	2da. Gen.	3era. Gen.
Comercio (13)	6	5	2	1	8	2	2	9	4	0	0
Industria (07)	1	4	2	1	0	4	2	1	6	0	0
Servicios (02)	0	2	0	2	0	0	0	2	0	0	0
Total (22)	7	11	4	4	8	6	4	12	10	0	0

Fuente: Creación propia con Base datos CANACINTRA HERMOSILLO 2011

Tabla 6: Sondeo Realizado a Colaboradores de las Empresas Familiares Estudiadas

Sondeo realizado a colaboradores de las 22 empresas familiares estudiadas	Comercio 13		Industria 07		Servicios 02		Total
	SI	NO	SI	NO	SI	NO	
¿Tienen código de ética?	8	5	3	4	2	0	22
¿Declaran públicamente sus valores?	5	8	3	4	2	0	22
¿Perciben coherencia en decir y actuar?	3	10	2	5	1	1	22
¿Definen su visión?	7	6	5	2	1	1	22
¿Comparten su visión empresarial?	3	10	5	2	0	2	22
¿Declaran su misión?	8	5	5	2	1	1	22
¿Comprenden todos la visión?	3	10	2	5	2	0	22
¿Comprenden todos la misión	5	8	2	5	1	1	22

Fuente: Creación Propia con base de datos de CANACINTRA HERMOSILLO 2011

La Tabla 6, muestra lo expresado por 67 colaboradores de las empresas objeto de estudio, mediante focus group. Se obtiene que solo 60% de las empresas familiares tienen establecido un código de ética, siendo 8 empresas de 22 ubicadas en el sector Comercio las que lo asumen. Seguido se observa que el 45% de las empresas familiares en cuestión declaran públicamente sus valores, y sólo un 27% de ellas proyecta coherencia entre lo que dice y hace; mientras que el 60% solamente han definido su visión. Respecto a compartir su visión empresarial con los colaboradores, existe un 37% de las empresas que si lo hace. Dato relevante de este sondeo es que un 63% de las empresas tienen declarada su misión, y sólo el 36% de las empresas se han asegurado de que todos sus colaboradores la comprendan; porcentaje relativamente bajo, si se considera que la misión implica todo el quehacer empresarial. De esta situación, se desprende una incógnita planteada en el objetivo de esta investigación, en el sentido de saber cuáles son las problemáticas de las empresas familiares que dificultan su continuidad.

Tabla 7: Razones por las Que Existen más Empresas Familiares en México

¿Por qué razón considera usted que existan más empresas familiares en México?	Porcentaje
Porque el desempleo impulsa este tipo de emprendimientos	33
Porque las familias continúan la tradición ancestral	18
Porque es una tendencia natural de la sociedad mexicana	25
Porque la familia mexicana es altamente solidaria y emprendedora.	24
<b>Total</b>	<b>100 %</b>

Fuente: Creación propia.

En la Tabla 7, se presentan las razones por las cuales existen más Empresas Familiares en México, destacando en primer lugar el desempleo que impulsa este tipo de emprendimientos con un 33% de las menciones, seguido de la afirmación de que la existencia de las Empresas Familiares en México es una tendencia natural de la sociedad con el 25% y finalmente porque la familia mexicana es altamente solidaria y emprendedora; afirmaciones que denotan valores como la solidaridad, tradición y laboriosidad inmersos en esta cultura.

Tabla 8: Información Sobre Gestión Empresarial con Valores

Concentrado de información recabada del cuestionario aplicado a empresarios.	1 NUNCA	2 RARA VEZ	3 A VECES	4 CASI SIEMPRE	5 SIEMPRE	TOTAL
¿Paga usted horas extras a sus trabajadores?	3	8	7		4	22

¿Cumple oportunamente el pago a proveedores?				11	11	22
¿Es veraz en su comunicación con el cliente?		10		9	3	22
¿Cumple con sus obligaciones fiscales?			4	8	10	22
¿Cuida el medio ambiente en que se desenvuelve su actividad empresarial?	2	3	5	6	6	22
¿Se ocupa del desarrollo humano de sus colaboradores?	8	2	2	6	4	22

Fuente: Creación Propia.

En la Tabla 8, se califican mediante escala de Likert, una pequeña serie de cuestiones que demuestran que algunas gestiones empresariales no son del todo coherentes con la visión y misión de las empresas estudiadas. En el caso del pago de tiempo extra a los trabajadores, aproximadamente el 50% de los empresarios no paga esta compensación laboral. La cultura financiera respecto al pago de proveedores es excelente puesto que el 50% paga a tiempo y el otro 50% casi siempre (salvo alguna situación especial). Igualmente esta cultura de pago de impuestos podemos calificarla como muy buena.

Ahora bien, en cuanto a la veracidad en la comunicación con el cliente, existe una gran área de oportunidad, puesto que el 45% dice que a veces comunica toda la verdad a su mercado. Respecto al cuidado del medio ambiente, las empresas mostraron todavía ambivalencia, pues algunas lo hacen por cumplir con la normatividad impuesta, y muy pocas por conciencia ecológica (45%). Un dato bastante pesado es saber que el 55% de estas empresas no se ocupan plenamente del desarrollo humano de sus colaboradores; y esta situación puede desatar errores y falta de interés hacia los asuntos de la empresa.

Tabla 9: Estrategias de Formación Empresarial Que Impulsen los Valores Humanos

Investigación sobre Estrategias de Formación Empresarial que impulsen los valores humanos detectados en la muestra	SI	NO
¿Tiene su empresa una declaración de valores que fortalezca la gestión humana	10	12
¿Existe en su empresa un incentivo motivador del actuar ético?	5	17
¿Su empresa tiene un programa de inducción que permita al personal conocerla?	8	14
¿Está considerado dentro de su plan de capacitación, enseñar el código de ética a sus colaboradores?	3	19

Fuente: Creación propia.

En la Tabla 9 se observa claramente que el 54% de las empresas estudiadas no tiene una declaración de valores que fortalezca la gestión humana; y el 78% de las mismas, no tiene un incentivo motivador del actuar ético. Además un 64% de estas empresas no tiene un programa de inducción al personal que le permita conocerla para garantizar su óptimo y correcto desempeño laboral. Un dato verdaderamente alarmante es el que resultó al preguntar si está considerado dentro de su plan de capacitación, enseñar el código de ética a sus colaboradores, pues un 86% aseguró no tenerlo considerado.

Tabla 10: Problemas Empresariales Derivados Del Comportamiento No Ético

¿Qué problemas ha tenido su empresa, derivados del comportamiento humano no ético en el último año?	Núm. Empresas de la muestra	Monto Estimado (2011)
Fraude	20	\$1,500,000
Pérdida de clientes	22	2,000,000
Problemas con personal	19	800,000
Otros	8	500,000
<b>Total estimado</b>		<b>4,800,000</b>

*Fuente: Creación propia.*

En la Tabla 10, se mencionan los problemas más frecuentes que se derivan del comportamiento humano no ético. Y el porcentaje mayor (100%) de casos corresponde a la pérdida de clientes, que tiene relación directa con la falta de veracidad en la comunicación que tienen estas empresas con su mercado. Seguido del fraude, que tiene un 91% de las menciones; complementando esta afirmación algunos comentarios hechos al margen, acerca de la comprensión de la visión y misión de la empresa; así relacionarse con otras variables analizadas como son la falta de programas de desarrollo humano y la falta de un incentivo motivador del actuar ético. Otro problema importante se da en la interacción de personas; ya que la falta de valores éticos en el actuar de los colaboradores origina fricciones y problemas entre ellos y representan un 86% de los casos; y que en conjunto ocasionan la elevación de pérdidas.

## RESULTADOS

El presente análisis surge por la necesidad inminente de recrear un modelo motivador hacia a las personas que trabajan en las organizaciones, en el sentido de alcanzar la consecución de la estrategia empresarial de manera ética; y en especial a las empresas familiares debido a que son éstas las que tienen mayor participación dentro del número de empresas que conforman la economía, Adicionalmente son las que más influyen en la comunidad debido a la mayor proporción de empleo que generan en el mundo.

La investigación realizada en las 22 empresas familiares de Hermosillo, Sonora, develaron hallazgos interesantes, como el hecho de ser negocios que se incubaron en el seno familiar, y que sólo entre sus miembros se da importancia a la vivencia de los valores. Incoherencia detectada al entrevistar a sus colaboradores y afirmar que un alto porcentaje de ellos no cuentan con un incentivo motivador del actuar ético, así como un 86% no tiene considerado en su plan de capacitación enseñar el código de ética a sus colaboradores. Otros datos interesantes encontrados fueron que más del 50% de los entrevistados afirmaron no recibir pago justo del tiempo extra laborado; y que aproximadamente un 23% de las empresas se ocupan del cuidado del medio ambiente. Además, sólo el 50% se ocupa del desarrollo humano de sus colaboradores.

Aspecto curioso encontrado al iniciar la investigación, fue la actitud temerosa de los empresarios al presentarles la intención de este estudio, pues pensaban que la empresa sería auditada y sentenciada y algunos se negaron a participar; y por esta razón la muestra se configuró de solo 22 empresas familiares. Se queda pendiente estudiar el desempeño en valores que se viven al interior de la familia empresaria, y que para este análisis fue prácticamente imposible medir. Respecto a los problemas empresariales derivados del comportamiento no ético de los colaboradores, sean familiares o no, más del 86% de las empresas estudiadas sufrieron fraudes, pérdidas de clientes y problemas con el personal que han significado cuantiosas pérdidas; lo que demuestra el alto impacto que tienen los valores éticos en el desempeño de las empresas, y que en la medida en que se trabaje en la formación humana en valores, la gestión empresarial se verá protegida y beneficiada, hasta el punto de poder afirmar que el actuar ético incentiva la rentabilidad empresarial.

La sociedad empresarial, está viviendo sistemas perversos centrados exclusivamente en el resultado y en el objetivo, se olvida completamente de la ética, de que ocasiona daños a las personas y a su entorno.

La dirección por valores, virtudes y principios consiste en adoptar una filosofía de gestión moral y empresarial hasta convertirla en estilo de vida para todos sus miembros, sean familiares o no. Una cultura coherente con los valores, virtudes y principios de una empresa incrementa la capacidad de supervivencia de la misma en el largo plazo. Dentro de esta filosofía los valores, virtudes y principios representan los pilares necesarios para mantener la unidad de la organización, y son el faro que las orienta en una tormenta; y también son la catapulta que las impulsa hacia mejores escenarios.

## CONCLUSIONES

Durante los últimos años, se ha descubierto en diversos estudios la influencia de los valores en las empresas familiares, siendo ampliamente aceptado que la unidad familiar y el compromiso de la familia con sus empresas constituye la ventaja competitiva de las empresas familiares exitosas, al igual que la confianza reinante entre la familia o el denominado “Familyness” que las hace diferenciales e incluso las lleva a obtener un mejor desempeño frente a las empresas no familiares. Por esta razón, es importante que

las familias establezcan y den a conocer sus valores, y de esta forma poder enfocar sus esfuerzos en mantenerlos vigentes en la vida de sus miembros. Es muy probable que los valores fundamentales sean los mismos de los fundadores así como su capacidad para crear legados familiares. También hay que reconocer que los valores del fundador tienen una gran importancia en el día a día de las empresas familiares, al igual que en la alineación de su cultura, pero debemos aclarar que las familias deben saber cuáles valores y principios deben resaltar en cada ámbito, para que de esta forma se puedan obtener mejores resultados. El ideal sería lograr transmitir los valores a todos a lo largo de las generaciones, pero debemos ser conscientes que en el camino encontraremos nuevas personas, y con ellas nuevos valores que redefinirán a la familia; y muy posiblemente ayuden a mejorar la actuación de la familia empresaria.

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## **BIOGRAFÍA**

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# INDICADORES ECONÓMICOS, AMBIENTALES Y SUSTENTABILIDAD DEL ECOTURISMO EN MÉXICO

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## RESUMEN

*En esta investigación se analizaron las dimensiones del desarrollo sustentable, desde la perspectiva de la comunalidad, en servicios y actividades de ecoturismo de 35 comunidades indígenas de México. Se incluyó desarrollo local como dimensión económica, sustentabilidad comunitaria como dimensión social y la dimensión ambiental. Con base a indicadores de desarrollo local propuestos por Bañuelos Flores & Salido Araiza (2007), ambientales propuestos por la Secretaría de Turismo de México (SECTUR, 2013), de sustentabilidad comunitaria desarrollados por Velázquez-Sánchez, Gómez-Velázquez, & Solana Vásquez, (2013) se diseñó y aplicó un cuestionario con 118 ítems a habitantes-participantes en proyectos de ecoturismo indígena en 13 estados de la república mexicana. Los resultados mostraron la definición de cinco categorías de desarrollo local, dos categorías ambientales y cuatro categorías de sustentabilidad comunitaria. Desde la perspectiva comunitaria, en el ecoturismo indígena, en los resultados se observó que existe relación positiva de las tres dimensiones del desarrollo sustentable. Este estudio provee una alternativa metodológica para el análisis del ecoturismo y del desarrollo sustentable.*

**PALABRAS CLAVE:** Desarrollo sustentable, ecoturismo, sustentabilidad comunitaria, desarrollo local, ambiente

## ECONOMIC INDICATORS, ENVIRONMENTAL AND SUSTAINABILITY OF ECOTOURISM IN MEXICO

### ABSTRACT

*In this research we examined the dimensions of sustainable development from the perspective of commonality in ecotourism services and 35 indigenous communities in Mexico. It included local development as economic, community sustainability and social dimension and the environmental dimension. Based on environmental indicators proposed by the Ministry of Tourism of Mexico (Tourism Secretary, 2013), community sustainability developed by Velazquez - Sanchez, Gomez - Velazquez, & Solana Vasquez, (2013) and local development proposed by Bañuelos Flores & Salido Araiza (2007), was designed and applied a questionnaire with 55 items to people - participants in indigenous ecotourism projects in 13 states of the Mexican Republic. The results showed the definition of local development five categories, two categories four categories of environmental and community sustainability. From the community perspective, the results show that the positive relationship exists indigenous ecotourism of the three dimensions of sustainable*

*development. In this study we propose an alternative methodology for the analysis of ecotourism and sustainable development*

**JEL:** L83, O13, F18, A13.

**KEYWORDS:** Sustainable development, ecotourism, community sustainability, local development environment.

## INTRODUCCIÓN

Desde la perspectiva del desarrollo sustentable, los indicadores ambientales, económicos y la sustentabilidad comunitaria son factores necesarios para evaluar la pertinencia del establecimiento de destinos de ecoturismo. El problema que se analiza en esta investigación es la falta de definición de indicadores ambientales, económicos y de sustentabilidad comunitaria para la evaluación de los proyectos de ecoturismo indígena de México. De acuerdo a Velázquez-Sánchez, Gómez-Velázquez, & Solana Vásquez (2013) la autorización de proyectos de ecoturismo en comunidades indígenas, no contempla la evaluación de los efectos en la sustentabilidad comunitaria, en la conservación del ambiente y en el desarrollo en términos de lo local.

En el contexto mexicano se localizan 650 destinos de ecoturismo (SECTUR 2013). Para la Comisión para el Desarrollo de los Pueblos Indígenas 106 destinos que ofrecen ecoturismo se encuentran en comunidades indígenas (CDI, 2012) y se distribuyen en 29 de los 32 estados mexicanos. El ideal del ecoturismo es ser una actividad que represente generación de ingresos para la comunidad y conservar el ambiente y la cultura (CDI, 2012). En la realidad no existen criterios que evalúen la pertinencia del ecoturismo en términos de indicadores ambientales, de sustentabilidad comunitaria y desde la perspectiva del desarrollo local. En la publicación TIES (2013) de la Sociedad Internacional de Ecoturismo, mencionan el potencial que el ecoturismo ofrece en la conservación de los espacios naturales y el alivio a la pobreza para las comunidades locales, sin embargo, el estudio no provee los indicadores empleados para evaluar tal aseveración.

En estudios realizados tanto por Daltabuit-Godás y por Valenzuela-Valdivieso (2010) y Coca-Pérez (2007) se observa la importancia de incluir lo comunitario en el desarrollo de destinos ecoturísticos. En el estudio de Rainforest Alliance (2013) concluyeron que el cuidado del ambiente en el destino turístico, contribuye a la preferencia de viajeros frecuentes de México. Al respecto Velázquez-Sánchez, Gómez-Velázquez, & Solana Vásquez (2013) encontraron que los visitantes de destinos eco turísticos, en la región de la costa oaxaqueña, aprecian principalmente la presencia de habitantes nativos. Sin embargo, hasta el momento no se localizaron estudios que analicen los indicadores ambientales, de sustentabilidad comunitaria y de desarrollo local en destinos eco turísticos.

En este documento se presenta organizada la información como sigue. En la sección de revisión de literatura se presenta el análisis de los conceptos y estudios en ecoturismo, sustentabilidad comunitaria, indicadores ambientales y desarrollo local. Se incluye el análisis y la comparación de los indicadores disponibles en la literatura con los validados con este estudio. En el apartado de metodología se integran la descripción de la población y la muestra, la definición de las variables y su operacionalización, la estructura del cuestionario y el procedimiento de validez por medio de análisis factorial. En los resultados podrá apreciar tablas para facilitar el resumen de los datos y la explicación de los mismos en comparación con el objetivo planteado. En conclusiones

y limitaciones se comparan los resultados con la literatura revisada y se mencionan los alcances y posible continuidad de esta línea de investigación.

## REVISIÓN DE LITERATURA

El término desarrollo sustentable es una propuesta para la adecuación del modelo económico a acciones de cuidado del ambiente y responsabilidad social (Brundtland, 1987). A partir de la presencia del concepto desarrollo sustentable, se aprecian posiciones discursivas desde alguno de los tres ejes económico, ambiental, social. En los análisis desde la perspectiva económica Martínez Negrete, De Ita Martínez, Laviano & Ortíz (2009), consideran al ambiente y a la sociedad como elementos subordinados del crecimiento económico y mencionan los beneficios del desarrollo tecnológico para atender los posibles deterioros. En la visión económica el desarrollo local es un parámetro para evaluar las condiciones de las regiones. De acuerdo a Wong (2000) y comparado con Martínez-Luna (2010), para analizar el desarrollo local, se debe tener la responsabilidad de incluir la interpretación de los habitantes y del espacio armónico en el que conviven con la naturaleza y su cultura. A través del método de fenomenología Velázquez-Sánchez, et al (2013) caracterizaron con cinco categorías el desarrollo local desde la perspectiva de la comunalidad.

El eje social del desarrollo sustentable, contempla los elementos culturales como necesarios una definición local. De acuerdo a Díaz (2004), los aspectos culturales son observados desde la perspectiva de la comunidad. En los textos de Martínez (2003) y Robles Hernández & Cardoso Jiménez (2009), se encuentran las características que definen la sustentabilidad de las comunidades y en Velázquez-Sánchez y Solana (2013) los indicadores y operacionalización de los mismos. El eje ambiental es considerado para caracterizar el ecoturismo por (SECTUR, 2013). El ecoturismo de acuerdo a la Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT, 2009), es la alternativa de turismo que se caracteriza por el desarrollo de actividades de recreación en entornos naturales con la vigilancia necesaria para la protección del ambiente y el respeto a las expresiones culturales de los habitantes de las comunidades anfitrionas. La SECTUR (2010), define ecoturismo como una alternativa del turismo tradicional con el agregado de ofrecer al visitante la apreciación del medio natural y la convivencia con la comunidad para observar la cultura de la mismas.

Para Daltabuit-Godás y Valenzuela-Valdivieso (2010), el ecoturismo es “una opción planteada para alcanzar el desarrollo sustentable con la participación directa de la comunidad rural organizada”. Al respecto Coca-Pérez (2007) menciona que para estudiar el ecoturismo y la sustentabilidad es importante tomar en cuenta lo comunitario para poder comprender la cosmovisión. Velázquez-Sánchez, et al (2013), proponen los indicadores de desarrollo local para integrar la dimensión económica a una definición del desarrollo sustentable. Para Rainforest Alliance (2013), el 84% de clientes de Expedia, se interesaron en destinos sustentables y el 59% de visitantes de Travelocity en la distinción de cuidado del ambiente, para escoger un destino para esparcimiento. De acuerdo a la Sociedad Internacional de Ecoturismo, el ecoturismo tiene el potencial de ayudar en la conservación de espacios naturales, alivio a la pobreza y bienestar de las comunidades locales (TIES, 2013). Sin embargo, hasta la fecha en la literatura, no existen estudios que analicen y definan los indicadores económicos, ambientales y la contribución de los factores culturales como elemento del desarrollo sustentable.

## METODOLOGÍA

En esta investigación empírica se analizaron los indicadores económicos, ambientales y de sustentabilidad comunitaria en el ecoturismo de 35 comunidades indígenas de 13 estados de México. En la Tabla 1: Se presenta la operacionalización de desarrollo local con base en las categorías (trabajo, negocio, productos, transporte y construcción) propuestas por Bañuelos Flores & Salido Araiza (2007). Ambiente se definió con las categorías valoración de los recursos naturales y participación comunitaria en las acciones de conservación propuestas por CESTUR (2013) y Sustentabilidad comunitaria se definió con base a las categorías contempladas por Martínez (2003) y se incluyeron los indicadores validados por Velázquez-Sánchez, Gómez-Velázquez, & Solana (2013).

Tabla 1: Operacionalización de las Variables Ambiental, Económico-Desarrollo Local y Social-Sustentabilidad Comunitaria Que Definen Desarrollo Sustentable en Comunidades Indígenas con Ecoturismo

VARIABLES	CATEGORIAS	INDICADORES/ítems
<b>Desarrollo Sustentable</b>		
Dimensión Económica	Trabajo	Puestos de trabajo (3)
Desarrollo Local	Negocios	Negocios nuevos (3)
	Productos	Abasto (5)
	Transporte	Número de camiones (3)
	Construcción	Casas y remodelaciones (5)
	Valoración de los recursos naturales de la comunidad	Relevancia que otorgan a los recursos naturales de la comunidad (7)
Dimensión Ambiental	Acciones para la conservación de los recursos naturales de la comunidad	Acciones de conservación implementadas (20)
Dimensión Social Sustentabilidad comunitaria	Cultura propia	Tecnología (7)
		Conocimiento (8)
		Producción (5)
		Normatividad Social (7)
	Adecuación	Originalidad (4)
		Valores (4)
		Armonía (3)
	Cultura	Medicina (4)
		Comida (5)
		Creatividad (4)
	Cosmovisión (6)	
	Materiales (4)	
	Herramientas (5)	
	Tecnología propia	Relación hombre-tierra

En la tabla 1: se observa la operacionalización de las variables. Para desarrollo local con las categorías de Bañuelos Flores & Salido Araiza (2007) e indicadores propuestos por Velázquez-Sánchez, Bohorquez Canseco, & Solana Vásquez (2013); la dimensión ambiental con las categorías que considera CESTUR (2013) y sustentabilidad comunitaria con las categorías que mencionan Martínez Luna (2010) y Robles Hernández & Cardoso Jiménez (2009), con los indicadores diseñados por Velázquez-Sánchez et al (2013) con el número de ítems diseñados. Fuente Elaboración propia

### Diseño del Cuestionario

Para el diseño del cuestionario se tomaron como base las categorías e indicadores que se muestran en la Tabla 1: Se incluyeron 19 ítems para desarrollo local, 27 ítems para indicadores ambientales y 72 ítems para sustentabilidad comunitaria, en total 118 ítems. Se consideró para la muestra a la tercera parte de los 106 destinos de ecoturismo indígena que considera la CDI (2013). El diseño de la muestra con 35 habitantes-participantes de trece estados de la república mexicana: Campeche (3), Colima (2), Chiapas (4), Durango (1), Estado de México (4), Hidalgo

(3), Michoacán (1), Morelos (2), Nayarit (3), Oaxaca (2), Querétaro (3), Quintana Roo (2) y Veracruz (5).

### Análisis de los Datos

Se aplicó un piloto y se realizó prueba de validez por medio análisis factorial con rotación varimax. Se observó la agrupación de los indicadores en once factores y se adecuaron los ítems a los términos empleados entre los habitantes de las comunidades indígenas mexicanas. Con los resultados del análisis factorial se integraron las categorías para este estudio y se compararon con las categorías e indicadores disponibles en la literatura. De acuerdo al diseño de la muestra se realizó la encuesta. Por medio de correlación se analizó la relación entre las categorías de las variables del desarrollo sustentable a través de las dimensiones; económica (desarrollo local), ambiental y social (sustentabilidad comunitaria).

## RESULTADOS

En la Tabla 2: se presentan las categorías y los indicadores validados de la dimensión Económica en términos de desarrollo local en el ecoturismo indígena: Categoría Trabajo; Indicador trabajos generados para la comunidad. Categoría Negocios; Indicador negocios establecidos en la comunidad. Categoría Productos; Indicador disponibilidad de productos básico. Categoría Transporte; Indicador incremento de corridas de autobuses. Categoría Construcción; Indicadores remodelación, adecuación, mejoras y construcción de viviendas de los habitantes y espacios comunes. Destacaron las categorías construcción y trabajo.

En la dimensión Ambiental del ecoturismo indígena validaron: Categoría Valoración de los recursos naturales de la comunidad; indicadores, medidas de prevención establecidas y brigadas de vigilancia. Categoría Acciones para la conservación de los recursos naturales de la comunidad; indicadores acciones incluidas en reglamento, relevancia que otorgan a los recursos naturales de la comunidad y acciones de conservación implementadas. En la dimensión Social en términos de sustentabilidad comunitaria validaron: Categoría Cultura propia y Cultura se integraron con los indicadores de tecnología tradicional incluida en el ecoturismo, conocimiento tradicional, producción artesanal, local, normatividad social para la organización, medicina tradicional, comida tradicional, creatividad en expresiones artesanales y cosmovisión del entorno natural. Categoría Adecuación; indicadores originalidad en servicios y actividades, valores comunitarios y armonía comunidad-comunalidad. Categoría Tecnología Propia; indicadores materiales en construcción y preparación, herramientas en cultivos y preparación y relación tierra-hombre.

Tabla 2: Indicadores Económicos, Ambientales y Sociales Para el Desarrollo Sustentable Desde la Perspectiva Comunitaria en los Servicios de Ecoturismo en México

VARIABLES	CATEGORIAS	INDICADORES/ (ÍTEMS)
<b>Desarrollo Sustentable</b>		
Dimensión Económica	Trabajo	Trabajos generados para la comunidad
Desarrollo Local	Negocios	Negocios establecidos en la comunidad
	Productos	Disponibilidad de productos básicos
	Transporte	Incremento de corridas de autobuses
	Construcción	Remodelación, adecuación, mejoras y construcción de viviendas de los habitantes y espacios comunes

Dimensión Ambiental	Valoración de los recursos naturales de la comunidad Acciones para la conservación de los recursos naturales de la comunidad	Medidas de prevención establecidas Brigadas de vigilancia Acciones incluidas en el reglamento Relevancia que otorgan a los recursos naturales de la comunidad Acciones de conservación implementadas
Dimensión Social Sustentabilidad comunitaria	Cultura propia	Tecnología tradicional incluida en ecoturismo Conocimiento tradicional Producción artesanal y local Normatividad Social para la organización Medicina tradicional Comida tradicional Creatividad en expresiones artesanales Cosmovisión entorno natural Originalidad en servicios y actividades Valores comunitarios Armonía comunidad-comunalidad Materiales en construcción y preparación Herramientas en cultivos y preparación Relación hombre-tierra
	Adecuación	
	Tecnología propia	

En la tabla 2: resultados del análisis factorial practicado a los datos de los treinta y cinco cuestionarios aplicados a habitantes-participantes de destinos eco turísticos localizados en trece estados de la república mexicana. El análisis factorial resultó en cinco factores para la dimensión económica (desarrollo local), dos factores para la dimensión ambiental y cuatro factores para la dimensión social (sustentabilidad comunitaria). En esta tabla se pueden apreciar a detalle los indicadores resultados y el número de ítems validados. Fuente. Elaboración propia.

En la tabla 3: Se pueden observar los resultados de los 35 Estados mexicanos analizados. Se observó agrupación, un primer grupo Campeche, Chiapas, Hidalgo, Michoacán y Oaxaca que se caracterizan por su población indígena en los destinos de ecoturismo, mostraron más consistencia en las categorías de sustentabilidad comunitaria. En el segundo grupo Estado de México, Nayarit y Veracruz se observaron categorías de las tres variables pero destacan las de ambiente. El tercer grupo Colima, Durango, Morelos Querétaro y Quintana Roo destacaron en las categorías de desarrollo local y mostraron el menor número de indicadores de las categorías de sustentabilidad comunitaria.

Tabla 3: Indicadores Económicos, Ambientales y Sociales Observados Desde la Comunalidad Como Desarrollo Local, Ambiente y Sustentabilidad Comunitaria en Comunidades con Ecoturismo en 13 Estados de la República Mexicana

ESTADOS/ Número de	DESARROLLO LOCAL	AMBIENTE	SUSTENTABILIDAD COMUNITARIA
destinos Grupo 1	Categoría/Elementos Construcción. (Mejoras, nuevas viviendas y espacios comunes).	Categoría/Elementos Valoración de los recursos naturales de la comunidad. (Medidas de Prevención establecidas. Brigadas de vigilancia)	Categoría/Elementos Cultura propia. (Tecnología tradicional incluida en ecoturismo. Conocimiento tradicional. Producción artesanal y local. Normatividad Social para la organización. Medicina tradicional. Comida tradicional. Creatividad en expresiones artesanales. Cosmovisión entorno natural)
Campeche 3	Trabajo. (Trabajos en los que participan los habitantes).	Acciones para la conservación de los recursos naturales de la comunidad. (Relevancia que otorgan a los recursos naturales de la comunidad. Acciones de conservación implementadas)	Adecuación. (Originalidad en servicios y actividades. Valores comunitarios. Armonía comunidad-comunalidad) Tecnología propia. (Materiales en construcción y preparación. Herramientas en cultivos y preparación. Relación hombre-tierra)
Chiapas 4			
Hidalgo 3			
Michoacán 1			
Oaxaca 2			
	Trabajo. (Trabajos generados para	Valoración de los recursos naturales	Cultura propia. (Tecnología tradicional

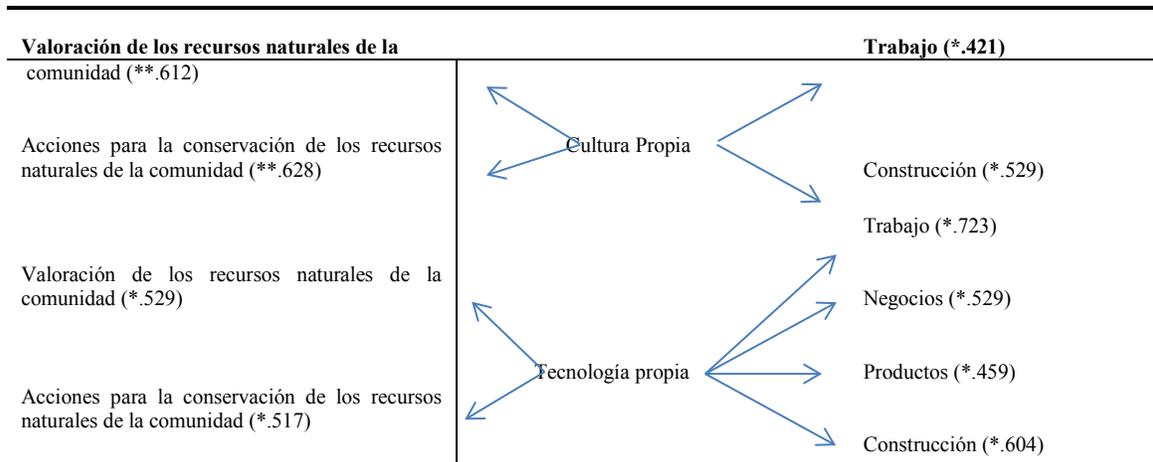
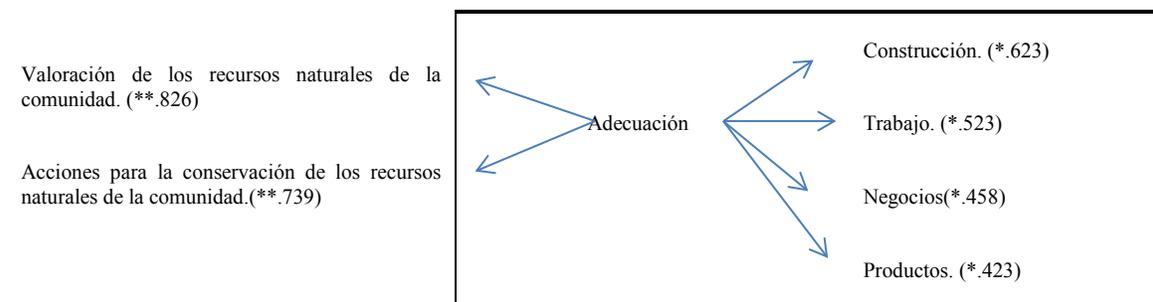
Grupo 2	la comunidad. Negocios. (Negocios establecidos en la comunidad. Productos. (Disponibilidad de productos básicos) Transporte. (Incremento de corridas de autobuses) Construcción. (Remodelación, adecuación, mejoras y construcción de viviendas de los habitantes y espacios comunes) Trabajo. (Trabajos generados para la comunidad.	de la comunidad. (Acciones incluidas en el reglamento. Medidas de prevención establecidas. Brigadas de vigilancia) Acciones para la conservación de los recursos naturales de la comunidad. (Relevancia que otorgan a los recursos naturales de la comunidad. Acciones de conservación implementadas) Valoración de los recursos naturales de la comunidad. (Acciones incluidas en el reglamento. Medidas de prevención establecidas)	incluida en ecoturismo. Conocimiento tradicional. Producción artesanal y local. Normatividad Social para la organización. Medicina tradicional. Comida tradicional. Creatividad en expresiones artesanales. Cosmovisión entorno natural) Adecuación. (Originalidad en servicios y actividades. Valores comunitarios) Tecnología propia. (Materiales en construcción y preparación) Cultura propia. (Tecnología tradicional incluida en ecoturismo. Conocimiento tradicional. Producción artesanal y local. Normatividad Social para la organización. Medicina tradicional. Comida tradicional. Creatividad en expresiones artesanales. Cosmovisión entorno natural) Adecuación. (Originalidad en servicios y actividades.) Tecnología propia. (Materiales en construcción y preparación)
Estado de México	4		
Nayarit	3		
Veracruz	5		
Grupo 3	Negocios. (Negocios establecidos en la comunidad. Productos. (Disponibilidad de productos básicos) Transporte. (Incremento de corridas de autobuses) Construcción. (Remodelación, adecuación, mejoras y construcción de viviendas de los habitantes y espacios comunes)	Acciones para la conservación de los recursos naturales de la comunidad. (Acciones de conservación implementadas)	
Colima	2		
Durango	1		
Morelos	2		
Querétaro	2		
Quintana Roo	3		

En la tabla 3: Se pueden observar los resultados del análisis por estado mexicano. Se agruparon de acuerdo a la frecuencia en la que se presentaron las categorías e indicadores. En un primer grupo se agruparon los estados con más participación de los habitantes y con más población indígena. En un segundo grupo los estados agrupados tienen habitantes indígenas pero no participan directamente en los destinos ecoturísticos. El grupo tres es el que mostró menos participación de habitantes locales en las actividades de ecoturismo. En el primer grupo se observó más frecuencia de los indicadores de sustentabilidad comunitaria, en el segundo se observó frecuencia en los indicadores de las tres variables, pero solo en algunas categorías y el tercer grupo mostró menos frecuencia en las categorías de sustentabilidad comunitaria. Fuente: Elaboración propia.

Los resultados mostraron que el grupo integrado por los estados de Campeche, Chiapas, Hidalgo, Michoacán y Oaxaca se observa relación positiva significativa (\*\*.826) entre las categorías Adecuación y Valoración de los recursos naturales de la comunidad. (\*\*.739) entre Adecuación y Acciones para la conservación de los recursos naturales de la comunidad. (\*.523) entre Adecuación y Trabajo. (\*.458) Adecuación y Negocios. (\*.423) Adecuación y Productos y (\*.623) entre Adecuación y Construcción. También se observó relación positiva (\*\*.612) entre *Cultura Propia* y Valoración de los recursos naturales de la comunidad. (\*\*.628) *Cultura Propia* y Acciones para la conservación de los recursos naturales de la comunidad. (\*.421) *Cultura Propia* y Trabajo. (\*.629) *Cultura Propia* y Construcción. (\*.529) *Tecnología propia* y Valoración de los recursos naturales de la comunidad. (\*.517) *Tecnología propia* y Acciones para la conservación de los recursos naturales de la comunidad. (\*.723) *Tecnología propia* y Trabajo. (\*.529) *Tecnología propia* y Negocios. (\*.459) *Tecnología propia* y Productos y (\*.604) *Tecnología propia* y Construcción.

Tabla 4: Relación de las Categorías de las Variables del Desarrollo Sustentable en Comunidades Indígenas Mexicanas con Ecoturismo.

AMBIENTE	SUSTENTABILIDAD COMUNITARIA	DESARROLLO LOCAL
Categorías	Categoría	Categoría



En la tabla 4: se pueden observar las relaciones entre las categorías de las variables incluidas en este estudio. Destaca la categoría Adecuación porque mostró más consistencia con las categorías de la variable ambiental y la variable desarrollo local.

### CONCLUSIONES

Los resultados permiten observar que en el ecoturismo de comunidades indígenas, las cuatro categorías de desarrollo local propuestas por Bañuelos Flores & Salido Araiza (2007), pueden explicar la dimensión económica de desarrollo sustentable. Para dimensión ambiental los resultados coinciden con las categorías propuestas por la CESTUR (2013), lo que plantea revisar los resultados de Velázquez-Sánchez & Ramos (2013). Para sustentabilidad comunitaria validaron las cuatro categorías probadas por Velázquez, et al (2013). A diferencia de los servicios turísticos tradicionales, el ecoturismo en comunidades indígenas ha logrado integrar los aspectos de comunalidad y ambiente a los servicios que ofrecen; los resultados coinciden con Velázquez-Sánchez, Gómez Velázquez y Solana (2013). Los sitios de ecoturismo evaluados en esta investigación permiten concluir que el ecoturismo es una forma de adecuar el desarrollo a la cosmovisión de comunidades indígenas y probar la estrategia de resistencia llamada adecuación propuesta por Martínez Luna (2010) para expresarlo como desarrollo local y así integrar la dimensión económica, ambiental y social del desarrollo sustentable. Los resultados vertidos en este documento contribuyen al estudio del ecoturismo en comunidades indígenas. De una forma empírica aporta datos, prueba indicadores y establece relación entre categorías de las tres dimensiones del desarrollo sustentable para contribuir al desarrollo de índices para la evaluación del sector turístico y para la planificación de sitios de ecoturismo. *Este estudio provee una alternativa metodológica para el análisis de las dimensiones del desarrollo y turismo sustentable en comunidades indígenas.*

### Limitaciones

Las limitaciones de los resultados obtenidos en esta investigación, se deben a las categorías evaluadas y a la organización de los datos en tres grupos. Falta revisar los indicadores para integrar índices y para probar la correlación por dimensión del desarrollo sustentable. También se pueden revisar las categorías en otro tipo de comunidades.

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## **DIFERENTES REDES SOCIALES EN LAS MIPYME LOCALIZADAS EN PUEBLA, MÉXICO**

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### **RESUMEN**

*En este trabajo se presenta un análisis de las diferencias y particularidades de los nodos que integran las redes sociales en las MIPYME localizadas en Puebla, México. Para lo cual, se parte de la revisión de algunos autores que han realizado estudios acerca de las redes sociales en las Micro Pequeñas y Medianas Empresas (MIPYME) localizadas en diferentes partes de la República Mexicana. La muestra se integra por dos grupos de empresas el primero fue 341 empresas representadas por su propietario o administrador, se aplicó un cuestionario de 10 preguntas; es importante señalar que la investigación de campo se realizó en una sola etapa, con duración de tres semanas; en la primera semana se aplicaron 91 cuestionarios, en la segunda semana se aplicaron 50 cuestionarios y en la tercera semana 200 cuestionarios. El segundo grupo lo integran 114 micros y pequeños empresarios. El objetivo del trabajo es indagar las diferencias que existe en de las Redes Sociales creadas por las MIPYME poblanas respecto al entorno en que se encuentren y de acuerdo con ello varia el intercambio de conocimientos que les apoyan para su permanencia en el mercado, mejoras en su producto y procesos y en acciones de innovación. La investigación da respuesta a la pregunta ¿Cuáles son los intercambios de conocimientos que han tenido las MIPYME poblanas, de que tipo y con quiénes de acuerdo al entorno en el que se encuentran?*

**PALABRAS CLAVE:** Redes de conocimiento, MIPYME

## **DIFFERENT NETWORKS IN MSMEs LOCATED IN PUEBLA, MEXICO**

### **ABSTRACT**

*This paper presents an analysis of the differences and particularities of the nodes that make up the social networks in SMEs located in Puebla, Mexico. Which, be part of the review of some authors who have made studies about social networking in Micro small and medium enterprises (SMEs) located in different parts of the Mexican Republic. The sample is made up of two groups of companies the first was 341 companies represented by their owner or administrator, a 10-question questionnaire; It is important to note that field research was carried out in a single stage, with duration of three weeks; 91 questionnaires were applied in the first week, second week 50 questionnaires were applied and in the third week 200 questionnaires. Make up the second group 114 micro and small entrepreneurs. The objective of the work is to investigate the differences that exist in social networks created by poblanas SMEs with respect to the environment in which they find themselves and accordingly various knowledge exchange that support them to remain on the market, improvements in its product and processes and innovation actions. Research is the answer to the question What are the exchanges of knowledge that MSMEs have poblanas , what type and who according to the environment in which they find themselves ?*

**KEYWORDS:** Knowledge Networks, MSME

## INTRODUCCIÓN

El objetivo de la presente investigación es indagar los beneficios de las Redes de conocimiento o Redes Sociales en las MIPYMEs poblanas como facilitadoras de conocimientos que les apoyan para su permanencia en el mercado, mejoras en su producto y procesos y en acciones de innovación. Para ello, se parte de que las redes sociales son un factor indispensable de la actividad empresarial, y que es a través de éstas como se puede tener acceso a diferentes recursos, entre otros a diferentes conocimientos: tecnológicos, administrativos y empresariales, que de otra forma no sería posible Basaldúa (2005). Asimismo, para llevar a cabo el estudio, se retoma el concepto de redes de conocimiento propuesto por Casas (2003), quien señala, que estas redes se construyen mediante intercambios entre un conjunto de actores que tienen intereses comunes en el desarrollo o aplicación del conocimiento científico, tecnológico o técnico para un propósito específico, sea este científico, de desarrollo tecnológico y de mejoramiento de procesos productivos. Para responder a la pregunta de investigación ¿Cuáles son los intercambios de conocimientos que han tenido las MIPYME poblanas, de que tipo y con quiénes de acuerdo al entorno en el que se encuentran? El trabajo se estructura de la siguiente forma: Revisión de la literatura, donde se integra el concepto de las redes sociales o de conocimiento, en México y los modelos de redes, así como información de las MIPYME, entre otros puntos. La investigación de campo se integra por dos grupos, de empresas representadas por su propietario o administrador, el primero tiene 341 y el segundo por 114.

## REVISIÓN DE LA LITERATURA

### Definiciones De Las Redes De Conocimiento

De acuerdo a Saexenian (1990): Las redes de conocimiento constituyen un conjunto formado por: instituciones académicas, industriales, políticas y agentes de enlace que colaboran conjuntamente, mejorando el trabajo científico, debido a que posibilitan el libre flujo de información e impulsan las condiciones locales para la innovación y que tienen por objetivo la construcción y difusión del conocimiento. Lara (2007); Anunziata y Macchiarola (2010) explican las redes de conocimiento como individuos, grupos o instituciones, asociados con un fin en común y señalan que las redes de conocimiento son asociaciones entre individuos, grupos o instituciones que tienen una agenda común en torno a intereses diversos tales como: dar solución a problemas, compartir recursos e infraestructura, propiciar la cooperación, la solidaridad social, como así también el intercambio de información y conocimientos y la transferencia de tecnología. Casas (2001; citado por Prada, 2005) menciona que, estas redes implican desde redes profesionales, hasta redes de entretenimiento, pero también abarcan la transmisión de conocimientos o innovaciones que dan lugar a la formación de espacios regionales de conocimiento.

Red es aquella relación de los grupos humanos que sostienen dos o más personas con el propósito de ayudarse, realizar negocios o llevar a cabo cualquier actividad relacionada con sus intereses, van surgiendo relaciones que pueden ser de carácter formal o informal (Tapia y Tapia, 2010). Para fines de esta investigación se define a las redes de conocimiento como el conjunto de individuos, empresas, asociaciones y agentes de

conexión que colaboran para la generación del conocimiento mediante el intercambio de información y la transferencia de tecnología con fines de innovación, de acuerdo a su entorno.

### Formación de Redes de Conocimiento

Las redes de conocimiento, están integradas por el elemento humano, así como por factores tecnológicos y sociales. Prada (2005) hace énfasis en cuatro elementos necesarios para la creación de Redes de Conocimiento, entre los cuales menciona: a) Comunidades y equipos expertos, b) Comunidades de conocimiento, c) El conocimiento, como la relación entre el sujeto y el objeto: d) Conocimiento e innovación. Existe una vasta literatura sobre la noción de red, las principales aportaciones han surgido de las disciplinas sociales, todas ellas han contribuido a enriquecer el marco teórico - conceptual, dando lugar a una taxonomía que incluye redes de intercambio y redes de poder (Knoke, 1990), de información y de colaboración (Freeman, 1991), de producción (Saxenian, 1991), de innovación o de innovadores (De Bresson y Amesse, 1991) y redes sociotécnicas (Callon, 1989).

Siguiendo a Casas (2001), se tiene que: estas formas de intercambio pueden concebirse como un proceso de transacción de conocimiento, aunque no en términos económicos, ya que una gran parte del conocimiento que se transmite en estas redes se hace por vía tácita y no mediante la compra – venta del mismo. Sin embargo estas formas de intercambio pueden llegar a tener un costo o beneficio económico. Las redes se construyen con las relaciones que se van creando entre los diferentes actores involucrados en una relación (Granovetter, 1973). Además, de los aspectos considerados sobre las redes de conocimiento, Casas (2003), señala que en el análisis de redes es necesario tomar en cuenta las siguientes dimensiones: 1) El contexto institucional de la colaboración entre los sectores público y privado; 2) La estructura o morfología de las redes; 3) La génesis, desarrollo y dinámica de las redes; 4) El contenido y/o los insumos que se intercambian y, 5) Los resultados de las redes y del intercambio de conocimientos. Estas dimensiones incluyen un conjunto amplio de características, que se sintetizan en la tabla .1.

Tabla 1: Dimensiones Para el Análisis de las Redes Sociales

<b>Contexto institucional</b>	<b>Estructura o morfología de las redes (Integrantes)</b>	<b>Dinámica: direccionalidad, duración, frecuencia comunicación y alcance</b>	<b>Contenido: formas de intercambio e insumos que circulan</b>	<b>Resultados de las redes y del intercambio de conocimiento</b>
Presencia de Instituciones de Educación Superior (IES), centros públicos de investigación, asociaciones empresariales, instituciones mixtas público-privadas.	Noción de red: los nodos representan a los actores y las áreas que conectan los nodos representan las relaciones entre los actores. Las redes involucran flujos de información entre varios de los nodos de la red. Las redes son el elemento crítico de la formación de mercados, mediante su contribución al aprendizaje. El desarrollo de la red es un proceso evolutivo	Direccionalidad, durabilidad, intensidad y frecuencia. Dinámica formal o informal. Dinámica horizontal y vertical. Los procesos de comunicación. El alcance espacial o territorial.	Sobre la idea de conocimiento: tácito y codificado; intercambio de conocimiento. Flujos e insumos de conocimiento: endógeno y exógeno. Tipos de conocimiento: científico, tecnológico, empresarial. Fuentes: acceso a fuerza de trabajo altamente capacitada, universidades locales e internacionales, competidores, alianzas, incentivos gubernamentales, prensa y artículos sobre comercio, eventos locales e internacionales. Canales para cruzar fronteras: contratación de nuevo personal, publicaciones, reuniones, modos informales de comunicación, movilidad de personas entre organizaciones. Extensión de fronteras: relaciones	Innovaciones radicales o incrementales. Generación de capacidades en las empresas. Generación de conocimiento. Resultados sociales, económicos y/o políticos. Creación de redes de conocimiento.

	detonado por la innovación, en el que el aprendizaje es el aspecto central de la red.	personales informales.
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*Esta tabla muestra las dimensiones que permiten analizar las redes sociales desde el contexto, la estructura, formas de intercambio e insumos que circulan.*

Un aspecto más sobre el que es necesario abundar, es naturaleza formal o informal de las relaciones que conforman la red. Las redes formales, según Birley (citado en Levanti, 2001: 1046), se componen de los bancos, las agencias locales o nacionales, así como las cámaras y otras representaciones oficiales. Las redes informales se refieren a todas las relaciones personales del empresario, principalmente la familia, los amigos y los contactos de negocios. Para Tapia y Tapia (2010), existen dos tipos de relaciones en las redes: a) las redes formales.-Se componen de las instituciones bancarias, las agencias locales o nacionales, las incubadoras y otras representaciones oficiales, b) las redes informales.- Se refiere a todas las relaciones personales del empresario, principalmente la familia, los amigos y los contactos de negocios, esta red informal de acuerdo a autores como Vera (2007), juega un papel fundamental en los procesos de creación de una empresa y son la primera fuente de ayuda del emprendedor.

#### Modelos Para el Desarrollo de las Redes de Conocimiento

Lara (2007) muestra cinco modelos de redes de conocimiento, los cuales brindan alternativas de interacción diferentes para la creación de conocimiento: 1. Modelo del ágora. Establece el espacio en el cual investigadores y destinatarios de proyecto establecen mecanismos de interacción y desarrollo, el espacio puede ser físico o virtual (recordemos que las TIC's permiten romper las barreras del tiempo y del espacio). Este tipo de modelo presenta una auto-organización y una autorregulación, lo cual disminuye la jerarquía organizacional. 2. Modelo de Agregación. Éste modelo está centrado en la satisfacción del cliente, para lo cual se hace uso de un agente de enlace entre el grupo de investigación y el usuario de la información, lo cual agrega un valor de la demanda y permite un control jerarquizado. 3. Modelo de Cadenas de valor. Éste modelo requiere de un agente integrador, el cual se encuentre en contacto con un grupo de investigadores innovadores, el cual se encarga del diseño, producción y distribución de productos o servicios. Creando soluciones de acuerdo a las problemáticas planteadas por los solicitantes.

En cada etapa del proceso se añade valor, puesto que cada proyecto es ajustado a las necesidades del cliente. En este modelo se tiende un control jerárquico elevado. 4. Modelo de Alianza. Se da entre comunidades con la finalidad de obtener un bien común, por lo tanto se sustentan principalmente de las relaciones entre los colaboradores (individuos, comunidades u organizaciones). Con este modelo se busca con alto nivel de integración con el mínimo nivel jerárquico. 5. Modelo de Red distributiva. Este modelo integra a las demás redes, propone la distribución del conocimiento entre las mismas. Ésta se transfiere mediante el uso de un sistema de gestión de conocimiento en las redes de alta velocidad. Los modelos propuestos muestran diferentes formas que permiten hacer uso de las redes de conocimiento, la elección de un modelo a seguir dependerá del contexto en el cual se desarrolla la investigación así como de las necesidades de conocimiento y sobre todo de la percepción y preferencias de los actores de la red.

#### Las Redes De Conocimiento en las MIPYME

En la actualidad las micro, pequeñas y medianas empresas (MIPYME), representan una sólida opción tanto para la creación de empleos y producción de artículos diversos, para responder a los

requerimientos de la globalización. Dentro del desarrollo día a día de las MIPYME se puede identificar la importancia que para ellas tienen las redes de conocimiento, es decir, aquellos vínculos tanto formales como informales que se van construyendo entre la empresa y un conjunto de agentes como proveedores, clientes, instituciones de gobierno, por mencionar algunos. Estas redes sirven de acceso a diferentes recursos y conocimientos (Tapia y Tapia, 2010).

Un primer intento para proponer un marco de referencia que tome en cuenta la importancia que tiene las redes sociales en el proceso de consolidación de las MIPYME ha sido el de Vera (2007; citado por Tapia y Tapia, 2010). Uno de los aspectos que llama poderosamente la atención en el desempeño de las MIPYME en general, son las redes sociales, es decir, aquellos lazos tanto formales como informales que se van generando entre la empresa – vía la figura del dueño, empresario y/o directivo - y los proveedores, clientes gobierno, etcétera. Estas redes tal y como lo señala Basaldúa (2005) son el vehículo para que la empresa pueda tener acceso a diferentes recursos, entre otros a distintos conocimientos que de otra forma no sería posible o muy difícil.

### Mipyme

Las MIPYMEs se clasifican de acuerdo a diversos puntos de vista tal y como se muestra en la tabla 2. Las MIPYME en Puebla México son importantes al contribuir con fuentes de empleo. El Gobierno actual del Estado en el plan de Desarrollo 2011-2017 apoya a las MIPYME, con un programa de microcréditos y capital semilla. Su presencia es importante al encontrarse tal y como se señala en el siguiente Tabla 3.

Tabla 2: Clasificación de Empresas

Tamaño	Sector	Rango de número de trabajadores	Rango de monto de ventas anuales (mdp)
<b>Micro</b>	Todos	Hasta 10	Hasta \$4
<b>Pequeña</b>	Comercio	Desde 11 hasta 30	Desde \$4.01 hasta \$100
	Industria y servicios	Desde 11 hasta 50	Desde \$4.01 hasta \$100
<b>Mediana</b>	Comercio	Desde 31 hasta 100	Desde \$4.01 hasta \$250
	Industria	Desde 51 hasta 100	
	Servicios	Desde 51 hasta 250	

*Esta tabla muestra la clasificación de las empresas según sector económico por rango de número de trabajadores y monto de ventas.*

Tabla 3: Datos Económicos de Mipymes

Empresas por tamaño en los sectores manufacturero, comercio y servicios en Puebla										
Personal ocupado	Unidades económicas	Unidades económicas %	Personal ocupado Miles	Personal ocupado %	Salario miles millones	Producción de Miles millones	Producción de %	Promedio de trabajadores por empresa	de Salario promedio	productividad
Micro (0 a10)	207.1	97.0	455.6	57.1	4.0	31.7	10.2	2.2	0.01	0.1
Pequeña (11 a 50)	5.3	2.5	106.5	13.3	4.5	29.3	9.4	20.1	0.04	0.3
Mediana (51 a 250)	1.1	0.5	114.8	14.4	7.0	57.8	18.6	103.4	0.06	0.5
Grande (+ 250)	0.1	0.1	121.2	15.2	13.8	191.4	61.7	830.2	0.11	1.6
Total	213.6	100	798.1	100	29.3	310.2	100	3.7	0.04	0.39

*Esta tabla muestra el número de unidades económicas, producción, salarios promedio según clasificación de las empresas*

*Características generales de las MIPYME:* Entendiendo las características generales de la empresa, podemos detallar algunas características que expresen la naturaleza de las MIPYME

(Roldan, 2013). Primero, el capital es proporcionado por una o más personas que establecen una empresa. Segundo, los propios dueños dirigen la marcha de la empresa; su administración suele ser empírica. Tercero, utilizan más maquinaria y equipo, aunque se sigan basando más en el trabajo que en el capital. Cuarto, dominan y abastecen un mercado más amplio, aunque no necesariamente tiene que ser local o regional, ya que muchas veces llegan a producir para el mercado nacional e incluso para el mercado internacional. Quinto, está en proceso de crecimiento, la pequeña tiende a ser mediana y está aspira a ser grande. Sexto, obtienen algunas ventajas fiscales por parte del Estado que algunas veces las considera causantes menores dependiendo de sus ventas y utilidades.

## METODOLOGÍA

El estudio se enfoca a identificar los beneficios de las redes sociales o de conocimiento en las MIPYME localizadas en Puebla, México. Considerando como variables de investigación las siguientes: relación de las MIPYME con clientes, proveedores e intercambio de conocimientos. El marco muestral se construyó con las unidades y marcos siguientes ver Tabla 4:

Tabla 4: Determinación de la Muestra

Unidad de análisis	MIPYME (Administradores y/o Dueños)	MIPYME (Administradores y/o Dueños)
Tamaño del universo	207000	207000
Tamaño de la muestra	*114	**384
Instrumento	Cuestionario	Cuestionario
Periodo de aplicación	Noviembre - diciembre 2012	Febrero 2013 (tres semanas)
Cuestionarios aplicados	Respondidos 114 No respondidos 0	Respondidos 341 No respondidos 43
	* Muestra a conveniencia del investigador	** Muestra determinada con formula estadística

*Esta tabla muestra la población estudiada y el tamaño de la muestra del objeto de estudio*

La aplicación de los cuestionarios se realizó por cuota; asignándole a cada encuestador que aplicará un determinado número de cuestionarios. Integrando una muestra definitiva 341 empresas eliminando 44 cuestionarios que no fueron contestados en su totalidad, cantidad inferior a la muestra determinada y que al aplicarla formula señala una muestra de 384 elementos, considerando una población de 207000 empresas. Para determinar el tamaño de la muestra se utilizó la siguiente fórmula:

$$n = \frac{Z^2 p q N}{Ne^2 + Z^2 p q} \quad (1)$$

Donde:

n=?

e= 5%

N = la población = 207000 empresas

Z = nivel de confianza 95%=1.96

p = 0.50

q = 1-.50

Sustituyendo los valores en la fórmula tenemos:

$$n = \frac{(1.96)^2 (0.50) (1-0.50) (207000)}{(207000)(0.05)^2 + 1.96^2 (0.05) (1-0.50)} = 384$$

La aplicación de cuestionarios se realizó en una sola etapa en el mes de febrero 2013, con duración de tres semanas; en la primera semana se aplicaron 91 cuestionarios, en la segunda semana se aplicaron 50 cuestionarios y en la tercera semana 200 cuestionarios.

## RESULTADOS

Previo a la aplicación del cuestionario se utilizó una pregunta filtro para tener la certeza de que la empresa estuviera dentro de las MIPYME. La pregunta fue la siguiente: ¿ Cuantos trabajadores tiene la empresa? Tomando como referencia la clasificación de las MIPYME por el número de trabajadores, obteniendo los resultados que se presentan en el Tabla 5.

De la aplicación del cuestionario a una muestra de 341 y 114 Personas propietarios o administradores de MIPYME, se obtuvieron los resultados que a continuación se presentan: Las preguntas 1, 2, 4 y 8 se concentran en la Tabla 6.

1.- ¿Desde cuándo está funcionando la empresa? Como se observa en la Tabla 6 en la primera muestra las empresas sesgan su madures en 43% a 2 a 5 años y en la segunda muestra el 59% de las empresas entrevistadas tienen una madurez de 5 años, las empresas más jóvenes en la primera muestra integran un 21% y en la segunda muestra el 9% tienen menos de un año.

2.- ¿Qué tiempo tiene participando como dueño o directivo en la empresa? La Tabla 6 muestra, en el primer grupo que la participación de los entrevistados es de 2 a 5 años, esa misma experiencia resulta en la segunda muestra, pero no de manera dominante, ya que hay participación muy similar en otros intervalos de tiempo.

4.- ¿Desde cuándo se da el intercambio? La antigüedad de la red se aprecia para la primera muestra a se aprecia entre 1na 2 años y en la segunda se observa un ligero predominio desde el inicio de la empresa, Tabla 6.

8.- ¿Desde cuándo se da el intercambio? La antigüedad de la red entre los proveedores y la empresa es para la primera muestra desde el inicio y para la segunda muestra, preponderantemente entre 1 a 2 años.

Tabla 5: Diversidad de Empresas Que Integran la Muestra

Tipo de empresa	Número de empresas participantes primer grupo ( noviembre- diciembre 2012)	Número de empresas participantessegundo grupo ( febrero- marzo 2013)
Micro	74 ----- 65%	160 ----- 47%
Pequeña	32 ----- 28%	164 ----- 48%
Mediana	8 ----- 7%	17 ----- 5%
Total	114 ----- 100%	341 ----- 100%

*Esta tabla muestra la integración de la muestra por número de Micro, Pequeñas y Medianas empresas que participaron en la respuesta a los cuestionarios.*

Las respuestas las preguntas antes relacionadas se concentran en la Tabla 6.

Tabla 6: Concentrado De Respuestas A Las Preguntas 1,2,4 Y 8 Que Se Refieren A Datos Cronologicos

Variable	Inicio de la empresa		Menos de 1 año		1-2 años		2-5 años		Más de 5 años		No contesto	Total	
	Nov-dic 2102	Feb-mar 2013	Nov-dic 2102	Feb-mar 2013	Nov-dic 2102	Feb-mar 2013	Nov-dic 2102	Feb-mar 2013	Nov-dic 2102	Feb-mar 2013		Nov-dic 2102	Feb-mar 2013
1.- Funcionamiento de la empresa	0%	0%	21%	9%	7%	11%	43%	21%	29%	59%	0%	100%	100%
2.- Antigüedad del propietario o administrador	0%	0%	21%	21%	7%	25%	43%	27%	29%	23%	4%	100%	100%
3.- Antigüedad de la red con Clientes	12%	28%	5%	0%	42%	27%	16%	21%	25%	16%	8%	100%	100%
4.- Antigüedad de la red con Proveedores	81%	23%	2%	0%	4%	26%	6%	24%	7%	13%	14%	100%	100%
Sumas	93	51	49	30	60	89	108	93	90	111	26		

La Tabla refleja respecto a las 4 variables que la integran los mas altos porcentajes en el rango mas de 5 años; de que se generó la actividad (1 y 2) o relación (3 y 4) considerada en las variables.

La pregunta 3, 6, 7 y 10 se concentran en la Tabla 7.

3.- ¿Tiene o ha tenido intercambio de conocimientos y/o experiencias con sus clientes? La Tabla 7, muestra claramente la existencia de la red conformada entre las MIPYME y los clientes, tanto en el primero como en el segundo grupo.

6.- ¿Ha aplicado en la empresa alguna acción derivada del intercambio de conocimientos y experiencias con sus clientes? Las empresas como se aprecia en la Tabla 7 si han tenido intercambios de conocimientos con sus clientes y la aplicación de los mismos.

7.- ¿Tiene o ha tenido intercambio de conocimientos y/o experiencias con sus proveedores? La Tabla 7 exhibe la existencia de la red entre los proveedores en 80% y el 73% de las empresas del primero y segundo grupo respectivamente.

10.- ¿Ha aplicado en la empresa alguna acción derivada del intercambio de conocimientos y experiencias con sus proveedores? Las empresas han establecido intercambio de de experiencias y conocimientos con los proveedores y aplican el producto de este intercambio.

Tabla 7: Concentrado de respuestas a las preguntas 3,6,7 y10 que se refieren a datos afirmativos o negativos

Variable	Si		No		No contesto		c	
	Nov-dic 2102	Feb-mar 2013						
Red de conocimiento con Clientes	80%	83%	20%	16%	0%	1%	100%	100%
Intercambio de experiencias y/o conocimientos con Clientes	60%	78%	40%	18%	0%	4%	100%	100%
Red de conocimiento con Proveedores	80%	73%	20%	26%	0%	1%	100%	100%
Intercambio de experiencias y/o conocimientos con Proveedores	63%	68%	37%	26%	0%	6%	100%	100%
Red de conocimiento con entidades de Gobierno	95%	0%	5%	100%	0%	0%	100%	100%
Intercambio de experiencias y/o conocimientos con Entidades de Gobierno	100%	0%	0%	100%	0%	0%	100%	100%

Sumas	478	302	122	286	12
-------	-----	-----	-----	-----	----

La Tabla refleja respecto a las 4 primeras variables que la integran los mas altos porcentajes en las respuestas afirmativas, lo que permite aseverar la existencia de redes de conocimiento con clientes y proveedores e intercambio de conocimientos con los mismos. No así para el segundo grupo de empresas en lo referente a las 2 ultimas variables, de acuerdo a las respuestas, este grupo no tiene como integrantes de su redes al Gobierno.

La pregunta 5 presenta sus resultados en la Tabla 8. La pregunta 9 integra resultados en la Tabla 9.

5.- ¿Qué tipo de experiencias y/o conocimientos se han intercambiado? Predomina el intercambio de Conocimientos y experiencias de gustos y preferencias del producto o servicio como se puede observar en la tabla 8. El total de respuestas no suma 114 y 341 debido a que algunos de los encuestados señalaron como respuesta más de una opción.

Tabla 8: Tipos de intercambio con clientes

	Nov-dic 2102	Feb-mar 2013
Conocimientos y experiencias de gustos y preferencias del producto o servicio	63	233
Conocimientos y experiencias sobre nuevos mercados	43	131
Conocimientos y experiencias respecto al empaque del producto	22	53
Otros intercambios	13	30
	Servicios, especificaciones, actualizaciones, sistemas, procedimientos, calidad en el servicio, información fiscal, información laboral, precios.	Servicios, especificaciones, actualizaciones, sistemas, procedimientos, calidad en el servicio, información fiscal, información laboral, precios.
No Contesto	0	37

Esta tabla muestran los diferentes tipos de intercambio entre clientes y la empresa. Resaltando prioritariamente el intercambio de experiencias y conocimientos de gustos y preferencias del producto o servicio.

9.- Qué tipo de experiencias y/o conocimientos se han intercambiado? El intercambio entre los proveedores y las empresas se da en forma equilibrada en los tres primeros puntos del Tabla 9. El total de respuestas no suma 114 y 341 debido a que algunos de los encuestados señalaron como respuesta más de una opción.

Tabla 9: Tipos de intercambio con Proveedores

	Nov-dic 2102	Feb-mar 2013
Conocimientos y experiencias de gustos y preferencias del producto o servicio	57	123
Conocimientos y experiencias sobre	99	122

nuevos mercados		
Conocimientos y experiencias respecto al empaque del producto	25	95
Otros intercambios	54	30
	Servicios, tiempos de entrega, actualizaciones, sistemas, procedimientos, calidad en el servicio, información fiscal, información laboral, precios, nuevas marcas mercados y costos	Servicios, tiempos de entrega, actualizaciones, sistemas, procedimientos, calidad en el servicio, información fiscal, información laboral, precios, nuevas marcas mercados y costos.
No Contesto	0	67

*Esta tabla muestra los diferentes tipos de intercambio entre proveedores y la empresa. Resaltando prioritariamente el intercambio de experiencias y conocimientos de gustos y preferencias del producto o servicio.*

Como se pudo apreciar los resultados obtenidos muestran la presencia de las redes de conocimiento en las MIPYMEs. Retomando lo señalado por Lara (2007) y Anunziata y Macchiarola (2010), las redes son asociaciones entre individuos con una agenda común. También es notoria la diversidad de redes Casas (2003), en las MIPYME poblanas con sus clientes, proveedores y Gobierno, así como la existencia de intercambio de conocimientos a través de esas redes. El intercambio se da en primer lugar respecto a conocimientos y experiencias de gustos y preferencias del producto o servicio por parte de los clientes y proveedores, lo que permite a la empresa satisfacer las necesidades de los clientes; en segundo lugar se nota la presencia de intercambio de conocimientos sobre nuevos mercados a los que las MIPYME se pueden acercar por las referencias e informes que les hacen llegar los clientes y proveedores y finalmente en tercer lugar se nota la presencia de un intercambio de conocimientos y experiencias referido al empaque de los productos.

El trabajo de investigación permitió conocer la existencia de Redes sociales o de conocimiento y la formación de las mismas entre la empresa y diferentes actores como son sus clientes y sus proveedores, y gobierno, entre ellos se da el intercambio de experiencias y conocimientos. Las redes con los clientes y con los proveedores por su duración se encuentran maduras. El intercambio con los clientes se enfoca más al conocimiento de experiencias sobre gustos y preferencias del producto o servicio, a diferencia con los proveedores que intercambio es más intenso en diferentes aspectos. Las dimensiones para el análisis de las redes de conocimiento señalado por Casas (2003), se presenta de forma sintética conjuntando los resultados de los dos grupos de empresa con los que se trabajó, en la Tabla 8.

La Tabla 9 muestra de forma detallada con apoyo en la dinámica de las redes (Casas, 2003) los resultado que contiene la tabla 8.

Tabla 8: Existencia de las Redes de Conocimiento en las MIPYME Poblanas

Concepto	Si aplica Clientes	Si aplica Proveedores	Si aplica con Gobierno
Existencia de la Red de Conocimientos.	Si	Si	Si
Elementos de la Red de Conocimientos. (elemento humano, así como por factores tecnológicos y sociales)	Si	Si	Si
Formación de la Red de Conocimientos. (Relación del empresario con clientes y Proveedores)	Si	Si	Si
Dimensiones de la Red de Conocimiento. Análisis :			
1) El contexto institucional de la colaboración entre los sectores público y privado;	Si	Si	Si
2) La estructura o morfología de las redes;( los nodos representan a los actores y las áreas que conectan los nodos representan las relaciones, es decir los integrantes)	Si	Si	Si
3) La génesis, desarrollo y dinámica de las redes (Dinámica: direccionalidad, duración, frecuencia comunicación)	Si	Si	Si

4) El contenido y/o los insumos que se intercambian ( Sobre la idea de conocimiento: tácito y codificado; intercambio de conocimiento, Flujos e insumos de conocimiento: endógeno y exógeno, Tipos de conocimiento: científico, tecnológico, empresarial, Fuentes: acceso a fuerza de trabajo altamente capacitada, universidades locales e internacionales, competidores, alianzas, incentivos gubernamentales, prensa y artículos sobre comercio, eventos locales e internacionales, Canales para cruzar fronteras: contratación de nuevo personal, publicaciones, reuniones, modos informales de comunicación, movilidad de personas entre organizaciones Extensión de fronteras: relaciones personales informales.	Si	Si	Si
5) Los resultados de las redes y del intercambio de conocimientos. (Innovaciones radicales o incrementales, Generación de capacidades en las empresas, Generación de conocimiento, resultados sociales, económicos y/o políticos y Creación de redes de conocimiento.	Si	Si	Si

*Esta tabla muestra la existencia de las redes de conocimiento en las MIPYME poblanas desde diferentes puntos de vista.*

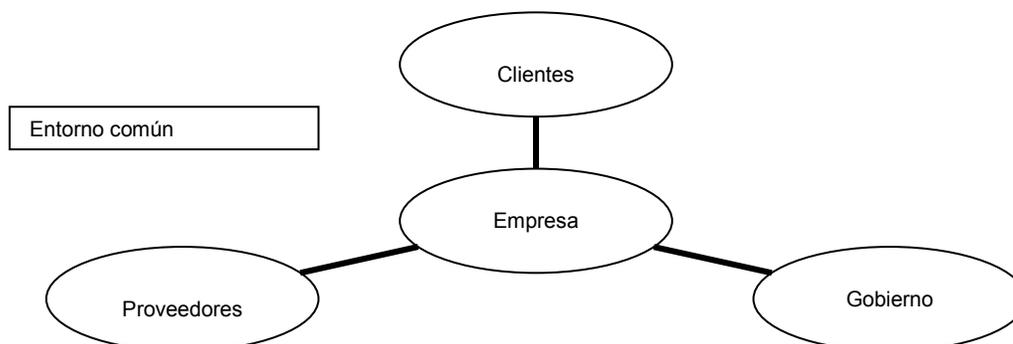
Tabla 9: Dinámica de las Redes de Conocimiento en las MIPYME Poblanas

Estructura o morfología de las redes (Integrantes)	Dinámica: direccionalidad, duración, frecuencia comunicación y alcance	Contenido: formas de intercambio e insumos que circulan	Resultados de las redes y del intercambio de conocimiento
<b>Instituciones de Educación Superior IES</b>	Contactos personales del personal directivo de la empresa. Se observa una direccionalidad de ambas partes, una durabilidad que tiene su origen después de la formación de la empresa.	<b>Información</b> con respecto a diferentes apoyos financieros. <b>Acceso a recursos</b> , en este caso sobre infraestructura necesaria para que la empresa inicie y mantenga su actividad.	Generación de conocimiento sobre aspectos productivos. Información sobre tecnología.
<b>Empresarios</b>	Contactos personales del personal directivo de la empresa. Se observa una direccionalidad de ambas partes, una durabilidad que tiene su origen después de la formación de la empresa. Construcción de la relación por interés de ambas partes. El inicio de la relación coincide con el inicio de las operaciones de la empresa.	<b>Información</b> con respecto a diferentes apoyos financieros. <b>Acceso a recursos</b> , en este caso sobre infraestructura necesaria para que la empresa inicie y mantenga su actividad.	Generación de conocimiento sobre prácticas empresariales.
<b>Proveedores</b>	Contacto personal del de los directivos de la empresa. Construcción de la relación por interés de ambas partes. Se observa un intercambio frecuente de información y conocimientos sobre las características de calidad de los insumos y productos. Y al igual que la relación anterior, el inicio de la relación coincide con el inicio de las operaciones de la empresa.	<b>Conocimientos</b> , específicamente respecto a la tecnología e insumos. <b>Acceso a recursos</b> , en este caso a materias primas y maquinaria.	Maquinaria acorde a las necesidades y exigencias de los productos solicitados por los clientes, así como insumos.
<b>Clientes y usuarios</b>	Contactos personales y página web. Por interés de ambas partes hay un intercambio cotidiano de información y este vínculo ha existido desde que inició operaciones la empresa.	Información sobre gustos y preferencias de sus clientes y cumplimiento de códigos de conducta y requisitos de producción. No Aplica	Productos que cumplen con las exigencias de los clientes.
<b>Asociaciones empresariales</b>	No Aplica	No Aplica	No Aplica
<b>Entidades de gobierno</b>	Es una relación que surge como resultado de los contactos personales de la persona que dirige la empresa a través de diferentes programas estatales y regionales Se trata de una relación que surge por interés de ambas partes, pero en la que se observan intercambios esporádicos y que al igual que las otras relaciones surge después del inicio de la empresa.	Beneficios financieros.	Disposición de efectivo para la estructura de la empresa. Disposición de mejores flujos de efectivo.

*Esta tabla muestra la existencia de las redes de conocimiento en las MIPYME poblanas con los diferentes actores involucrados en ellas.*

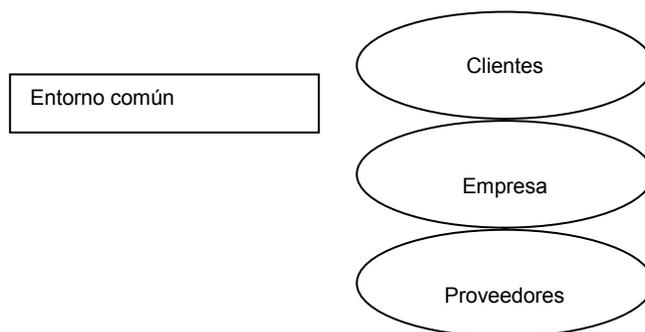
De forma ilustrativa se presentan los resultados en los dos grupos de empresas a las que se les aplicaron los cuestionarios, marcando las diferencias y similitudes encontradas respecto a los tipos de redes. Figura 1 y 2.

Figura 1: Red Empresa grupo Nov. – Dic. 2012



*Esta Figura muestra la existencia de las redes de conocimiento en las MIPYME poblanas con la integración de 4 actores. Tomando como base el modelo Alianza Lara, 2007.*

Figura 2: Red Empresa grupo Feb -mar 2013



*Esta Figura muestra la existencia de las redes de conocimiento en las MIPYME poblanas con la integración de 3 actores. Tomando como base el modelo Alianza, Lara 2007.*

## CONCLUSIONES

Los estudios realizados por diferentes autores en materia de redes sociales permitieron definir las redes de conocimiento, sus elementos, como se integran, sus dimensiones y conocer su presencia en las MIPYME.

Identificar además la existencia de diferentes tipos de redes como son las redes formales e informales y remarcar la presencia de redes semiformales como una aportación de la presente investigación al considerar a las relaciones establecidas por parte de la empresa con clientes, proveedores y gobierno; que se han mantenido en el tiempo creando confianza y amistad entre los actores que forman esos lazos de la red. Cabe resaltar que la presencia de las redes es eminente en las MIPYME, pero el entorno que en el que se encuentran inmersas influye en la conformación de las mismas, respecto a los actores que participan. Para cerrar las conclusiones se menciona que se da respuesta a la interrogante formulada señalando la existencia de las redes de conocimientos entre las MIPYME localizadas en la ciudad de Puebla, México, con clientes, proveedores y gobierno en las que se nota la influencia del entorno en el que se encuentran las empresas.

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# DISEÑO Y VALIDACIÓN DE UNA METODOLOGÍA PARA EVALUAR EL NIVEL DE MADUREZ DE LA ALINEACIÓN ESTRATÉGICA DE LAS TECNOLOGÍAS DE LA INFORMACIÓN

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Marcela Casas Meza, Universidad Tec. Milenio

## RESUMEN

*La alineación entre el Negocio y las Tecnologías de Información y Comunicación (TIC) se ha convertido en una de las prioridades de las organizaciones hoy en día. Para afrontar esta problemática se han centrado los esfuerzos de esta investigación en relacionar las dimensiones de un Modelo para identificar el nivel de madurez de la Alineación Estratégica de las TIC's con las variables propuestas en el Manual Administrativo de Aplicación General en materia de Tecnologías de Información y Comunicaciones (MAAGTIC), que es un marco regulatorio desarrollado por el Gobierno mexicano. En la metodología para la recolección de datos se elaboró un constructo basado en los procesos correspondientes a los niveles de gestión de los cuales se obtiene un conjunto de 120 subprocesos propuestos en el MAAGTIC. El constructo inicial se colocó en un sitio web para facilitar el acceso y la rapidez en las respuestas. Se seleccionaron los expertos y se calculó para los mismos Coeficiente de competencia K a partir del ( $K_a$ ) coeficiente de argumentación y el coeficiente del conocimiento ( $K_c$ ). En la validación del constructo se obtuve un Alpha de cronbach de .984. El estudio Kaiser-Meyer-Olkin (KMO) y Esfericidad de Bartlett para probar y avalar la factibilidad de la reducción fue .726. Con la finalidad de evaluar la correlación existente entre las variables, se utilizó el Análisis de Correspondencias (múltiple), Árboles de decisión con el método de crecimiento CHAID exhaustivo y Análisis discriminante. Una vez que se redujeron las variables quedó un constructo que se evalúa con ecuaciones estructurales para su aplicación en una organización donde se obtuvo la evaluación del nivel de madurez de la alineación entre las TIC's y el negocio.*

**PALABRAS CLAVES:** Tecnologías de Información y Comunicación, Alineación estratégica, Ecuaciones Estructurales

## DESIGN AND VALIDATION OF A METHODOLOGY FOR ASSESSING THE LEVEL OF MATURITY OF STRATEGIC ALIGNMENT OF INFORMATION TECHNOLOGY

### ABSTRACT

*Alignment between Business and Information and Communication Technologies (ICT ) has become one of the priorities of organizations today. To address this problem have focused the efforts of this research to relate the dimensions of a model to identify the level of maturity of the Strategic Alignment of ICT with the variables proposed in the Administrative Manual of General Application in Technology Information and Communications ( MAAGTIC ), which is a regulatory*

*framework developed by the Mexican government . The methodology for data collection developed a process-based construct corresponding to the levels of management which yields a set of 120 threads proposed in MAAGTIC . The initial construct was placed on a website for easy access and speed of responses. Experts were selected and calculated for the same competition coefficient  $K$  from  $K_a$  argument coefficient and the coefficient of knowledge ( $K_c$ ). In the validation of the construct obtained a Cronbach 's alpha of .984 . The study Kaiser -Meyer- Olkin (  $KMO$  ) and Bartlett sphericity to test and guarantee the feasibility of the reduction was .726 . In order to evaluate the correlation between variables was used Correspondence Analysis (multiple), decision trees with Exhaustive CHAID growing method and discriminant analysis. Once the variables were reduced was a construct structural equation is evaluated for application in an organization where you obtained the assessment of the level of maturity of the alignment between business - TIC's.*

**JEL:** M15

**KEYWORDS:** Information and Communication Technologies, Strategic Alignment, Structural Equation (SEM)

## INTRODUCCION

Los Sistemas de Información Empresariales han evolucionado de un nivel de baja complejidad y operaciones rutinarias, a niveles que representan un alto grado de complejidad e integración, convirtiendo a los mismos en instrumentos estratégicos. No es exagerado decir que actualmente lo que hace esencialmente la diferencia en una organización, es su capacidad para convertir los datos y la información en conocimiento aplicado a las decisiones.

La alineación estratégica del Negocio con las Tecnologías de Información (TI) han sido utilizada por las organizaciones para crear y mejorar la eficiencia, reducir costos, mejorar la relación comprador-proveedor, y para crear nuevos productos y soluciones para el negocio, Nadali et al. (2011); para Hair & Anderson (2010), la alineación Negocio-TI significa el grado en el cual la misión, objetivos y planes de las TI están soportados por la misión, objetivos y planes del Negocio. Según Burlton (2010), “La alineación estratégica se define como la justa vinculación de las prioridades de la organización y los procesos empresariales que permiten una continua y una eficaz acción para mejorar el rendimiento empresarial.”

Algunas de las razones primarias en el análisis de la Literatura de la baja tasa de éxito en la alineación del Negocio y las TI, es la falta de una definición uniforme de la alineación, la búsqueda de una estrategia para la alineación, y la falta de una herramienta apropiada para medir el éxito de la misma. (Baets, 1992; Lee, 2013; Siurdyban, 2012).

Haciendo uso de las mejores prácticas, modelos de gobierno, marcos de referencia y normas metodológicas las organizaciones están buscando soluciones de TI que les permitan alinear sus operaciones con sus objetivos de negocios y así evaluar el impacto de implementar nuevas aplicaciones al crecimiento del negocio y a los planes futuros de las organizaciones.

Con la finalidad de alinear los modelos de procesos de negocio con las TI, se tiene como necesidad el homologar y soportar a las mismas, a través de las mejores prácticas, explorando las aplicadas actualmente en las organizaciones y adaptándolas a la organización permitiendo con ello el brindar elementos certeros para el soporte de los procesos de negocio, teniendo como fin establecer estrategias que permitan dar esa ventaja competitiva, a través de los servicios de TI

que contribuyan a la alineación de los objetivos, ofreciendo elementos estratégicos claves como apoyo y soporte a la alta dirección para la toma de decisiones.

Entre los Modelos de Alineación de las TI con las estrategias del negocio ha sido de gran repercusión el modelo de Henderson & Venkatraman (1993), de alineación de la estrategia de TI-Negocio (Strategic Alignment Model-SAM), que está constituido por cuatro elementos: estrategia de negocio, estrategia de TI, procesos e infraestructura organizacional y procesos e infraestructura de TI.

Luftman & Kempaiah (2007), desarrollaron un modelo para identificar el nivel de madurez de la alineación entre el negocio y las TI, el Modelo de Madurez de la Alineación Estratégica (Strategic Alignment Maturity Model - SAMM).

En México, el Manual Administrativo de Aplicación General en Materia de Tecnologías de la Información y Comunicaciones, de ahí sus siglas MAAGTIC fue desarrollado por la Secretaría de la Función Pública como una estrategia del Gobierno Federal mexicano para mejorar la gestión pública, al estandarizar las actividades de las Unidades de Tecnologías de Información y Comunicaciones (UTIC's) de todas las instituciones de la Administración Pública Federal. Con estas acciones se busca además incrementar la transparencia y capacidad de las UTIC's.

MAGTIC es una propuesta que integra diferentes marcos de referencia y buenas prácticas de las Tecnologías de información como son: ITIL, COBIT, CMMI, ISO 27000, RUP, Administración basada en el PMBoK e ISO 20000. Fue propuesto en septiembre del 2009 y la primera versión fue liberada en el mes de julio de 2010, entrando en vigor en el mes de agosto del mismo año, la versión más actual fue liberada en Noviembre del 2011.

El propósito de esta investigación es por tanto diseñar y validar una herramienta que integre los Modelos internacionales de Alineación de las Tecnologías de la Información con el MAAGTIC.

La estructura en la que se desarrolla a continuación una síntesis de este resultado de investigación es la siguiente: la Revisión de Literatura que contiene los aspectos más relevantes acerca de la importancia de la Alineación de las Tecnologías de la Información con las estrategias del negocio y sus Modelos, la Metodología empleada para sustentar con Modelos matemáticos las decisiones en cuanto a la reducción de variables y el planteamiento de un Modelo Teórico basado en ecuaciones estructurales, los resultados finales del diagnóstico efectuado en una organización no identificada por razones de confidencialidad, Conclusiones y Referencias Bibliográficas.

## **REVISIÓN DE LITERARIA**

La creciente dependencia de las tecnologías de información (TI) en las organizaciones, han provocado que éstas, enfrenten situaciones complejas del cómo alinear y adaptar las Tecnologías de Información a los procesos de negocio de la organización, con la finalidad de tener un soporte tecnológico, operativo y estratégico, que brinde esa ventaja competitiva, asumiendo como premisa la optimización de recursos y generación de valor a través de ellas. Luftman & Kempaiah (2007).

Una encuesta reciente a 243 compañías realizada por Luftman & Ben-Zvi (2010), muestra que dentro de las principales preocupaciones de los directivos de TI están: a) Productividad del Negocio y reducción de costos; b) Alineación del Negocio y TI; c) Agilidad y velocidad en el Negocio; d) Reingeniería de Procesos de Negocio, todas estas listadas en ese orden. Aunado a

que la globalización ha impulsado aún más en la necesidad de que las organizaciones incrementen la eficiencia, velocidad y flexibilidad de sus procesos.

Esta problemática es una de las principales preocupaciones que los directivos han referido en las organizaciones, quienes en su rol de decisores en materia de TI tienen dificultades para identificar la incorporación de las TI mismas como generadora de valor para el negocio. López Paz et al. (2010).

Con base en esta necesidad, muchas organizaciones diseñan e implementan proyectos orientados a resolver el problema de mantener sus procesos estratégicos a través de las tecnologías de información (TI). La alineación entre los objetivos del negocio y los servicios de TI es una de las estrategias claves que las organizaciones necesitan implementar para manejar sus negocios de forma exitosa.

La esencia para la integración de los procesos de negocio y las Tecnologías de la Información (TI), es que la incorporación de las TI, sea generadora de valor para el negocio en todo el proceso de incorporación tecnológica. Sin embargo, la misma por sí sola no es generadora de valor para la organización, incluso, no se mantiene neutral pues, decisiones equivocadas en incorporar a las Tecnologías de Información llegan a convertirse en una fuente de destrucción del valor para la organización. Son, Gladyszewski, & Weitzel (2006)

Para ello los procesos tienen que ser diseñados, ejecutados, administrados y medidos de acuerdo a las prioridades y situaciones estratégicas específicas del negocio. Las organizaciones constantemente se esfuerzan para maximizar el uso de recursos y obtener una mayor devolución sobre la inversión, mediante la optimización de la integración de las TI y el negocio con respecto al proceso, funciones, tecnologías, sistemas y recursos humanos.

Ahuja (2012), infiere en que la evolución de las TI las ha convertido en una unidad primaria del negocio como diferenciador estratégico. Debido a su integración simbiótica entre el Negocio y las TI, lo cual hace cada vez más importante esta alineación de las funciones de TI con las de los procesos del negocio, para permitir a la organización obtener ventajas estratégicas.

Para articular dichas estrategias existen una serie de marcos de referencia a través de mejores prácticas, herramientas y estándares como lo son: ITIL V3, COBIT 5, ISO 2000, IEC/27002, CMMI, RUP, PMBoK y MAAGTIC, que permiten normar, organizar y controlar la gestión de servicios de TI como soporte a los procesos de negocio de las organizaciones. (OGC & ITGI, 2008; Secretaria de la Función Pública, 2011; Strahonja, 2009)

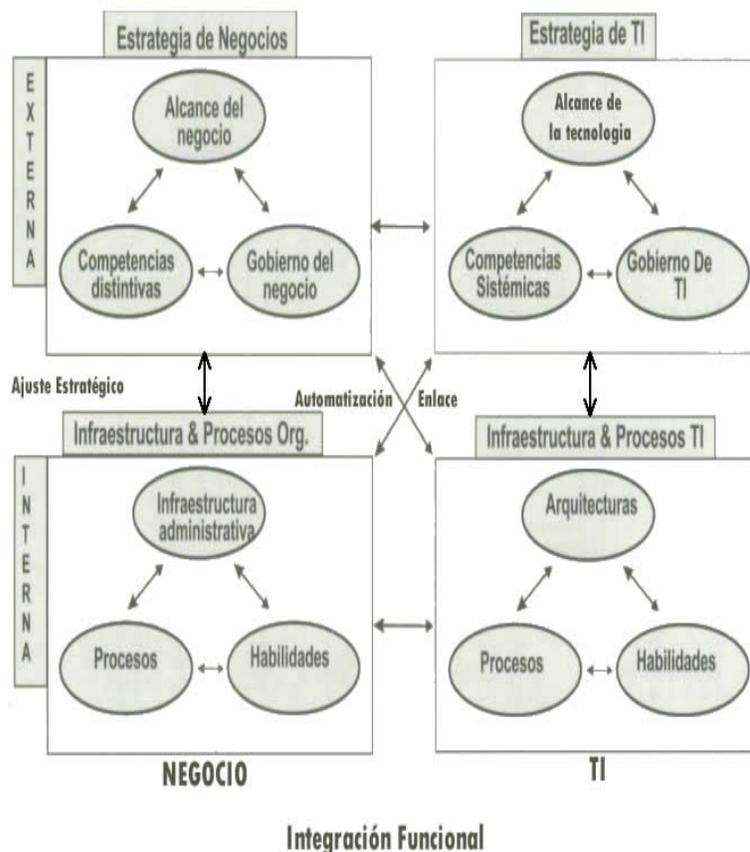
El modelo de Henderson & Venkatraman (1993), de alineación de la estrategia de TI-Negocio (Strategic Alignment Model-SAM), está constituido por cuatro elementos: estrategia de negocio, estrategia de TI, procesos e infraestructura organizacional y procesos e infraestructura de TI. En la figura 1, se observa el modelo gráfico aportado por los autores donde se muestra cómo la alineación estratégica se lleva a cabo a través de dos bloques constructivos; el ajuste estratégico (dominios interno y externo) y la integración funcional (dominios del negocio y TI), teniendo en cuenta las relaciones existentes de los elementos, por lo que se definen 4 perspectivas dominantes a tener en cuenta por las organizaciones que deseen implementar una alineación estratégica del negocio y de las TI.

Las perspectivas se dividen en cuatro dominios a analizar: a) Estrategia de negocio, b) Estructura de negocio, c) Estrategia TI y d) Estructura TI. Las relaciones cruzadas entre estos dominios matizan diferentes tipos de integración y alineación que se pueden abordar en la organización.

Luftman & Kempaiah (2007), desarrollaron un modelo con el cual es posible realizar un diagnóstico que permite identificar el nivel de madurez de la alineación entre el negocio y las TI, el Modelo de Madurez de la Alineación Estratégica (Strategic Alignment Maturity Model - SAMM). La estructura del modelo consta de 6 criterios de alineación, presentes en cada uno de los 5 niveles de madurez.

Tener un conocimiento claro del nivel de madurez con el que la organización cuenta en relación a su alineación estratégica hace posible la identificación de brechas que impiden la correcta alineación entre el negocio y las TI, a su vez también ayuda a conocer la madurez con la que las decisiones estratégicas son tomadas y de alguna manera saber cómo y dónde está ubicada la organización, permitiendo saber en qué manera puede mejorar la relación Negocio / TI. (Luftman, Brown, & Balaji, 2011; Luftman & Kempaiah, 2007; Vargas, Boza, & Cuenca, 2011); Para proveer una herramienta de medición del nivel de madurez de la alineación Negocio y TI en una organización fue desarrollado el Modelo de Madurez de la Alineación Estratégica (Strategic Alignment Maturity Model - SAMM) (Ahuja, 2012; Baets, 1992; David & Robert, 1992; Kaplan & Norton, 2008; López Paz, Maciá Pérez, & Gilart Iglesias, 2009; Luftman & Kempaiah, 2007; vom Brocke, 2010)

Figura 1 Modelo de Alineación Estratégica (SAM)



*Fuente: (Henderson & Venkatraman, 1993)*

El modelo SAMM propone que el nivel de madurez de la alineación del Negocio y las TI puede ser medido a través de seis componentes: Comunicación, Valor de TI, Gobierno de TI, Relaciones con el negocio, Arquitectura y Habilidades. (Luftman & Kempaiah (2007).

Una vez aplicado el diagnóstico a partir del modelo SAMM los resultados permiten ubicar a la organización en uno de los cinco niveles de madurez siguientes: Nivel 1: Inicial, hay una comunicación pobre entre el negocio y TI y del valor y contribución que proveen. Nivel 2: Comprometido, las organizaciones han empezado a mejorar sus relaciones entre el negocio y TI. Nivel 3: Enfocado, Los niveles de gestión alto y medio entienden el negocio y comienza a surgir la comprensión de las TI por parte del Negocio. Nivel 4: Mejorado y administrado, Las organizaciones administran los procesos que necesitan para el alineamiento estratégico con la empresa. Una de las principales características de este nivel es que la brecha entre las TI y el Negocio se ha cerrado. Nivel 5: En este nivel las organizaciones han optimizado la alineación estratégica entre el Negocio y las TI a través de rigurosos procesos de negocio que integran los planes estratégicos del Negocio y los planes de TI.

### **METODOLOGÍA**

Con la finalidad de agilizar el proceso de diseño y validación de la metodología fue necesaria la elaboración de un sistema web el cual no solo se facilita el proceso de ajuste del constructo y su aplicación dentro de la organización sino que brinda una manera simple de recolección y procesamiento de datos, ya que toda la información es guardada dentro de una base de datos que es utilizada en el procesamiento con las técnicas de apoyo a las decisiones descritas a continuación.

Para la resolución del constructo se dio relevancia al criterio experto. Fueron seleccionados 60 expertos (45 por parte del negocio y 15 de TIC). El Alpha de Cronbach calculado resultó en .984 y se evaluó la posibilidad de reducir el conjunto de variables mediante el estudio Kaiser-Meyer-Olkin (KMO) y esfericidad de Bartlett con resultado de .726 el cual excede el nivel de .5 recomendado para la factibilidad de la reducción, en la prueba de esfericidad de Bartlett se obtuvo una significancia igual a .0001, lo que indica que existe suficiente correlación entre las variables para proceder, a la reducción ya que la misma propone que valores más cercanos a cero son más idóneos a la misma.

Se utilizó Análisis de Correspondencia (múltiple), como técnica estadística multivariante para analizar las relaciones de dependencia e independencia de un conjunto de variables categóricas a partir de los datos del estudio Rodríguez & Mora (2001), y la técnica de árboles de decisión permitió obtener una visión de múltiples variables al mismo tiempo y se ajustaron criterios en la opción CHAID (CHi-squared Automatic Interaction Detector), el estadístico de Chi-cuadrada a razón de máxima verosimilitud. Se seleccionó un método de crecimiento del árbol adecuado para nuestro estudio. Aunque existen en el SPSS cuatro posibilidades de algoritmos de crecimiento para los árboles de decisión se decidió hacer uso del CHAID Exhaustivo con máxima verosimilitud como el método de Crecimiento, dadas las características de nuestro estudio y los datos recolectados, descartando CRT (Classification and Regression Trees) y QUEST (Quick, Unbiased, Efficient, Statistical Tree) Berlanga et al (2013). La razón fundamental de esta decisión es lograr la mayor sensibilidad posible en nuestro análisis para las categorías de las variables de caracterización de la muestra (grupos de procesos, procesos, subprocesos y factores críticos) además de que el modo de cálculo de las combinaciones de las categorías de las variables predictoras es más completo Fuentes & González (2006).

Con la finalidad de validar los resultados obtenidos por las técnicas anteriores y asegurarnos que los análisis previos han dado resultados certeros se aplicó un análisis discriminante seleccionando como variable de agrupación los subprocesos del MAAGTIC. Una vez se tiene integrado el MAAGTIC con el modelo SAMM se puede crear un modelo de ecuaciones estructurales, en donde se visualice la relación existente entre las variables así como la asociación de los subprocesos con los criterios de alineación. La fiabilidad del modelo puede ser examinada por medio de un análisis factorial confirmatorio a través de las ecuaciones estructurales y sus índices de ajustes, los que se muestra en detalles en el trabajo en extenso, mientras que en esta versión resumida solo se muestran los resultados finales de la aplicación.

## RESULTADOS

El modelo final ajustado permitió visualizar las variables, es decir, los subprocesos que cuentan con mayor significancia para la organización. Se puede ver el listado de estos 18 subprocesos en la tabla 1.

Tabla 2: Listado de Subprocesos con Mayor Significancia

Subproceso	Criterio	Descripción	
OMS2	Comunicación	Establecer los tipos, estados e información mínima de las Solicitudes de servicio	
THO3		Ejecutar el Programa de proyecto de transición a la operación y soporte	
ADT4		Revisar los estándares tecnológicos establecidos	
ACMB5		Valor	Evaluar y coordinar el cambio
OSGP1	Gobierno	Establecer los repositorios de activos del proceso y métricas de los procesos	
ANS1		Definir y actualizar los acuerdos de niveles de servicio y operacionales	
DSTI5		Administrar la continuidad de servicios de TIC	
DDT3		Establecer y actualizar el Programa de tecnología	
MI1		Elaborar y dar seguimiento al Programa de aprovisionamiento de la infraestructura tecnológica	
MI2		Mantener los recursos de infraestructura tecnológica y su disponibilidad	
APP1		Establecer directrices para la gobernabilidad y evaluación del portafolio de proyectos de TIC	
AO2		Programar y ejecutar las tareas de la operación	
ATC2		Asociación	Participación en el procedimiento para la contratación de soluciones tecnológicas de TIC
AAF1		Arquitectura	Diseñar el centro de datos
AAF2	Implementar controles de seguridad física en el centro de datos		
AAF3	Administrar las instalaciones físicas del centro de datos		
APC2	Habilidades	Integrar la propuesta de acciones de capacitación	
APC1		Identificar las necesidades de capacitación de los empleados de la UTIC	

*Esta tabla muestra los 18 subprocesos que quedaron después de cuatro ajustes al Modelo de Ecuaciones Estructurales. Representan los subprocesos que mejor describen la alineación de las Tecnologías de la Información con las estrategias del negocio.*

El resultado final en la aplicación del Modelo propuesto se muestra en la Tabla 2.

Tabla 2: Listado De Los Criterios De Alineación y Su Respectivas Medias

Criterio Alineación	Media
Comunicación	2.79
Valor	2.83
Gobierno	2.80
Asociación	2.90
Arquitectura	3.15
Habilidades	2.47
Total	<b>2.82</b>

*Esta tabla muestra que tan alejado se encuentra cada criterio de un nivel aceptable. Siendo el criterio de Arquitectura la más destacada (Media = 3.15) y el criterio de Habilidades el más débil (Media = 2.47).*

## CONCLUSIONES

Las Tecnologías de Información no generan valor por sí mismas. Es preciso lograr para ello, que exista una Alineación de su uso con las estrategias del negocio.

Complementar el modelo SAMM con MAAGTIC resulta efectivo, ya que el primero muestra las características de alineación pero no especifica las actividades a realizar para su implementación y el segundo muestra las actividades a realizar pero no define la manera en la cual ayudan en la alineación estratégica de la organización. Es así como una fusión de ambos permite crear un instrumento que mide la alineación entre el Negocio y las TI, y a su vez otorga el listado de actividades a realizar para cubrir las brechas que impiden la misma.

Incluso en grandes organización que han realizado cuantiosas inversiones en la adquisición implantación de Tecnologías de Información (TI) es probable que no exista un alto nivel de madurez en lo concerniente a la Alineación de las mismas con las estrategias del negocio, dado que es necesario potenciar una mayor intensidad en las interrelaciones entre la estructura y la estrategia del negocio con la estructura y la estrategia de las TI, así como desarrollar los procedimientos requeridos en las dimensiones establecidas: Comunicación, Valor de TI, Gobierno de TI, Relaciones con el negocio, Arquitectura y Habilidades.

Esta investigación determinó los subprocesos relevantes del MAAGTIC para diagnosticar y emprender las acciones de mejora necesarias en las dimensiones anteriormente mencionadas.

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# **GRADO DE FAMILIARIDAD QUE TIENEN LOS PROFESORES, ESTUDIANTES Y PROFESIONALES CON RELACIÓN A LA POSIBLE ADOPCIÓN DE LAS NORMAS INTERNACIONALES DE INFORMACIÓN FINANCIERA**

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## **RESUMEN**

*Esta investigación cualitativa estudió el nivel de familiaridad que tienen los profesores, estudiantes y profesionales de Puerto Rico en el área de contabilidad con relación a los acuerdos de convergencia entre la Junta de Normas de Contabilidad Financiera (FASB por sus siglas en inglés) y la Junta de Normas de Contabilidad Internacional (IASB por sus siglas en inglés). Además, estudió y evaluó el nivel de familiaridad que estos grupos tienen con las normas internacionales de información financiera (NIIF) ante la posible adopción de las mismas en Estados Unidos y por ende en Puerto Rico. Se utilizó un cuestionario que permitió mediante el uso de programas estadísticos estudiar el nivel de familiaridad de los grupos que participaron en la encuesta. Se utilizaron las pruebas de Kruskal-Wallis, la prueba de Dunn y la prueba t de promedios para estudiar e interpretar los resultados. Se compararon las medianas resultantes de los tres grupos para determinar si los resultados de las medianas eran estadísticamente similares. Entre los resultados obtenidos se destaca que, en términos de familiaridad, el grupo de profesores es el más familiarizado con la convergencia y las NIIF. En términos generales, este grupo está entre neutral y familiarizado con los acuerdos de convergencia y las NIIF. Los grupos compuestos por estudiantes y profesionales resultaron no estar familiarizados con el acuerdo de convergencia y las NIIF.*

**PALABRAS CLAVES:** Contabilidad, Normas Internacionales de Información Financiera, Convergencia, Principios de Contabilidad, Puerto Rico, Profesores, Estudiantes Y Profesionales de Contabilidad.

## **HOW FAMILIAR ARE PROFESSOR, STUDENTS, AND PROFESSIONAL ACCOUNTING WITH THE INTERNATIONAL FINANCIAL REPORTING STANDARDS IN PUERTO RICO?**

### **ABSTRACT**

*This qualitative research examined the level of familiarity of professor, students, and professionals in the area of accounting from Puerto Rico with the agreements of convergence between Financial Accounting Standard Board and International Accounting Standard Board. Also studied and evaluated the level of familiarity that these groups have with the international financial reporting standards and the possible adoption in the United States and therefore in Puerto Rico. Questionnaire was used to obtain the data of this study. The data was analyses and interpret using the Kruskal-Wallis test, Dunn test, and t-test. The medium resulting from the survey of the three groups was compared to determine statistical similarity. The results highlighted that in terms of familiarity, the group of professor was the most familiar with the convergence and International Financial Reporting Standard (IFRS). This group is between*

*neutral and familiar with the agreements and IFRS convergence. The groups composed of students and professionals were not familiar with the agreement of convergence and IFRS.*

**KEYWORDS:** Accounting, International Financial Reporting Standards, Convergence, Generally Accepted Accounting Principles, Puerto Rico, Professor, Students And Accountant Professional.

## INTRODUCCION

El surgimiento de la globalización presenta nuevos retos y oportunidades para las empresas. Una de estas oportunidades es poder participar de un mercado financiero global (Fernández, Fernández, y Olmedillas, 2007). Las empresas se benefician de esta apertura del mercado financiero ampliando las posibilidades de obtener financiamiento de proveedores de capital extranjero (IFRS USA, 2012). A su vez los inversionistas alrededor del mundo también se benefician al tener opciones de inversión en empresas a nivel global (Djatej, Duanning, Gorton y McGonigle, 2012). Para atender las necesidades de estos proveedores de capital es necesario un formato de información que permita la comparabilidad y promueva la competitividad estimulando la inversión de capital a nivel mundial (Lew, 2005). Los líderes de las naciones más desarrolladas han señalado que unas normas uniformes de contabilidad promoverán la confianza de los inversionistas y estimularan el mercado de capital, algo necesario para que las naciones puedan superar la crisis financiera de los últimos 10 años (Financial Accounting Standards Board, 2012). Además, según un estudio de PwC (2012), la globalización de los negocios y las finanzas ya han promovido la adopción en masa de las normas internacionales de información financiera (NIIF) en más de 12,000 empresas alrededor del mundo.

Wolosky (2008), señala que el uso de las NIIF reduce las barreras internacionales para competir por el capital y permite a los inversionistas evaluar distintas opciones de inversión a nivel internacional participando de mercados de capital globales. Esto a su vez promueve la competitividad ya que los inversionistas pueden evaluar y entender mejor la información que las empresas le comunican (Bolt-Lee y Smith, 2009). Por otro lado las empresas pueden competir en la obtención de capital al presentarse ante los mercados usando unas normas uniformes (Gannon, 2010).

En un estudio realizado por “*Internacional Federation of Accountants*” y citado por el American Institute of CPA's, se encontró que la mayoría de los líderes de contabilidad en el mundo están de acuerdo en que solo debe existir una organización que promulgue normas de contabilidad de alta calidad global. Incluso la FASB (2012) ha expresado que los usuarios estarían mejor servidos si se logra esto. Solo de esta manera se puede asegurar que la información que reciben los usuarios reúne las cualidades y características necesarias (FASB, 2012).

La Junta de Normas de Contabilidad Financiera (FASB por sus siglas en inglés) y la Comisión de Cambios y Valores (SEC, por sus siglas en inglés), suscriben la misma necesidad condicionada a que las normas uniformes que se promulguen sean de la más alta calidad. Este reclamo de alta calidad ocasiona que los representantes de la Junta de Normas de Contabilidad Internacional (IASB por sus siglas en inglés) y los líderes europeos piensen que para lograr la calidad que reclaman la FASB y la SEC será necesario cambiar de una base de principios a una de reglas y normas como las que existen en Estados Unidos de América (Cohn, 2012).

## REVISIÓN DE LITERATURA

Los estudios encontrados sobre este tema comienzan a partir de 2008, ese año la Comisión de Cambios y Valores (SEC por sus siglas en inglés) hace una convocatoria pública para recibir reacciones a la posibilidad de permitir el uso de las normas internacionales de información financiera (NIIF) para las empresas de Estados Unidos de América (EUA) posterior al año 2015. En ese año KPMG en combinación con la Asociación Americana de Profesores de Contabilidad (AAA por sus siglas en inglés) realizaron una encuesta a más de 500 profesores para conocer qué acciones se estaban tomando en las universidades para familiarizar a los estudiantes con las NIIF. Los resultados indicaron que el 62% de los profesores no habían realizado acciones significativas para incorporar la discusión sobre las NIIF en sus cursos (KPMG-AAA, 2008; Shinn, 2009; Bradshaw, Ciesielki, Gordon, Hodder y Hopkins, 2010). Un 32% respondió que esperaban que para el 2011 los estudiantes estuvieran más preparados sobre el asunto. Esto viene acompañado de que es a partir de 2011 que esperaban que los libros de texto de contabilidad de EUA comenzaran a incorporar temas de las NIIF (Shinn, 2009). PwC, ErnstYoung, KPMG, Deloitte y otras firmas grandes también han llevado a cabo estudios en distintas universidades de EUA y Canadá para determinar cuánta conciencia existía sobre el uso de las NIIF y cómo las universidades se estaban preparando para este cambio (PriceWaterhouseCoopers, 2012; Deloitte IFRS E-Learning, 2012). La Fundación de Caridad de PriceWaterhouseCoopers ha provisto de más de \$1 millón en donaciones a 38 propuestas dirigidas a respaldar iniciativas de profesores para incorporar las NIIF a los cursos universitarios lo que demuestra que las firmas están pensando en el desarrollo de futuros contadores con conocimientos sobre las NIIF (PriceWaterhouseCoopers, 2012). En la investigación realizada en el 2010 por Moqbel y Bakay se formularon tres preguntas de investigación:

1. ¿Existen diferencias de percepción entre académicos y practicantes al evaluar si EUA está listo para usar las NIIF?
2. ¿Existen diferencias entre las personas más familiarizadas con la convergencia y aquellos no familiarizados, con respecto a las consecuencias severas que tendrá la posible adopción de las NIIF?
3. ¿Existen diferencias entre practicantes y académicos relacionados al plan de transición hacia el uso de las NIIF?

Para contestar estas preguntas Moqbel y Bakay (2010) adaptaron algunas de las preguntas de una investigación realizada por Rezae, Smith y Szendi (2010). El cuestionario se distribuyó por correos electrónicos a estudiantes de contabilidad sub-graduados, graduados y practicantes de contabilidad y finanzas egresados de la Universidad Internacional Texas A&M. El cuestionario de los autores contiene 4 secciones, la primera recoge información demográfica, las otras secciones están relacionadas a las preguntas de investigación. Moqbel y Bakay usaron una prueba t ("t test") para examinar las respuestas.

Se obtuvieron 28 respuestas de la academia y 35 de profesionales practicantes. Menos de la mitad respondieron estar familiarizados con las NIIF con una media de 2.43 para los académicos y 2.40 para los practicantes basados en una escala Likert de 5 puntos (1 para no familiarizados y 5 como familiarizados). La diferencia en resultados de la academia y los practicantes no fue significativa.

Los resultados del estudio reflejan que los participantes no estaban familiarizados con las NIIF. Para la pregunta 2, también, se utilizó una escala Likert de cinco puntos. Los autores concluyen que existe una diferencia significativa entre los que están familiarizados y los no familiarizados con respecto a las consecuencias severas de la convergencia. Para la pregunta 3 relacionada al plan para preparar a los usuarios con el uso de las NIIF, las respuestas también están divididas entre los que están familiarizados con las NIIF y los que no lo están. Para aquellos

familiarizados, el 80% entiende que el plan debe ser preparar a los inversionistas para entender las NIIF. Para los no familiarizados, el resultado fue de 50%. Los autores concluyen que no hay diferencia significativa en la percepción del plan para prepararse para el uso de las NIIF ya que las otras preguntas vinculadas al plan tienen resultados estadísticamente similares. Rezaee, Smith y Szendi (2010) realizaron un estudio más largo, complejo y con un número mayor de participantes. Las preguntas del estudio son las siguientes:

1. ¿Existirán diferencias en las perspectivas de practicantes y académicos relacionadas a las consecuencias de la convergencia hacia las NIIF?
2. ¿Pensarán los más familiarizados con las NIIF que la convergencia tendrá consecuencias más severas que aquellos que no están familiarizados?
3. ¿Crearán aquellos que piensan que la convergencia ocurrirá tarde o temprano que la misma tendrá consecuencias más severas?

Se enviaron cuestionarios por correo electrónico a 500 profesores de contabilidad y finanzas seleccionadas al azar, usando el directorio de profesores de Hasselback's 2007-2008 (Accounting Faculty Directory). Otra muestra al azar de 500 Oficiales Ejecutivos de Finanzas (CFO por sus siglas en inglés) se seleccionó utilizando una base de datos del Financial Executives International. Se recibieron 124 cuestionarios contestados de profesores y 120 de los CFO. Se aplicó el "chi-square test of independence" y se usó el análisis no paramétrico de Kruskal-Wallis.

Entre los hallazgos del estudio se resume que un promedio de 3.6, de una escala Likert de 5 puntos, del grupo de profesores, contestaron estar familiarizados con las NIIF y el resultado de los profesionales practicantes fue 2.76. La diferencia sobre la familiaridad de los profesores y los profesionales practicantes resultó estadísticamente significativo con un nivel de 0.01. En otras preguntas de la investigación no se encontraron diferencias significativas entre las respuestas de los profesores y los profesionales practicantes. Los resultados obtenidos confirman otros estudios realizados (Rezae, Smith y Szendi, 2010). En otro estudio de naturaleza empírica realizado por Djatej, Zhou, Gorton y McGonigle (2012), en el año 2012, se examina la intención de la adopción temprana de las NIIF usando cuatro constructos. Los constructos estudiados son: actitud, normas subjetivas, control percibido e intención. Los datos fueron recopilados a través de un cuestionario, 138 profesionales participaron del estudio, todos contadores profesionales, Contador Público Autorizado (CPA) de firmas grandes y regionales. Los autores concluyeron que los profesionales en el ámbito de contabilidad de EUA creen que las NIIF se van adoptar en EUA (Djatej, Duanning, Gorton y McGonigle, 2012). La mayoría de los CPA de la nación piensan que las NIIF se van a adoptar en EUA y que es necesario comenzar a prepararse para el cambio que se avecina. Además, el estudio atribuye a las normas substantivas y control de ambiente y no a presión social como lo que está influenciando a los CPA.

El Instituto Americano de Contadores Públicos Autorizados (AICPA por sus siglas en inglés) ha realizado estudios semi-anales desde septiembre de 2008 hasta noviembre de 2011 a los que ha llamado *IFRS Readiness Tracking Survey* (AICPA, 2011). El propósito del estudio era determinar el grado de familiaridad que tenían los diversos grupos. En el estudio efectuado en septiembre de 2011 se recibieron 1,241 respuestas de las cuales 1,100 se consideraron válidas, distribuidas de la siguiente manera: 163 provenientes de empresas americanas que venden valores al público, 163 de empresas americanas que no venden valores al público, 50 de empresas extranjeras que venden valores al público, 41 de empresas extranjeras que no venden valores al público, 20 de entidades sin fines de lucro o entidades educativas y 662 respuestas de practicantes de la contabilidad pública.

En esta encuesta se destacan los siguientes resultados: 1. La familiaridad con las NIIF de los diferentes grupos se ha mantenido estable desde el 2010; 2. La mayoría (54%) respalda que la SEC le permita a las empresas la opción de utilizar las NIIF; 3. Un 60% entiende que la FASB no debe hacer cambios para parecerse a las NIIF si la SEC decide aceptar las mismas; 4. Las empresas de EUA continúan posponiendo sus planes y su preparación para la adopción de las NIIF; 5. La mayoría de los encuestados respaldan la adopción de las NIIF, sin embargo señalan que primero es necesario lograr una mayor convergencia entre la Junta de Normas de Contabilidad Financiera (FASB por sus siglas en inglés) y la Junta de Normas de Contabilidad Internacional (IASB por sus siglas en inglés); 6. La mayoría de los encuestados están conscientes del acuerdo de convergencia entre la FASB y la IASB. Las encuestas del AICPA desde septiembre de 2008 hasta septiembre de 2011 también, estudian el nivel de familiaridad que tienen los grupos estudiados clasificados entre las categorías de: ninguna, básica, alguna, avanzada y experta. Las encuestas reflejan que la familiaridad básica es la respuesta de la mayoría y en términos generales no ha cambiado mucho en los últimos dos años. Los resultados del estudio del estudio del AICPA de 2008 al 2011 concluyeron que los grupos estudiados solo tenían una familiaridad básica.

La relevancia de este estudio es que permite comparar los resultados de Puerto Rico (PR) con los obtenidos por el AICPA. No se encontraron los estudios correspondientes a marzo y septiembre de 2012. En la revisión de literatura se limitó a buscar estudios que guardaran relevancia con el tema de familiaridad de los procesos de convergencia entre los distintos sectores o partes afectadas. Liu (2010) reseña que en los resultados de varias encuestas, los ejecutivos de las empresas están conscientes de la alta probabilidad de utilizar las NIIF. Sin embargo, no están tomando acción o no han desarrollado ningún plan al respecto. En relación a esto, Liu continúa diciendo que un estudio realizado por la firma de CPA, Grant Thornton, dirigida a los oficiales ejecutivos en el 2009 indicó que el 40% de estos pensaba que las NIIF nunca iban a ser requeridas, un 39% indicó que este proceso demoraría entre 3 y 5 años, un 14% entendía que el proceso tardaría 5 años o más y solo un 7% pensaba que el uso de las NIIF sería inmediato. Liu, usando otro estudio de PwC del año 2009, nos comunica que el 41% del grupo estudiado entendía que el proceso para la posible adopción de las NIIF estaba bien encaminado, el 26% opinaba que era demasiado rápido y el 18% indicó que era demasiado lento. Otro de los estudios presentados por Liu es el de Deloitte 2009, donde se preguntó a los participantes en qué fecha la SEC va a permitir el uso de las NIIF en EUA? De los encuestados, el 19% entendía que para el año 2014, el 51% para el año 2015 y un 30% para una fecha posterior.

Para lograr la transición de principios de contabilidad generalmente aceptados (GAAP por sus siglas en inglés) a NIIF es necesario identificar quienes tienen la responsabilidad de promover la misma. En estudios sobre la adopción de las NIIF mencionan que la principal responsabilidad recae en dos grupos, estos son la academia representada por profesores y estudiantes y los profesionales representados por los CPA, las firmas de CPA, los contadores, los auditores y los analistas financieros (Moqbel y Bakay, 2010.. Las cuatro firmas grandes se han destacado en promover y apoyar las iniciativas de las universidades de EUA dirigidas a la incorporación de las NIIF en sus currículos de enseñanza (Deloitte IFRS E-Learning, 2012). En las universidades de EUA se han incorporado temas de contabilidad internacional a los cursos e incluso han añadido cursos de contabilidad internacional a los currículos (Kroll 2009). Un cambio como este requiere de una transición ordenada y el éxito de la misma dependerá de que las partes antes señaladas se preparen para entender y usar las NIIF.

Una convergencia y eventual adopción de NIIF efectiva requiere que todas las partes interesadas, incluyendo las empresas, los usuarios, los ejecutivos, auditores, actuariales, contadores, CPA, analistas financieros y educadores estén familiarizados con las diferencias entre los GAAP de EUA y las NIIF (Rezae, Smit, Szendi, 2010). Sin embargo, en las investigaciones obtenidas en la revisión de literatura se demuestra que menos del 50% de los encuestados están familiarizados con las NIIF. Por la proximidad de la adopción de las NIIF en EUA es necesario examinar la situación de PR. Conocer la familiaridad de los profesores, estudiantes y profesionales practicantes nos va a permitir identificar que necesidades existen en estos grupos de manera que en PR se pueda planificar una transición ordenada hacia el uso de las NIIF.

## METODOLOGÍA

El enfoque metodológico de esta investigación es cualitativo y va dirigido a identificar el grado de familiaridad que tienen los profesores, los estudiantes y los profesionales de contabilidad con relación a (1) la convergencia entre la Junta de Normas de Contabilidad Financiera (FASB por sus siglas en inglés) y la Junta de Normas de Contabilidad Internacional (IASB por sus siglas en inglés) y (2) el uso de las normas internacionales de información financiera (NIIF) en Estados Unidos de América (EUA) y Puerto Rico (PR). Además, se identifica el plan de transición que los encuestados entienden se debe seguir y el parecer de los encuestados sobre lo que deben hacer las universidades de PR y los profesionales practicantes para encaminarse hacia la futura adopción a las NIIF. La investigación es de carácter exploratoria porque es la primera de su clase en PR. Por tal razón en lugar de presentar hipótesis del estudio, se seleccionaron 6 preguntas de investigación que identificamos con las siglas de PQ y se formula una hipótesis nula para la pregunta que consiste en no hallar significancia estadística entre las respuestas de los tres grupos. Se utilizó un cuestionario. La naturaleza de este estudio es cualitativa, el uso de números es para poder usar programas estadísticos que permitan evaluar datos. Las variables se consideran independientes y los valores discretos. Por tratarse de medidas no paramétricas el análisis apropiado es mediante el uso de medianas y la búsqueda de significancia estadística en la distribución de sus valores. Debido a que se trabajó con tres grupos independientes se utilizó la prueba Kruskal-Wallis, se realizaron pruebas para comparar las medianas de los tres grupos y determinar si existe significancia estadística. En aquellas preguntas donde las medianas presentaron distribuciones de valores estadísticamente significativos se rechazó la hipótesis nula de la pregunta y se realizó la prueba de parejas de Dunn. Las preguntas del cuestionario se identifican por las siglas CQ. En la pregunta CQ10, conocida como prueba de validación se realizó un examen a los encuestados para conocer el grado de familiaridad que tienen con el acuerdo de convergencia.

Se trató de 6 preguntas que se corrigieron para determinar cuántas respuestas eran correctas. A los resultados se les realizó prueba t de promedios para evaluar e interpretar los datos. La muestra usada en este estudio consiste de 36 profesores, 46 estudiantes y 38 profesionales practicantes. La muestra no es aleatoria y se obtuvo por conveniencia. Para contactar a profesores y profesionales se usó el correo electrónico como la primera estrategia. Para obtener la muestra de estudiantes se visitaron 3 secciones de contabilidad para estudiantes clasificados en tercer año o más. El grupo de profesionales practicantes se logró invitando a exalumnos graduados participantes en la red social conocida como *Facebook*. Entendemos que el tamaño de la muestra se asemeja a otros estudios como el de Moqbel y Bakay (2010), que ya se ha citado antes.

El cuestionario tiene 10 preguntas. Se realizó una prueba piloto con 20 estudiantes matriculados en el tercer curso de intermedia (CONT4003). Con el estudio piloto evaluamos la claridad del

instrumento y el tiempo que demoraban los participantes en contestar el mismo. El estudio piloto y la encuesta a todos los participantes se sometió a dos pruebas de validación de instrumentos conocidas como prueba-reprueba (*test re-test*) y la prueba de pares y nones. No se encontró significancia estadística en la distribución de valores para ninguna de las preguntas del instrumento, esto probó confiabilidad y consistencia del cuestionario. Todas las preguntas del cuestionario fueron cerradas. Las preguntas de la 3 a la 10 contienen sub-categorías que vamos a identificar con las siglas  $c_x$ . Además, contiene una sección final que recoge la información demográfica de los participantes. Para las primeras tres preguntas, se les pidió a los participantes indicar el grado de familiaridad que tienen con respecto a las aseveraciones y premisas que se les presentaron. Para las preguntas 4 a la 9, se les solicitó evaluar el nivel de importancia que tienen los factores, estrategias, argumentos y razones, según sea el caso en particular.

Se usó una escala de 5 puntos para las primeras 9 preguntas. En la pregunta 10 del cuestionario se les pidió a los encuestados que determinaran la etapa de convergencia de varios temas. Las preguntas CQ 2 y CQ 3 están relacionadas y solicitaron que los encuestados indicaran el nivel de familiaridad que tenían con respecto al uso de las NIIF y el nivel de familiaridad que según ellos tienen los demás grupos estudiados. De esta forma la pregunta 3 nos ayuda a ver si existe consistencia dentro del instrumento. Este trabajo examinó 6 preguntas de investigación y estudio las respuestas de los tres grupos antes mencionados. La hipótesis nula para las 6 preguntas del estudio consiste en probar que la mediana que se obtenga de la encuesta no presenta significancia estadística y se acepte como el resultado de los tres grupos. En la Tabla 1 se presenta la relación entre las preguntas del estudio (PQ) y las preguntas del cuestionario (CQ).

En la Tabla 3 se presenta el perfil de cada grupo participante. El grupo de profesores estuvo compuesto por 13 instructores, 10 catedráticos auxiliares, 5 catedráticos asociados y 8 catedráticos. En el grupo de estudiantes 9 estaban clasificados en tercer año, 23 en cuarto año y 14 en quinto año o más. En términos de los profesionales practicantes el grupo quedó distribuido en 6 contadores no CPA, 8 auditores no CPA, 12 contadores CPA y 12 auditores CPA.

Tabla 1: Relación Entre Preguntas del Estudio y Preguntas del Cuestionario

Pregunta del Estudio (PQ)	Pregunta del Cuestionario
PQ1 ¿Cuál es el nivel de familiaridad que tienen los profesores, estudiantes y profesionales de PR con el acuerdo de convergencia?	CQ1 Indique el nivel de familiaridad que tiene con relación al acuerdo de convergencia entre la FASB y la IASB.
PQ2 ¿Cuál es el nivel de familiaridad que tienen los profesores, estudiantes y profesionales de PR con las normas internacionales de información financiera?	CQ10 Usando la siguiente lista de temas seleccione los que están siendo objetos de proceso de convergencia entre la FASB y la IASB.
PQ3 ¿Cuál es, según los participantes de este estudio, el plan apropiado y necesario para lograr la transición de las empresas de EUA del uso de los principios de contabilidad de aceptación general al uso de las normas internacionales de información financiera?	CQ2 Indique el nivel de familiaridad que tiene con relación al uso de las normas internacionales de información financiera.
PQ4 ¿Qué deben hacer, según los encuestados, las universidades para preparar a los futuros profesionales en el uso y entendimiento de las normas internacionales de información financiera?	CQ3 Indique el nivel de familiaridad con las NIIF que usted entiende posee cada uno de los siguientes grupos.
PQ5 ¿Qué deben hacer, según los encuestados, los profesionales practicantes para prepararse en el uso y entendimiento de las normas internacionales de información financiera?	CQ5 Indique el nivel de importancia de cada una de las siguientes estrategias para lograr un plan apropiado de transición de manera que las empresas de EUA puedan adoptar las NIIF.
	CQ7 Clasifique las estrategias que las universidades deben implantar para preparar a los futuros profesionales en el uso y entendimiento de las NIIF.
	CQ8 Clasifique las estrategias que los profesionales practicantes deben seguir para prepararse para el uso y entendimiento de las NIIF.

PQ6 ¿Qué factores, según los encuestados, debe considerar EUA a la hora de decidir si adopta las normas internacionales de información financiera?

CQ4 Indique el nivel de importancia de cada uno de los siguientes factores para facilitar la convergencia entre las NIIF y los principios de contabilidad generalmente aceptados de EUA.

CQ6 Indique el nivel de importancia de cada uno de los siguientes argumentos para justificar la adopción de las NIIF.

CQ9 Clasifique las razones que tiene EUA para interesarse en el uso de las NIIF.

La Tabla 2 Resume La Composición De La Muestra De Este Estudio.

Tabla 2: Composición de la Muestra

Muestra Inicial	Cuestionarios administrados	310	100%		
Participantes en la muestra	Total de cuestionarios recibidos	126	41%		
	Menos :				
	Cuestionarios incompletos	(6)	2%		
	Total cuestionarios validos	120	39%		
Participantes por grupo y Género	<b>Grupo</b>	<b>Total</b>	<b>%</b>	<b>Femenino</b>	<b>Masculino</b>
	Profesores	36	30	21	15
	Estudiantes	46	38	20	26
	Profesionales	38	32	11	27
	Total	120	100	52	68
	Porcentaje por Género			43%	57%

## RESULTADOS Y CONCLUSIONES

En la Tabla 4 se presentan las estadísticas descriptivas de todas las preguntas del cuestionario y su relación con las subcategorías. Estas están identificadas como CQ1, CQ2, CQ3, CQ4, CQ5, CQ6, CQ7, CQ8 y CQ9 con sus respectivas subcategorías identificadas con c<sub>x</sub>.

Tabla 4: Perfil de Cada Grupo

Profesores	Rango	Participantes	Porcentaje %
	Instructor	13	36
	Catedrático auxiliar	10	28
	Catedrático asociado	5	14
	Catedrático	8	22
	Total	36	100
Estudiantes	<b>Año de Estudio</b>	<b>Cantidad</b>	<b>Porcentaje %</b>
	Tercer año	9	20
	Cuarto año	23	50
	Quinto año o más	14	30
	Total	46	100
Profesionales	<b>Categoría</b>	<b>Cantidad</b>	<b>Porcentaje %</b>
	Contador no CPA	6	15
	Auditor no CPA	8	21
	Contador CPA	12	32
	Auditor CPA	12	32
	Total	38	100

Tabla 4: Estadística Descriptiva de la Muestra y su Relación con las Subcategorías (120 Participantes)

Sub-categorías	Mínimo	Máximo	Mediana	Promedio	Desviación Estándar
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CQ1, c <sub>1</sub>	Nivel de familiaridad con acuerdo de convergencia entre el FASB y IASB <sup>a</sup>	1	5	4	3.45	1.020
CQ2, c <sub>2</sub>	Nivel de familiaridad con las NIIF <sup>a</sup>	1	5	3	3.29	.938
CQ3, c <sub>3</sub>	Profesores <sup>a</sup>	2	5	4	4.05	.787
CQ3, c <sub>4</sub>	Estudiantes <sup>a</sup>	1	5	3	2.70	.913
CQ3, c <sub>5</sub>	Contador no CPAs <sup>a</sup>	1	5	3	2.54	1.003
CQ3, c <sub>6</sub>	CPAs <sup>a</sup>	1	5	4	3.56	.942
CQ3, c <sub>7</sub>	Auditor no CPA <sup>a</sup>	1	5	3	3.08	1.127
CQ3, c <sub>8</sub>	Auditor CPA <sup>a</sup>	1	5	4	3.91	.944
CQ4, c <sub>9</sub>	Costo inicial <sup>b</sup>	1	5	4	3.78	.948
CQ4, c <sub>10</sub>	Cambios normas auditoría <sup>b</sup>	1	5	4	4.10	.911
CQ4, c <sub>11</sub>	Incertidumbre uso NIIF <sup>b</sup>	1	5	4	3.79	.969
CQ4, c <sub>12</sub>	Participación proceso <sup>b</sup>	1	5	4	3.74	.912
CQ4, c <sub>13</sub>	Plan de transición <sup>b</sup>	2	5	4	4.27	.775
CQ4, c <sub>14</sub>	Educación, entendimiento y experiencia <sup>b</sup>	2	5	5	4.42	.784
CQ4, c <sub>15</sub>	Discusión, libros texto de contabilidad <sup>b</sup>	2	5	4	4.27	.807
CQ4, c <sub>16</sub>	Discusión, libros auditoría <sup>b</sup>	2	5	4	4.15	.876
CQ5, c <sub>17</sub>	Adiestrar inversionistas <sup>b</sup>	1	5	3.5	3.63	.978
CQ5, c <sub>18</sub>	Adiestrar auditores <sup>b</sup>	3	5	5	4.66	.587
CQ5, c <sub>19</sub>	Adiestrar gerencia <sup>b</sup>	1	5	5	4.32	.879
CQ5, c <sub>20</sub>	Contratar consultores y especialistas <sup>b</sup>	2	5	4	4.18	.847
CQ5, c <sub>21</sub>	Alcanzar nivel de convergencia <sup>b</sup>	1	5	5	4.68	.722
CQ6, c <sub>22</sub>	Reducir barreras en competencia por recursos de capital global <sup>b</sup>	1	5	4	3.64	1.019
CQ6, c <sub>23</sub>	Promover comparabilidad <sup>b</sup>	2	5	5	4.62	.663
CQ6, c <sub>24</sub>	NIIF lenguaje global <sup>b</sup>	2	5	4	4.15	.885
CQ6, c <sub>25</sub>	Promover juicio profesional en la gerencia y auditores <sup>b</sup>	1	5	4	3.61	1.007
CQ6, c <sub>26</sub>	Uniformidad informes de auditoría <sup>b</sup>	2	5	5	4.55	.732
CQ7, c <sub>27</sub>	Curso de contabilidad internacional <sup>b</sup>	1	5	5	4.42	.875
CQ7, c <sub>28</sub>	Discusión temas contabilidad internacional <sup>b</sup>	2	5	5	4.31	.868
CQ7, c <sub>29</sub>	Seminarios y conferencias a estudiantes sobre las NIIF <sup>b</sup>	2	5	4	4.08	.856
CQ7, c <sub>30</sub>	Libros de texto que presenten temas NIIF <sup>b</sup>	2	5	5	4.43	.774
CQ7, c <sub>31</sub>	Requerir a estudiantes investigaciones sobre el uso de las NIIF <sup>b</sup>	1	5	4	3.83	.958
CQ8, c <sub>32</sub>	Seminarios talleres <sup>b</sup>	2	5	5	4.47	.733
CQ8, c <sub>33</sub>	Lecturas de artículos relacionados a NIIF <sup>b</sup>	2	5	4	4.13	.809
CQ8, c <sub>34</sub>	Matricular curso contabilidad internacional <sup>b</sup>	1	5	3	3.23	1.212
CQ8, c <sub>35</sub>	Esperar termine proceso convergencia <sup>b</sup>	1	5	2	2.14	1.087
CQ9, c <sub>36</sub>	Promover comparabilidad <sup>b</sup>	2	5	5	4.47	.744
CQ9, c <sub>37</sub>	Fortalecer mercado de capital nacional <sup>b</sup>	1	5	4	3.75	1.079
CQ9, c <sub>38</sub>	Fortalecer mercado de capital global <sup>b</sup>	1	5	4	4.03	1.028
CQ9, c <sub>39</sub>	Promover competitividad <sup>b</sup>	1	5	4	3.96	1.016
CQ9, c <sub>40</sub>	Atender reclamo usuarios <sup>b</sup>	1	5	4	3.74	.966
CQ9, c <sub>41</sub>	Participar proceso establecer las NIIF <sup>b</sup>	1	5	4	3.84	1.085
CQ9, c <sub>42</sub>	Responder a presiones políticas <sup>b</sup>	1	5	3	3.22	1.197

CQ 1-3; 1= no familiarizado; 2= poco familiarizado; 3= neutral; 4= familiarizado; 5= muy familiarizado

CQ 4-9; 1= no importante; 2= poco importante; 3= importante; 4= muy importante; 5= sumamente importante

<sup>a</sup> Se refiere a familiaridad. <sup>b</sup> Se refiere a factores

## Resultado Pregunta De Investigacion PQ1

La mediana que se obtuvo de la muestra completa para esta pregunta fue de 4 usando la pregunta del cuestionario identificada como CQ1. Esto significa que los encuestados están familiarizados. Al usar la prueba Kruskal-Wallis se determinó que existía significancia estadística entre los tres grupos estudiados y por lo tanto se rechazó la hipótesis nula para esta pregunta. Esto quiere decir que el resultado no es estadísticamente similar para los tres grupos estudiados. Se realizó la prueba de Dunn para parejas. El resultado fue que el grado de familiaridad de los profesores que participaron en el estudio es mayor al de los estudiantes y profesionales practicantes de contabilidad que contestaron la encuesta. La Tabla 5 presenta los resultados de la PQ1 usando la pregunta del cuestionario CQ1.

Tabla 5: Prueba de Dunn Para Parejas con Relación a Convergencia

Pareja	Prueba estadística	Error estándar	Prueba Estadística Estándar	Valor P
Profesores/Estudiantes	20.248	7.322	2.765	0.017**
Profesores/Profesionales	26.455	7.653	3.457	0.002***

Estudiantes/Profesionales	6.207	7.213	0.861	1.000 <sup>ns</sup>
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\*\*\*  $\alpha = 0.01$  \*\*  $\alpha = 0.05$  ns = no significativa

Al usar los resultados de la pregunta del cuestionario CQ10, conocida como prueba de validación, encontramos que efectivamente el resultado de los tres grupos no es similar estadísticamente. La Tabla 6 presenta los resultados de los tres grupos, promedios y porcentaje de acierto. Además, se presentan los resultados individuales para cada grupo.

Tabla 6: Resultados PQ1, CQ10, Familiaridad con la Convergencia (Prueba de Validación)

Sujetos	Promedio	% correcto	Mínimo	Máximo	Desviación estándar	Varianza
Todos (120)	3.20	53	0	6	2.02	4.22
36 Profesores	4.11	69	0	6	1.72	2.96
48 Estudiantes	2.67	45	0	6	1.87	3.51
38 Profesionales	2.97	50	0	6	2.19	4.78

Para determinar si el promedio de los tres grupos es similar, realizamos una prueba t. Como demuestra la Tabla 7, los promedios no son iguales y existe significancia estadística en los valores, por lo que se rechaza la hipótesis nula en términos de promedio.

#### Resultado Pregunta De Investigacion PQ2

La prueba Kruskal-Wallis aplicada al resultado de la pregunta del cuestionario CQ2, nos demuestra que la distribución de valores de mediana de los tres grupos no es igual debido a que una pareja presenta significancia estadística en la distribución de sus valores con respecto a los demás. En la Tabla 8 se presentan los resultados obtenidos y un análisis de parejas usando la prueba de Dunn.

De los resultados obtenidos se destaca que los profesores presentan una mediana de 4 lo que significa que están familiarizados con las NIIF. Los otros dos grupos presentan medianas de 3, lo que significa que no están familiarizados con las NIIF. La pregunta del cuestionario identificada como CQ3 está relacionada a la CQ2 que acabamos de evaluar. En esta ocasión se les pidió a los encuestados otorgaran el grado de familiaridad correspondiente a cada grupo. Se destaca que la mediana correspondiente a los profesores en la pregunta de cuestionario CQ2, fue de 4 y la percepción de todos los grupos con relación a la familiaridad de los profesores con las NIIF, en la pregunta CQ3, también es 4. Este resultado valida la conclusión de la pregunta CQ2. Usando la prueba Kruskal-Wallis encontramos que la mediana de los tres grupos no es similar al evaluar el nivel de familiaridad de los profesores, contadores no CPAs, contadores CPAs, auditor no CPAs y auditores CPAs. Esto es cierto para todo valor  $\alpha = (0.1; 0.05; 0.01)$ . Debido a esto, se rechaza la hipótesis nula. La evaluación de los tres grupos con respecto a de la familiaridad de los estudiantes con las NIIF presenta una distribución de valores que no es estadísticamente significativa. En el caso de los profesionales los auditores CPAs presentan una mediana de 4 y así los perciben los demás participantes del estudio.

Tabla 7: Prueba de T con Relación a Convergencia (Examen de Validación) Pregunta CQ10

<b>c43 Arrendamientos</b>				
-Profesores/Estudiantes	<b>43.304</b>	<b>6.918</b>	<b>6.260</b>	<b>0.000***</b>
-Profesores/Profesionales	36.000	7.230	4.979	0.000***
-Estudiantes/Profesionales	-7.304	6.815	-1.072	0.851 <sup>NS</sup>
<b>c44 Consolidaciones</b>				
-Profesores/Estudiantes	42.851	6.880	6.228	0.000***

-Profesores/Profesionales	35.803	7.191	4.979	0.000***
-Estudiantes/Profesionales	-7.047	6.778	-1.040	0.895 <sup>NS</sup>
c45 Instrumentos financieros				
-Profesores/Estudiantes	37.941	6.713	5.652	0.000***
-Profesores/Profesionales	32.010	7.016	4.562	0.000***
-Estudiantes/Profesionales	-5.932	6.613	-0.897	1.000 <sup>NS</sup>
c46 Valoración inventario				
-Profesores/Estudiantes	21.725	6.568	3.308	0.003***
-Profesores/Profesionales	26.070	6.864	3.798	0.000***
-Estudiantes/Profesionales	4.346	6.470	0.672	1.000 <sup>NS</sup>
c47 Marco conceptual				
-Profesores/Estudiantes	30.144	6.561	4.595	0.000***
-Profesores/Profesionales	30.659	6.857	4.471	0.000***
-Estudiantes/Profesionales	0.514	6.463	0.080	1.000 <sup>NS</sup>
c48 Efectivo				
-Profesores/Estudiantes	41.573	7.386	5.628	0.000***
-Profesores/Profesionales	28.578	7.720	3.702	0.001***
-Estudiantes/Profesionales	-12.995	7.276	-1.786	0.222 <sup>NS</sup>

\*\*\*Tiene significancia estadística usando un valor  $\alpha = 0.01$  <sup>NS</sup> = no significativa

Tabla 8: Prueba de Dunn Para Todos los Grupos con Relación a PQ2

Parejas	Prueba estadística	Error estándar	Prueba Estadística Estándar	Valor P
Profesores/estudiantes	19.315	7.330	2.635	0.025**
Profesores/profesionales	28.242	7.661	3.686	0.001***
Estudiantes/profesionales	8.927	7.221	1.236	0.649 <sup>NS</sup>

\*\*\* $\alpha = 0.01$  \*\* $\alpha = 0.05$  <sup>NS</sup> = no significativa

### Resultado Pregunta De Investigacion PQ3

La Tabla 9 resume los resultados de esta pregunta que fue contestada mediante la pregunta del cuestionario CQ5. Las respuestas obtenidas de los tres grupos encuestados no presentaron diferencias estadísticas significativas y se acepta la hipótesis nula para la pregunta.

### Resultado pregunta de investigacion PQ4

El resultado de las cinco estrategias preguntadas en la CQ7, usando un intervalo de confianza  $\alpha = 0.01$  no presento significancia estadística por lo que se acepta la hipótesis nula y se concluye que excepto el uso de libros que presentan temas de contabilidad internacional que es considerado muy importante, las otras cuatro estrategias se consideran sumamente importante.

### Resultado Pregunta de Investigacion PQ5

La Tabla 10 presente un resumen del resultado obtenido de la pregunta de investigacion PQ5 y la pregunta del cuestionario CQ8. En esta ocasión se rechaza la hipótesis nula de la pregunta en dos sub-categorías y se acepta la hipótesis nula en las otras dos.

Tabla 9: Estrategias Que las Universidades Deben Implementar Para Preparar a los Futuros Profesionales en el uso Y Entendimiento de las NIIF

Estrategias	Mínimo	Máximo	Mediana	Promedio	Valor P
CQ5, c <sub>17</sub> Adiestrar inversionistas	1	5	3.5	3.63	0.978 <sup>NS</sup>
CQ5, c <sub>18</sub> Adiestrar auditores	3	5	5	4.66	0.587 <sup>NS</sup>

CQ5, c <sub>19</sub> Adiestrar la gerencia	1	5	5	4.32	0.879 <sup>NS</sup>
CQ5, c <sub>20</sub> Contratar consultores y especialistas en el uso e implantación de las NIIF	2	5	4	4.18	0.8470 <sup>NS</sup>
CQ5, c <sub>21</sub> Alcanzar un nivel de convergencia efectivo entre la FASB y IASB	1	5	5	4.68	0.722 <sup>NS</sup>

c<sub>x</sub> = Subcategoría pregunta del cuestionario CQ7 1=no importante; 2=poco importante; 3=importante; 4=muy importante y 5=sumamente importante <sup>NS</sup>= no significativa

Tabla 10: Estrategias Que los Profesionales Deben Seguir Para Prepararse Para el Uso y Entendimiento de las NIIF

Estrategias	Mínimo	Máximo	Mediana	Promedio	Valor p
CQ8, c <sub>32</sub> Asistir a talleres y seminarios dirigidos a la familiaridad y uso de las NIIF	2	5	5	4.47	0.005***
CQ8, c <sub>33</sub> Realizar lecturas relacionadas a temas de las NIIF	2	5	4	4.13	0.161 <sup>NS</sup>
CQ8, c <sub>34</sub> Matricularse en curso de contabilidad de una universidad	1	5	3	3.23	0.000***
CQ8, c <sub>35</sub> Esperar hasta que se termine el proceso de convergencia entre la FASB y la IASB	1	5	2	2.14	0.497 <sup>NS</sup>

c<sub>x</sub> = Subcategoría pregunta del cuestionario CQ8 1=no importante; 2=poco importante; 3=importante; 4=muy importante y 5=sumamente importante \*\*\*  $\alpha=0.01$  <sup>NS</sup>= no significativa

### Resultado Pregunta de Investigacion PQ6

El primer grupo de respuestas que se analizó fue el que se identifica con la pregunta de cuestionario CQ4. En un nivel de confianza  $\alpha=0.01$ , la prueba de Kruskal-Wallis nos indica que no existe significancia estadística para ninguno de ellos. Solo el factor conocido como: Nivel de educación, entendimiento y experiencia que fue catalogado como sumamente importante, los otros siete factores fueron considerados como muy importantes. Continuando nuestra discusión y análisis, evaluamos ahora la pregunta del cuestionario identificada como CQ6 y sus sub-categorías c<sub>22</sub> a c<sub>26</sub>. La prueba Kruskal-Wallis cuando usamos un valor  $\alpha=0.01$  nos indica que no existe significancia estadística para ninguna de las sub-categorías. En esta ocasión los argumentos: Promover comparabilidad y uniformidad en los informes de auditoría fueron considerados como sumamente importante, los otros factores fueron clasificados como muy importantes. Para finalizar la parte relacionada a la pregunta de estudio PQ6, examinamos la pregunta del cuestionario CQ9 y sus sub-categorías que van de la c<sub>36</sub> a la c<sub>42</sub>. La Tabla 11 nos resume los resultados obtenidos.

Para analizar los resultados obtenidos usamos la prueba Kruskal-Wallis con un intervalo de confianza  $\alpha=0.01$ . Encontramos que las primeras 6 sub-categorías tienen una distribución de valores que se considera no significativa. Para esas primeras seis razones podemos aceptar la hipótesis nula antes mencionada. Sin embargo, si usamos valores  $\alpha$ , menos confiables, encontramos que existe significancia estadística para cuatro de las de las 7 razones evaluadas.

Tabla 11: Razones Que Tiene EUA Para Interesarse en el Uso de las NIIF

Razones	Mínimo	Máximo	Mediana	Promedio	Valor p
CQ9, c <sub>36</sub> Promover comparabilidad	2	5	5	4.47	0.947 <sup>NS</sup>
CQ9, c <sub>37</sub> Fortalecer mercado de capital nacional	1	5	4	3.75	0.153 <sup>NS</sup>
CQ9, c <sub>38</sub> Fortalecer mercado de capital global	1	5	4	4.03	0.021**
CQ9, c <sub>39</sub> Promover competitividad	1	5	4	3.96	0.053*
CQ9, c <sub>40</sub> Atender reclamo usuarios	1	5	4	3.74	0.470 <sup>NS</sup>
CQ9, c <sub>41</sub> Participar proceso establecer las NIIF	1	5	4	3.84	0.044**

CQ9, c <sub>42</sub> Responder a presiones políticas	1	5	3	3.22	0.001***
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c<sub>x</sub> = Subcategoría pregunta del cuestionario CQ9 1=no importante; 2=poco importante; 3=importante; 4=muy importante y 5=sumamente importante \*α= 0.1 \*\*α= 0.05 \*\*\*α= 0.01 <sup>NS</sup>= no significativa

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## LA DISCREPANCIA FISCAL Y SU CONSECUENCIA COMO DELITO FISCAL EN MÉXICO

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### RESUMEN

*En la presente investigación se analiza el tema de la discrepancia fiscal en México y su consecuencia de convertirse en delito fiscal. El Estado Mexicano ha establecido mecanismos tales como la discrepancia fiscal para la comprobación del correcto cumplimiento de las obligaciones fiscales. La discrepancia fiscal se ha convertido en un procedimiento que consiste en revisar a aquellas personas físicas que en un ejercicio fiscal realizaron erogaciones superiores a los ingresos declarados en ese mismo periodo. El objetivo de este trabajo es analizar a la discrepancia fiscal en México, se revisará antecedentes, marco jurídico, las herramientas de la autoridad y su consecuencia como delito fiscal. Este es un estudio de corte cualitativo de tipo documental que analiza la normatividad vigente, así como los informes tributarios presentados por el Servicio de Administración Tributario. El resultado de esta investigación es una reflexión de la discrepancia fiscal, su impacto en la recaudación y el peligro de convertirse como delito fiscal.*

**PALABRAS CLAVES:** Impuesto, ingresos, recaudación, delito fiscal

## THE TAX DISCREPANCY AND ITS CONSEQUENCE AS TAX FRAUD IN MEXICO

### ABSTRACT

*This research analyses the topic about tax discrepancy in Mexico and its consequence when it becomes a tax fraud. The Mexican Government has established some mechanisms, such as: the tax discrepancy to verify the correct compliance with tax obligations. The tax discrepancy has become a procedure that involves reviewing those individuals who have made expenditures exceeding revenues in the same period in a fiscal year. The objective of this study is to analyze the tax discrepancy in Mexico. We will review background, legal framework, tools of the authority and its consequence as a tax fraud. This is a study of qualitative cutting of documentary type that analyzes the current regulations, as well as tax reports submitted by the Tax Administration Service. The result of this research is a reflection of the tax discrepancy, its impact on tax collection and the danger of becoming a tax fraud.*

**JEL:** H20, H26, K34

**KEYWORDS:** Tax, revenue, tax collection, tax offenses

## INTRODUCCIÓN

De acuerdo con Flores Zavala en su obra *Finanzas Públicas Mexicanas* (1981, p.3), el hecho de convivir en colectividad, nacen ciertas necesidades que por tener características propias es difícil que el hombre las pueda suplir aisladamente. Las necesidades colectivas pueden ser satisfechas en ocasiones por la actividad particular actuando libremente, pero en la mayor parte de los casos ocurre que no interesa a la iniciativa privada la satisfacción de estas necesidades, o bien que interesándole no le resulta costeable, o bien, porque es más conveniente para la colectividad que esa necesidad se encomiende a organismos públicos, dando así nacimiento a los servicios públicos que constituyen la parte más importante de las obligaciones del Estado, dando como consecuencia que el Estado tenga la atribución del cobro de contribuciones y con esto a los ingresos públicos. Por lo cual desde los años 80, las autoridades fiscales en México han buscado mecanismos para detectar la omisión de ingresos y por lo tanto aumentar su recaudación y a lo largo de estos treinta y tres años han eficientado estos mecanismos. A partir de 1979 se ha buscado una nueva metodología para la revisión del contribuyente en función a los signos externos de riqueza, por lo que se creó un mecanismo aparentemente no agresivo, pero que coadyuvara a la recaudación.

De ahí que nace la discrepancia fiscal. El tema de discrepancia fiscal es de gran trascendencia y de profundo interés, ya que a pesar que se encuentra contemplado como una realidad dentro la legislación tributaria mexicana a través de la ley del Impuesto Sobre la Renta y que solo se aplica a personas físicas, hasta el momento no se han evaluado los efectos financieros y penales para las Personas Físicas, únicos sujetos de esta medida, y los beneficios para el Estado como fuente de recaudación. Para la autoridad fiscal existe un foco rojo en las personas físicas que llama su atención, y es el relativo a aquellos signos externos de riqueza que presuponen que al contribuyente persona física cuenta con recursos suficientes para darse tal calidad de vida, ante tal situación no existe problema alguno cuando el origen de dichos recursos ha cubierto las contribuciones respectivas, caso contrario reviste un papel fundamental dicha figura de la discrepancia fiscal.

## REVISIÓN LITERARIA

La palabra discrepancia significa: “Diferencia o desigualdad que resulta de la comparación de las cosas entre sí” (Real Academia Española). Por lo que Discrepancia Fiscal es la diferencia que existe entre los datos que manifiestan los contribuyentes y la información con que cuenta la autoridad fiscal al momento de comparar los ingresos y los egresos que el contribuyente declaró o no declaró. En México actualmente este tema se encuentra regulado en el artículo 107 de la Ley del Impuesto Sobre la Renta vigente en el 2013, donde se contempla el procedimiento que debe seguir la autoridad cuando se encuentre con el supuesto de discrepancia fiscal; esta facultad es aplicable únicamente a personas físicas, ya que las personas morales no están contempladas en este procedimiento, dicho artículo dice lo siguiente: “Cuando una persona física, aun cuando no esté inscrita en el registro federal de contribuyentes realice en un año de calendario erogaciones superiores a los ingresos que hubiere declarado en ese mismo año, las autoridades fiscales procederán como sigue:

Comprobarán el monto de las erogaciones y la discrepancia con la declaración del contribuyente y darán a conocer a éste el resultado de dicha comprobación. El contribuyente, en un plazo de quince días, informará por escrito a las autoridades fiscales las razones que tuviera para inconformarse o el origen que explique la discrepancia y ofrecerá las pruebas que estimare convenientes, las que acompañara a su escrito o rendirá a más tardar dentro de los veinte días

siguientes. en ningún caso los plazos para presentar el escrito y las pruebas señaladas excederán, en su conjunto, de treinta y cinco días.

Si no se formula inconformidad o no se prueba el origen de la discrepancia, ésta se estimará ingreso de los señalados en el Capítulo IX de este Título en el año de que se trate y se formulará la liquidación respectiva.”

En el sentido estricto de la ley del Impuesto Sobre la Renta (ISR), si una persona física eroga más de lo que declara por concepto de ingresos en un ejercicio fiscal, significa que probablemente está obteniendo recursos que no considera en la determinación de su base para el pago anual de su Impuesto Sobre la Renta (ISR), por lo tanto, incurre en una discrepancia fiscal.

### Personas Físicas Que Incurren en Discrepancia Fiscal

El artículo 107, primer párrafo y fracción I, de la ley del Impuesto Sobre la Renta vigente en el 2013 en México dispone que “cuando una persona física, aun cuando no esté inscrita en el Registro Federal de Contribuyentes, realice en un año de calendario erogaciones superiores a los ingresos que hubiere declarado en ese mismo año, las autoridades fiscales procederán como sigue:..” De lo anterior mencionado podemos observar que el concepto de ingreso es un elemento sustantivo para la determinación de la base, por lo que procederemos a su análisis.

### El Ingreso, Elemento Sustantivo Para la Determinación de la Base

De conformidad con el Consejo Mexicano para la Investigación y Desarrollo de Normas de Información Financiera (CINIF) en la NIF A-5 numeral 43 se define: “Un ingreso es el incremento de los activos o el decremento de los pasivos de una entidad, durante un periodo contable, con un impacto favorable en la utilidad o pérdida neta o, en su caso, en el cambio neto en el patrimonio contable y, consecuentemente, en el capital ganado o patrimonio contable, respectivamente”. Por lo tanto el ingreso es toda cantidad que produzca una modificación positiva neta en el patrimonio de una persona física. La parte medular de la discrepancia fiscal es la hipótesis de realizar erogaciones superiores a los ingresos declarados, aquí el legislador previo un supuesto, que le da potestad a la autoridad fiscal a determinar una diferencia con el contribuyente. Se presume y estima que el contribuyente está evadiendo el pago de impuestos al no declarar la totalidad de sus ingresos. Es común desafortunadamente que algunas personas físicas realicen sus actividades sin expedir comprobante alguno u obtengan algún ingreso que no estén manifestando (tales como donativos, herencias, premios, etc.) por lo que sus gastos son mayores a los ingresos reportados ante el fisco, por lo que el Servicio de Administración Tributaria (SAT) podrá revisar si existe o no una discrepancia fiscal.

### Ejemplo de Determinación de Discrepancia Fiscal

En la Tabla 1: se ilustra un Caso de Discrepancia Fiscal, con Información Pertenciente a un Ejercicio Fiscal, de un Contribuyente Persona Física

Tabla 1: Ejemplo de Determinación de Discrepancia Fiscal

Concepto	Ingreso	Erogaciones
Ingresos declarados	\$1,100,000.00	
Depósitos bancarios		\$350,000.00
Adquisición de un vehículo		\$400,000.00
Otras deducciones		\$ 100,000.00

Inversiones financieras		\$850,000.00
Total ingresos	\$1,100,000.00	
Total erogaciones		\$1,700,000.00
Discrepancia fiscal	\$600,000.00	

En el ejemplo se muestra que el contribuyente obtuvo erogaciones mayores a los ingresos declarados, en cantidad de \$ 600,000.00, determinando así una posible discrepancia fiscal al encontrarse en la hipótesis normativa de ley, ya que sus erogaciones fueron superiores a los ingresos declarados.

## METODOLOGÍA

El diseño de la investigación fue no experimental de corte cualitativo del tipo descriptiva que aplica métodos de investigación documental, tomando referencias de libros, revistas y consultas en la red internet, para afianzar datos e información sobre el tema investigado; así como también, sitios y/o bases de datos oficiales

## RESULTADOS

### La Discrepancia Fiscal Como Delito de Defraudación Fiscal

El Código Fiscal de la Federación mexicano en su fracción I del artículo 109, que dispone “Sera sancionado con las mismas penas del delito de defraudación fiscal: aquella persona física que perciba dividendos, honorarios o en general preste un servicio personal independiente o esté dedicada a actividades empresariales, cuando realice en un ejercicio fiscal erogaciones superiores a los ingresos declarados en el propio ejercicio y no compruebe a la autoridad fiscal el origen de la discrepancia en los plazos y conforme al procedimiento señalado en la Ley del Impuesto Sobre la Renta”. El artículo 108, párrafos cuarto y quinto, del Código Fiscal de la Federación 2013 encontramos que el delito de defraudación fiscal se sancionará con las pena de prisión. Por cual es sumamente preocupante que un descuido por no manifestar correctamente nuestros ingresos, trae como consecuencia caer en el supuesto de delito fiscal.

### Herramientas y Medios de la Autoridad Para Obtener Información

El Estado a través del SAT puede obtener información por diversos medios como los siguientes: Declaraciones informativas de notarios, clientes y proveedores, pagos y retenciones de personas físicas, operaciones celebradas en efectivo superiores a \$100,000.00, padrón del IMSS, INFONAVIT, información del sistema financiero mexicano, Registro Público de la Propiedad y Comercio, instituciones bancarias, a través del impuesto a los depósitos en efectivo recaudado, entre otras.

## CONCLUSIONES

El tema de discrepancia fiscal es de gran trascendencia y de profundo interés dado que se observa que la autoridad cada día hace uso de esta figura jurídica contemplada para personas físicas en la Ley del Impuesto Sobre la Renta, únicos sujetos de esta medida, y los enormes beneficios para el Estado como fuente de recaudación. Actualmente todas las personas físicas, inscritas o no, en el Registro Federal de Contribuyentes, estamos en la mira permanente de las autoridades fiscales, quien conocen absolutamente todos nuestros movimientos a través de sus mecanismos de información, por lo que cualquier irregularidad es detectada, con el enorme peligro de que dicha

irregularidad se convierta en un delito fiscal, como lo prevee el Código Fiscal de la Federación mexicano.

En México las personas físicas inscritas en el Registro Federal de Contribuyentes (RFC), deben declarar ingresos suficientes que justifiquen el nivel de vida que están llevando y derivado de ello también logren solventar las erogaciones que efectúen, principalmente las que puedan ser verificables, como son las operaciones celebradas ante fedatario público, adquisiciones de automóviles, los depósitos en cuentas bancarias las inversiones financieras llevadas a cabo etc. En la actualidad pocos contribuyentes personas físicas llevan contabilidad formal, y ni siquiera se preocupan por determinar el origen de las cantidades que depositan en sus cuentas bancarias ni establecer un control sobre las erogaciones llevadas a cabo y si a esto le sumamos el paso del tiempo es casi imposible recordar la operación y mucho menos sus características. Por lo que se recomienda que las personas físicas inscritas al RFC deban cuidar que las erogaciones que realicen en un año de calendario nunca sean superiores a sus ingresos declarados en ese mismo año, para no incurrir en discrepancia fiscal y en caso de que así sea, exista una explicación del origen de esa diferencia. En México las personas físicas inscritas en el Registro Federal de Contribuyentes (RFC), deben declarar ingresos suficientes que justifiquen el nivel de vida que están llevando y derivado de ello también logren solventar las erogaciones que efectúen, principalmente las que puedan ser verificables, como son las operaciones celebradas ante fedatario público, adquisiciones de automóviles, los depósitos en cuentas bancarias las inversiones financieras llevadas a cabo etc. Así también se recomienda que todas las personas físicas que realizan alguna actividad económica, deban de actuar bajo el marco jurídico fiscal aplicable, para lo cual deberán estar inscritos en el RFC, estar cumpliendo puntualmente con sus obligaciones fiscales, declarar la totalidad de los ingresos obtenidos y pagar los impuestos correspondientes.

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# LIDERAZGO FEMENINO Y CLIMA ORGANIZACIONAL, EN UN INSTITUTO UNIVERSITARIO

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Braian Misael Real Bahena, Universidad Autónoma del Estado de Morelos

## RESUMEN

*Este trabajo aborda el caso del Instituto Profesional de la región Sur ( IPRES ), institución de educación superior de la Universidad Autónoma del Estado de Morelos; con el objetivo de mostrar resultados de la medición del clima organizacional antes y después del cambio de director, para conocer algunas características internas y describir su clima organizacional a partir de las percepciones que tienen los trabajadores en una etapa de transición, además se analiza la influencia del liderazgo de la actual directora en el logro de las metas organizacionales y de qué manera la percepción del clima organizacional o ambiente laboral puede ser afectado por el liderazgo femenino. En México cada vez son más las mujeres que dirigen diversas organizaciones, entre ellas las que pertenecen al ámbito educativo y las universidades no son la excepción, por otra parte el tipo de liderazgo que se ejerce puede ser promotor u obstáculo para el buen desempeño de la institución y puede ser un factor de distinción e influencia en el comportamiento de quienes la integran, por lo tanto, su conocimiento proporciona retroalimentación acerca de los procesos que determinan los comportamientos organizacionales y que determinan el clima laboral.*

**PALABRAS CLAVE:** Clima Organizacional, Liderazgo Femenino Percepción, Estilos de Liderazgo

## FEMALE LEADERSHIP AND ORGANIZATIONAL CLIMATE IN A UNIVERSITY INSTITUTE

### ABSTRACT

*This paper addresses the case of the Professional Institute of the South ( IPRES ), institution of higher education in the University of the State of Morelos , with the aim of showing the measurement results of the organizational climate before and after the change of manager to know some internal features and describe their organizational climate from the perceptions of workers in a transition stage , and analyzes the influence of the leadership of the current director in achieving organizational goals and how the perception of climate organizational or work environment can be affected by female leadership. In Mexico more and more women directed various organizations, including those belonging to the field of education and universities are no exception, otherwise the type of leadership can be exercised promoter or impede the proper performance of the institution and may be a factor of distinction and influence the behavior of those who integrate, therefore provides feedback about*

*their knowledge of the processes that determine organizational behavior and determine the working environment.*

**KEYWORDS:** Organizational Climate, Perceived, Female Leadership, Leadership Styles

## INTRODUCCIÓN

El clima organizacional impacta directamente en el desarrollo de las funciones de cualquier organización dicho en otros términos, la percepción que tiene el trabajador del ambiente en el que labora influye en su comportamiento, de tal manera que contar con un instrumento nos permitirá evaluar el clima y establecer mecanismos de mejora del ambiente laboral. Por otra parte el ambiente laboral se ve influenciado por varios factores: los factores que han sido identificados como como constituyentes de la realidad objetiva del desarrollo organizacional, se refieren a la estructura organizativa, las políticas y los procedimientos, las relaciones interpersonales y grupales, la tarea y el medio físico en el que se desarrolla el liderazgo (Alves J. 2000) y es precisamente la influencia del factor de liderazgo lo que se analiza en relación con el clima organizacional en el presente trabajo. Es indudable que el estilo de liderazgo que ejercen los directivos influye en la percepción que tienen los trabajadores del clima organizacional, en el presente trabajo se muestra resultados de la medición del clima laboral durante la gestión del (2008 -2011) y el periodo del (2011 al 2014), con el objetivo de observar si existe alguna modificación en la percepción del ambiente laboral a partir del liderazgo femenino que actualmente se ejerce en el Instituto Profesional de la Región Sur.

## REVISION DE LA LITERATURA

El clima o ambiente organizacional se refiere a un conjunto de características del lugar de trabajo, percibidas por los individuos que laboran en ese lugar y sirven como fuerza primordial para influir en su conducta en el trabajo (Hodgetts y Altman, 1981). Existen varios factores que contribuyen al clima organizacional, sin embargo los diferentes autores no se han puesto de acuerdo en cuanto al tipo de dimensiones que tienen que ser evaluadas a fin de tener una explicación lo más exacta posible del clima (Brunet, 2011). Entre estos múltiples factores se encuentra el estilo de dirección o liderazgo como principal determinante del clima, sin embargo es importante aclarar que existe polémica respecto a la afirmación anterior, no obstante de que comúnmente se acepta que el clima organizacional está fuertemente determinado por el estilo de liderazgo (Brunet, 2011) que se ejerce en la organización.

Para establecer la relación clima organizacional y liderazgo en los siguientes párrafos se mencionan las principales teorías sobre el liderazgo. El campo constituido por el liderazgo es muy diverso e incluye un amplio espectro de teorías, entre las más conocidas se encuentran: la teoría de los rasgos de los líderes como por ejemplo las teorías del gran hombre o los modelos conductuales como los de la Universidad de Ohio (Stogdill, Good & Day, 1962) a modelos situacionales tales como la teoría del intercambio líder seguidor (Schriesheim, Castro & Cogliser, 1999), la teoría de la contingencia (Fiedler, 1967), el modelo camino meta (Evans, 1970; House, 1971; House & Dessler, 1974; House & Mitchell, 1974), el modelo de liderazgo situacional (Hersey & Blanchard, 1982), entre otros los cuales tomaban en cuenta para su análisis las variables del ambiente y de la persona (Yukl, 2002). A partir de los estudios del comportamiento para analizar el liderazgo, surgen una serie de teorías que describen los estilos de liderazgo “todas ellas reconocieron principalmente dos tipos generales de comportamiento: 1. Los orientados hacia las tareas y 2. Los orientados hacia las personas.” (Ayoub, 2010).

## METODOLOGÍA

### La Población

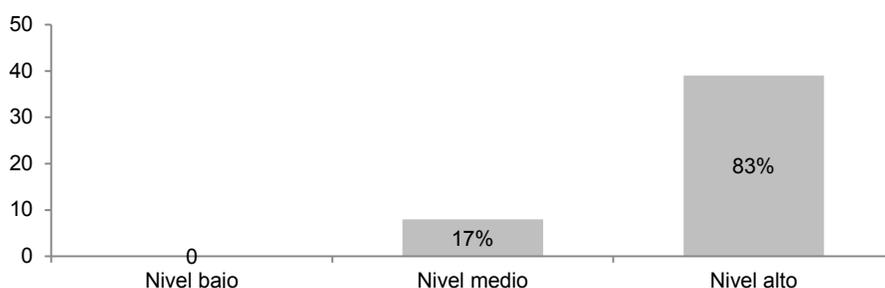
Para determinar la situación del clima laboral del Instituto Profesional de Región Sur (IPReS), se aplicó un instrumento al personal que labora en el plantel, por primera vez en el año 2009 a 47 trabajadores y posteriormente en el año 2012 a 51 trabajadores. En el 2013 se diseñó un instrumento para evaluar la gestión de la directora e identificar las características del liderazgo que ejerce en el instituto, mismo que fue aplicado a 55 trabajadores. El instrumento para medir el ambiente laboral, el instrumento que se utilizó fue el denominado: Escala de Clima Organizacional (EDCO). Se decidió usar este instrumento fundamentalmente debido a las características de la población, porque nos permite establecer una escala de medición uniforme y "libre de muestra" que pueda aplicarse a individuos y grupos de muy diversos niveles de habilidad y que permita probar como se encuentra el clima laboral de las organizaciones.

## RESULTADOS

Los resultados que se muestran en este apartado corresponden al instrumento aplicado en el año 2009, correspondiente al periodo de gestión (2008-2011) y fueron los siguientes:

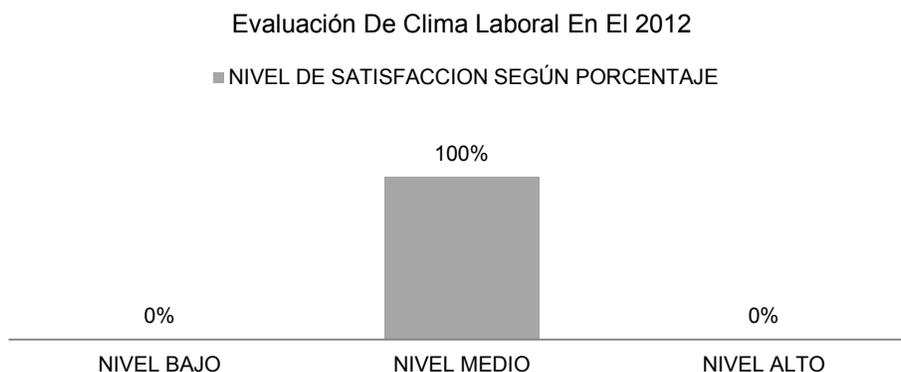
Figura 1: Primera Medición del Clima Laboral del (Ipres)

Evaluación de Clima Laboral en el 2009



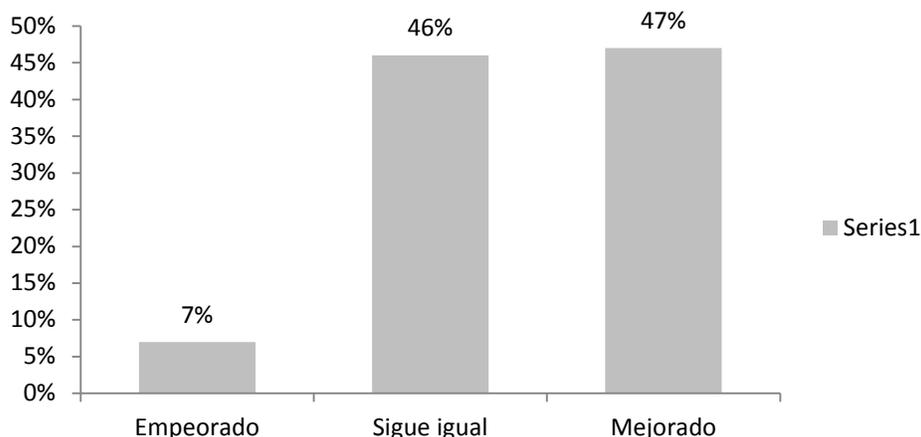
Como se puede observar el 83% de la población encuestada califica el clima organizacional en un nivel alto lo que significa que la mayoría de los trabajadores, tienen una percepción favorable con respecto a las reglas, políticas y estilo de liderazgo de su jefe, Por lo que se refiere al tipo de liderazgo en ese periodo los encuestados refieren que el líder no se involucraba directamente en las tareas, no existía supervisión de las mismas y mostraba una personalidad despreocupada, por lo que consideramos que este estilo se apega al denominado *laissez-faire* y reconocieron que este estilo conducía a un funcionamiento ineficiente. En la segunda medición del clima la encuesta se aplicó a 51 trabajadores, por otra parte es importante resaltar que los resultados que se muestran corresponden a la gestión de la directora que fungirá por el periodo del 2011 al 2014 y que al momento de la medición llevaba 7 meses dirigiendo la institución.

Figura 2: Segunda Medición del Clima Laboral del (IPRES)



En esta ocasión los trabajadores del IPRES calificaron el clima organizacional en un nivel medio, lo que demuestra que la percepción de los trabajadores cambió y percibieron un clima laboral menos favorable en comparación al 2009. Los resultados en la segunda medición mostraron que la percepción de los trabajadores cambió y entre otros factores influyó el cambio del titular en la dirección y como consecuencia el cambio en el estilo de liderazgo, En este segundo periodo analizado con respecto al estilo de liderazgo se observó lo siguiente: las políticas y las técnicas de trabajo son planeadas, delegadas y supervisadas directamente por el líder de la organización, algunas veces permite la discusión de las decisiones al interior del grupo, aunque mayoritariamente es el líder quien toma las decisiones, dejando un escaso margen a sus subordinados. Aunque algunos reconocen que algunas veces promueve el bienestar del grupo y solicita consejo. En el año 2013 con el objeto de identificar las características de liderazgo femenino en la institución se diseñó y aplicó un instrumento que nos permitió medir la calidad y el nivel de comunicación, relaciones, manejo del conflicto entre otros, con el objetivo de identificar las diferencias entre el director anterior y la directora que actualmente dirige la institución De acuerdo a los resultados obtenidos por el instrumento en términos generales se concluye que la percepción de los trabajadores respecto a la gestión de la directora en el Instituto Profesional de la Región Sur es más eficiente en las tareas de la organización ya que el 47% de los encuestados opina que el funcionamiento de la institución ha mejorado en comparación al directivo anterior, como se muestra en la figura 3.

Figura 3: opinión de los encuestados sobre el funcionamiento del (IPRES)



No obstante de que los trabajadores reconocen que el funcionamiento ha mejorado consideran que la comunicación es deficiente, lo cual genera conflictos, e insatisfacción en el personal, docente y administrativos, los cuales se sienten desplazados y poco valorados, comportamiento que se refleja en el 46% de la población encuestada quienes consideran que la institución sigue igual en términos de eficiencia. Por otra parte respecto a las cualidades del líder el 42 % aseguró que escucha con respeto y acepta las opiniones de sus subordinados, además de que se considera que es una líderesa que enfrenta y resuelve el conflicto.

## CONCLUSIONES

Los resultados demuestran que la percepción de los trabajadores sobre el clima organizacional se ve altamente influenciada por el estilo de liderazgo, como se puede observar en los resultados; el clima laboral ha ido disminuyendo de un nivel alto a medio lo que implica una baja en el nivel de satisfacción de los trabajadores y que algunas características del estilo de liderazgo que actualmente se ejerce deben ser analizadas. Además se puede observar en el presente caso que el *estilo laissez-faire* afecto las tareas y los resultados organizacionales aunque influyo en sentido positivo, con respecto al hecho de que la mayoría de los sujetos de estudio percibieran un clima altamente favorable. En la segunda medición del clima laboral la combinación del estilo de liderazgo autocrático y democrático, influenció la percepción de los trabajadores en sentido negativo, lo que hizo que los encuestados en esta ocasión evaluaran el clima laboral en un nivel medio, no obstante de que 47 % de la población encuestada reconoce que el funcionamiento de la organización ha mejorado en comparación al periodo anterior donde existía menor supervisión, en las tareas. El liderazgo femenino en este caso particular, mostro mejores resultados en el enfoque de tareas pero deficiencias en la comunicación y motivación de los trabajadores del IPRES.

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# LOS BENEFICIOS DE LA CONTABILIDAD AMBIENTAL EN UNA EMPRESA CON SISTEMAS DE PRODUCCIÓN DE BUENAS PRÁCTICAS AGRÍCOLAS

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Genoveva Rosano Ortega, Universidad Popular del Estado de Puebla  
Martha Sheila Gómez González, Universidad de Guadalajara

## RESUMEN

*El objetivo de este estudio fue identificar los beneficios de la contabilidad ambiental en una empresa agrícola que realiza buenas prácticas agrícolas. La investigación abordó un estudio de caso de una empresa agrícola ubicada en el Valle de Aatlán de Navarro Jalisco, para identificar (1) los costos y beneficios en los sistemas de producción con buenas prácticas agrícolas, (2) los impactos económicos de su sistema de producción y (3) el sistema de contabilidad ambiental que permite comunicar la sostenibilidad de una empresa agrícola. La identificación de los beneficios del sistema de contabilidad ambiental se llevó a cabo mediante cuestionarios aplicados al empresario agrícola y los resultados se presentan en cuadros que evalúan los resultados de la empresa con un sistema de contabilidad tradicional y uno ambiental. En conclusión, el sistema de contabilidad ambiental demuestra que la empresa es sustentable y tiene beneficios económicos, sociales y ambientales.*

**PALABRAS CLAVE:** Contabilidad Ambiental, Buenas Prácticas Agrícolas

## THE BENEFITS OF ENVIRONMENTAL ACCOUNTING IN A COMPANY PRODUCTION SYSTEMS WITH GOOD PRACTICES

### ABSTRACT

*The aim of this study was to identify the benefits of environmental accounting in an agricultural company that makes good agricultural practices. The research addresses a case study of a farm located in the Valley of Aatlán of Navarro Jalisco, to identify (1) the costs and benefits in production systems with good agricultural practices, (2) the economic impacts of its system production and (3) environmental accounting system that allows communicating the sustainability of an agricultural enterprise. Identifying the benefits of environmental accounting system carried out by the farmer questionnaires and the results are presented in tables that assess the results of the company with a traditional accounting system and an environmental. In conclusion, the accounting system environment shows that the company is sustainable and has economic, social and environmental.*

**JEL:** M41, Q56

**KEYWORDS:** Environmental Accounting, Good Agricultural Practices

### INTRODUCCIÓN

La calidad del medio ambiente es una de las actuales preocupaciones mundiales, algunas empresas agrícolas ubicadas en Autlán de Navarro, Jalisco. México, ya empiezan a establecer vinculaciones entre los aspectos económicos, sociales y ambientales, aunque de manera incipiente la contabilidad ambiental puede informar las actividades ambientales que la empresa realiza, para evaluar su sostenibilidad y comunicar los costos y beneficios de esta actuación. Algunos de los problemas ambientales de la región Valle de Autlán son causadas por las explotaciones agrícolas debido a una falta de cultura ambiental, por lo que en este trabajo se hace una aportación para demostrar que los procesos de producción con buenas prácticas agrícolas contribuyen a mejorar la calidad del medio ambiente, aunque tengan mayores costos pero también tienen más beneficios económicos, sociales y ambientales, esto es novedoso, ya que se demuestra por medio de un sistema de contabilidad ambiental que en México ya hay empresas con tendencias globales y se espera que este trabajo motive a otras empresas del sector agrícola a hacer conciencia y adoptar nuevos mecanismos de producción.

La contabilidad proporciona información económica, social y ambiental, es un error considerar que la contabilidad no tiene ningún papel en las actividades ambientales, por lo que se entiende a la contabilidad ambiental como el sistema de información que permite determinar el costo-beneficio de la actuación de la empresa con respecto al medio ambiente, fue necesario adecuar los estados financieros tradicionales y configurarlos con nuevos elementos, para identificar y clasificar las partidas ambientales en las cuentas de activo, pasivo y capital, también en los costos y gastos, lo anterior para relacionar lo financiero con lo ambiental y proporcionar informes de sostenibilidad.

#### **REVISIÓN DE LITERATURA**

Las empresas deben producir bienes sin perder de vista el medio ambiente, esto implica pasar de un desarrollo basado en el crecimiento económico a uno en donde se establecen estrechas vinculaciones entre aspectos económicos, sociales y ambientales, capaz de aprovechar las oportunidades que supone avanzar simultáneamente en estos tres ámbitos, sin que el avance de uno signifique ir en deterioro del otro (Division for Sustainable Development, 2009). Los problemas ambientales son complejos y múltiples sus causas y alcances, para su explicación se requiere de los fundamentos teóricos y estructuras metodológicas de diversas ciencias, entre las cuales se encuentra la contabilidad. Esta disciplina se concibe como una herramienta que genera información útil para la toma de decisiones; para ello debe considerar la base conceptual que surge de la relación, hasta hace poco ignorada, de las empresas con el ambiente en el cual interactúan. (Ablan y Méndez, 2004). La información contable debe reflejar la realidad económica y ésta se ve afectada por los impactos en el medio ambiente, los cuales deberán tasarse para dar una información útil para la toma de decisiones. (Pahlem, 1997).

La contabilidad está sufriendo una continua transformación para poder satisfacer estas nuevas exigencias del entorno empresarial, que demanda a la organización un desempeño respetuoso con el medio ambiente (De la Rosa, 2005). Referente a la problemática medio ambiental que tiene la región de El Valle de Autlán obedece a las explotaciones agrícolas que se dan a consecuencia de este tipo de cultivos. El Valle de Autlán es un área importante para el análisis de la agricultura principalmente por dos razones: La agricultura es una actividad central en la economía regional y ha sido uno de los factores más significativos de cambio ambiental en el último medio siglo en la región, debido a la deforestación, tecnologías agrícolas mal utilizadas, uso excesivo de agroquímicos, pesticidas, contaminación por materia orgánica, desechos industriales, contaminación atmosférica por quemas agrícolas y el uso intensivo de maquinaria agrícola.

(Jardel, 2000). Este impacto ambiental se presenta de forma indirecta por las actividades agrícolas debido a una falta de cultura ambiental y en un problema de salud pública.

(Gómez, 2012). La sociedad actual reclama la implicación de todos los agentes económicos en la adopción de las medidas que eviten un mayor deterioro del medio ambiente. Entre ellos se encuentran las empresas, sus gestores y los profesionales de la contabilidad. La contabilidad ha seguido, con respecto a la cuestión ecológica, la misma senda que la economía establecida: el impacto medioambiental de las actividades productivas permanece fuera de los cálculos de las empresas que no lo incorporan a su función de producción de bienes y servicios y queda como un problema macroeconómico a resolver por el conjunto de la sociedad. De ahí la necesidad en la actualidad de buscar alternativas para lograr internalizar las externalidades empresariales y su reflejo en la información contable (Pelegrin, Reyes, & Campos, 2010). Concepto de la Contabilidad Ambiental, términos empleados y sus beneficios La Contabilidad Ambiental de la Empresa entendida en un sentido amplio, como el conjunto de sistemas e instrumentos útiles para básicamente medir, evaluar y comunicar la actuación ambiental de la empresa.

(Ludevid, 1999). La Contabilidad Ambiental es aquella parte del sistema contable que tiene el propósito de proveer información sobre el impacto financiero de aspectos medioambientales a través de las cuentas anuales auditadas, también incluye información específica en aspectos financieros de la actuación medioambiental de la empresa, relacionadas con activos, pasivos, capital, gastos, ingresos e inversiones medioambientales. (Lamorú, 2011) La contabilidad ambiental se define como la técnica que se utiliza para producir sistemática y estructuralmente información cuantitativa, al analizar, clasificar y registrar las operaciones expresadas en unidades monetarias de las acciones y transacciones que realiza una entidad económica y de ciertos eventos económicos y medioambientales identificables y cuantificables que le afectan, con objeto evidenciar la acción de la empresa a favor del medio ambiente y facilitar a los diversos interesados la toma de decisiones en relación con dicha entidad y con el medio ambiente. (Vera M et al 2012) Como se ha comentado, en este punto se identifica a la contabilidad ambiental como el sistema de información que permite determinar el costo-beneficio de la actuación de la empresa con respecto al medio ambiente. Para desarrollar la actividad de la contabilidad ambiental, se requiere del manejo de algunos términos comunes como son:

Actividades ambientales.-Tienen como objetivo principal prevenir, reducir o reparar el daño al medio ambiente. Activos ambientales.- Aquello bienes que son incorporados al patrimonio de la entidad de forma duradera con la finalidad de reducir o controlar el impacto ambiental existente o futuro; y aquellos bienes que son recursos naturales, los cuales son propiedad de la nación y utilizados en procesos productivos de la entidad. Bienes (inventarios, propiedad, planta y equipo, cargos diferidos) propiedad de la empresa e inversiones realizadas con el propósito de proteger y preservar el ambiente. Pasivos ambientales.- Son pasivos estimados y contingentes, no se conoce con claridad al reclamante, ya que puede ser cualquier persona que se vea afectada por las actividades de la entidad. La estimación realizada varía constantemente, por lo que hay que realizar una permanente revisión de la estimación. Respecto de los pasivos contingentes y las estimaciones, las Normas de Información Financiera (NIF) apoyan al contador. Capital natural.- Se presenta cuando los recursos naturales son mayores que sus activos, por lo que es el factor menos cuantificado de la producción, es muy difícil asignarle un valor a los recursos naturales, los cuales no tienen precio en el mercado Costos y Gastos Relacionados con medidas ambientales.- Son los gastos devengados, de las actividades medioambientales realizadas o que deban realizarse para la gestión de los afectos medioambientales de las operaciones de la empresa, así como los derivados de los compromisos medioambientales de la misma (Ablan y Méndez, 2004).

Algunos de los beneficios de la contabilidad ambiental son que facilita la incorporación de información medioambiental en los informes financieros y la incorporación de información financiera en los informes medioambientales, permite interrelacionar los informes financieros y medioambientales de forma efectiva y permite proporcionar informes de sostenibilidad. La integración de estas información es recomendable porque representan no sólo una forma de incrementar la contabilidad de la información que la empresa suministra, sino también una forma de proporcionar la imagen fiel de la situación financiera y medioambiental de la empresa. (Lamorú, 2011) Las buenas prácticas agrícolas, la inocuidad y calidad alimentaria Los gobiernos de los países desarrollados han propuesto varias iniciativas relacionadas con inocuidad y calidad alimentaria. En 1997 el gobierno de Estados Unidos a través del presidente William Clinton anuncio la iniciativa conocida como “Inocuidad Alimentaria del campo a la mesa” la cual derivo meses más tarde en otra iniciativa que tiene como propósito el asegurar la inocuidad de los productos hortofrutícolas que consume el pueblo Estadounidense, trátase de productos cultivados internamente o que sean importados de otros países. (FAO, 2003). Al respecto, la Secretaria de Agricultura Ganadería, Desarrollo Rural, Pesca y Alimentación (SAGARPA), consciente de los riesgos que esta iniciativa pudiera tener para los productores hortofrutícolas nacionales que exportan hacia ese mercado, para la misma balanza comercial con ese país y para la población en general, se dio a la tarea de convocar a principios de 1998, a los representantes de los sectores públicos y privados para presentar una propuesta de estrategia que sobre inocuidad alimentaria, que habría de instrumentar el Gobierno Federal.

Así mismo, y con objeto de reforzar esta Estrategia, en Junio de 1998 los Secretarios de Agricultura y Salud del país, firmaron con sus homólogos estadounidenses en el marco de la Reunión Binacional México–Estados Unidos, la “Declaración Conjunta sobre Inocuidad Alimentaria” en donde se establece el interés de ambos gobiernos en trabajar coordinadamente para lograr la inocuidad en todos los alimentos, tanto domésticos como importados y minimizar la inocuidad de enfermedades asociadas al consumo de productos agroalimentarios. Por otra parte, los consumidores cada vez tienen mayores exigencias hacia la calidad de los alimentos que en conjunto con los requerimientos y compromisos internacionales, los gobiernos están implantando métodos más estrictos para lograr que los productos frescos y procesados estén libres de contaminantes físicos, químicos o microbiológicos. Para ello se están instalando sistemas de evaluación y certificación de productos y plantas empacadoras que cumplan con los estándares de calidad, incluyendo inocuidad, requeridos por los consumidores.

Dado esto y debido al peligro de contaminación constante de las hortalizas frescas, existen tres empresas ubicadas en Autlán de Navarro, Jalisco, México, que producen hortalizas frescas bajo los lineamientos y procedimientos de Buenas Prácticas Agrícolas y de Manejo establecidos por SENASICA”. El concepto de Buenas Prácticas Agrícolas (BPA) ha ido evolucionando con el transcurso de los últimos años en el contexto de una economía alimentaria rápidamente cambiante y globalizadora, como resultado del interés y del compromiso de una amplia gama de partes interesadas en torno a la producción alimentaria, a la seguridad, calidad alimentaria y a la sostenibilidad ambiental de la agricultura. Las BPA aplican las recomendaciones y los conocimientos disponibles para la sostenibilidad ambiental, económica y social de procesos de producción in situ y de posproducción, que terminan en productos agrícolas alimentarios y no alimentarios seguros y saludables. (ADRS, 2012).

El Plan Nacional de Desarrollo 2007-2012, establece como una de sus estrategias (8.1), proteger el país de plagas y enfermedades y mejorar la situación sanitaria, mediante la aplicación de la normatividad en materia de sanidad e inocuidad agroalimentaria, por lo que El Gobierno Federal

mediante SAGARPA, y la Dirección General de Inocuidad Agroalimentaria, Acuícola y Pesquera cuentan con el programa del Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimentaria, (SENASICA) que tiene los lineamientos generales para la operación y certificación de Sistemas de Reducción de Riesgos de Contaminación (SRRC) en la producción primaria de alimentos de origen agrícola los cuales son voluntarios y buscan minimizar la contaminación física, química y microbiológica en las operaciones de campo y empaque de los productos hortofrutícolas.

## METODOLOGÍA

Se ha derivado información a profundidad sobre las experiencias que, en términos de la gestión administrativa siguen empresas que han tenido la instauración de una nueva mentalidad de sostenibilidad, con una certificación de empresa con buenas prácticas agrícolas y como marco la implementación de un sistema de contabilidad medioambiental. Para la realización de este trabajo se utilizó un diseño de investigación no experimental, específicamente se utilizó un diseño transaccional descriptivo. Según Hernández (2008) una investigación es no experimental cuando se realiza sin la manipulación deliberada de las variables (independientes) y en las que se observan los fenómenos en su estado natural para después analizarlos. Dado que no fue posible la conformación de grupos artificiales en el experimento, el grupo se integró de manera dirigida, no intervino ningún proceso de selección probabilístico, ya que se trata de un estudio de caso. En este estudio se aplicaron en total 2 tipos de cuestionarios; el primer cuestionario llamado “CUESTIONARIO 1” Este cuestionario recogió información relacionada con la experiencia de tener un proceso de producción de buenas prácticas agrícolas y en la aplicación de un sistema de contabilidad ambiental. El segundo cuestionario llamado “CUESTIONARIO 2” realizado con el fin de identificar los costos y los beneficios de una empresa agrícolas sustentable.

Recordemos que este trabajo es de corte metodológico cualitativo, que en lugar de buscar exactitud (como su contraparte la investigación cuantitativa) en los resultados obtenidos: se trata de obtener un entendimiento lo más profundo posible de la problemática que implica el intentar aplicar una gestión administrativa sustentable y para dar cabida a un sistema de contabilidad ambiental que soporte y registre las decisiones ambientales que desde esa perspectiva se vienen tomando en la empresa.

## RESULTADOS

Para detectar los costos y gastos ambientales así como los beneficios que ha logrado la empresa Agrícola La Tunita, S.P.R. de R.L. al ser una empresa sostenible, se realizó un análisis de la empresa desde que inició operaciones, para conocer el estado de resultado, el flujo de efectivo y el estado de posición financiera de los años 2009 al 2014. se hace una proyección de 2 años para demostrar la rentabilidad económica con el paso de los años. La empresa Agrícola La Tunita S.P.R. de R.L. Se constituye el 9 de enero del año 2009, con capital social de \$250,000.00 de los cuales \$ 82,500.00 fueron en mobiliario en equipo de oficina, equipo de cómputo, equipo de transporte, y gastos de constitución y \$ 167,500.00 en efectivo para los gastos iniciales.

Tabla 1: Estado de Resultados

	Año	2009	2010	2011	2012	2013	2014
	Ventas	-	555,347	1,213,453	1,418,805	1,850,000	2,120,000
Menos:	Costo de Producción	-	82,672	208,258	141,086	158,656	173,717
Menos:	Costos Ambientales	-	14,050	178,835	153,609	161,290	169,354
Igual:	Utilidad bruta	-	458,625	826,360	1,124,109	1,530,054	1,776,929
Menos:	Gastos de Operación	13,258	431,114	711,540	966,736	741,429	860,867

Menos:	Gastos Ambientales	2,225	184,726	221,922	249,734	268,494	284,619
Igual:	Utilidad del ejercicio	-15,483	-157,215	-107,102	-92,361	520,131	631,443

Fuente: Elaboración propia

El Estado de Resultado de la empresa muestra los ingresos, costos, gastos así como las utilidades que ha generado por año, la empresa en sus primeros años resulta con utilidades negativas, ya que al iniciar operaciones realizó inversiones para habilitar el área de producción y sus gastos son más altos, debido a las erogaciones por la certificación como una empresa con buenas prácticas agrícolas pero se puede demostrar que con el paso de los años se convertirán en utilidades y se demuestra que una empresa responsable con el medioambiente también puede ser rentable.

Los costos de producción que la empresa realiza para producir las hortalizas son; por ejemplo la preparación del suelo, la compra de semilla, las mangueras y conexiones, la rafia etc. estos se presentan en este cuadro por cada año, se identifica como costos ambientales los fertilizantes ya que solo se adquieren los autorizados por la empresa certificadora y se usa solo en las cantidades autorizadas, para la cual la empresa lleva una bitácora para el control de estos productos. Los gastos ambientales que son realizados por la empresa para operar son; las nóminas y todos los gastos relacionados por tener empleados, como IMSS, INFONAVIT, etc., honorarios, mantenimiento de maquinaria, energía eléctrica, las depreciaciones y amortizaciones, lo novedoso de este cuadro son los gastos ambientales, que tradicionalmente las empresas en su contabilidad no las identifican, en este caso la empresa La Tunita realiza gastos de asesoría para lograr la certificación para lograr la inocuidad en sus productos, el sueldo del gerente de inocuidad, los análisis de laboratorio, los gastos en productos para proteger al medioambiente o en su caso remediar posibles daños, así como las depreciaciones y provisiones ambientales.

Tabla 2: Flujo de Efectivo

ANO	INICIAL	2009	2010	2011	2012	2013	2014
<b>INGRESOS</b>							
Ventas			555,347	1,213,453	1,418,805	1,850,000	2,120,000
Aportaciones de capital	250,000	200,000	1,000,000	100,000	100,000		
Apoyo del Gobierno 50%			792,207		690,000		
<b>TOTAL DE INGRESOS</b>	<b>250,000</b>	<b>200,000</b>	<b>2,347,554</b>	<b>1,313,453</b>	<b>2,208,805</b>	<b>1,850,000</b>	<b>2,120,000</b>
<b>EGRESOS</b>							
Mobiliario Equipo de Oficina	22,000	-	-	-	-	-	-
Equipo de Cómputo	14,500	-	-	-	-	-	-
Equipo de transporte	40,000	-	-	-	-	-	-
Maquinaria y Equipo	-	82,000	35,000	-	-	-	-
Edificios	-	90,000	-	-	939,256	-	-
Activos ambientales	-	178,000	1,744,413	237,000	-	-	-
Depreciación de equipo. de oficina	-	-1,613	-1,760	-1,760	-1,760	-1,760	-1,760
Depreciación de equipo. de cómputo	-	-2,791	-3,045	-3,045	-1,269	-	-
Depreciación de equipo de transporte	-	-4,583	-5,000	-5,000	-5,000	-417	-
Depreciación de maquinaria y equipo	-	-2,870	-7,986	-8,190	-8,190	-8,190	-8,190
Depreciación de edificios	-	-1,125	-2,250	-2,250	-13,991	-13,991	-13,991
Depreciación de activos ambientales	-	-2,225	-116,383	-136,236	-143,149	-143,149	-143,149
Amortización de activos diferidos	-	-275	-300	-300	-300	-300	-300
Provisiones ambientales	-	-	-27,767	-60,673	-70,940	-92,500	-106,000
Gastos de constitución	6,000	-	-	-	-	-	-
Costos de producción	-	-	82,672	208,258	141,086	158,656	173,717
Costos ambientales	-	-	14,050	178,835	153,609	161,290	169,354
Gastos de operación	-	13,258	431,114	711,540	966,736	741,429	860,867
Gastos ambientales	-	2,225	184,726	221,922	249,734	268,494	284,619
<b>TOTAL DE EGRESOS</b>	<b>82,500</b>	<b>350,000</b>	<b>2,327,483</b>	<b>1,340,101</b>	<b>2,205,824</b>	<b>1,069,563</b>	<b>1,215,168</b>
<b>TOTAL DE FLUJO</b>	<b>167,500</b>	<b>-150,000</b>	<b>20,070</b>	<b>-26,648</b>	<b>2,981</b>	<b>780,437</b>	<b>904,832</b>
FLUJO ACUMULADO EN EL PERIODO	-	17,500	37,570	10,922	13,903	794,340	1,699,173

Fuente: Elaboración propia

El flujo de efectivo se presenta con una retrospectiva de los años 2009, 2010, 2011, 2012, y una proyección del 2013 y 2014 para identificar los beneficios futuros, las ventas de la empresa se han incrementado para el primer año el 119%, para el segundo 155%, para el tercero el 233% y el cuarto el 282%, se puede observar en sus flujos de efectivo de cada año que no hay una tendencia constante de crecimiento, y esto se debe a que la empresa los primeros 5 años han sido para habilitar el invernadero y la nave del empaque, inversiones fuertes que solo se hacen una vez, y que los siguientes años ya no habrá esas salidas de efectivo y se puede demostrar en los dos últimos años.

Permite efectuar un análisis comparativo de la situación financiera de la empresa a una fecha determinada, se muestran los activos, pasivos y capital, en el caso de los activos ambientales que son utilizados para disminuir el impacto ambiental se demuestra que al iniciar operaciones no contaba con ninguno, en el segundo año tiene el 41%, en el tercero el 92%, en el cuarto el 92% en el quinto el 100%, y en el sexto año el 74%, esto debido a que la empresa hace una inversión fuerte en la construcción de un empaque, para que la empresa realice el empaque del producto que cultiva y de esa manera la empresa puede vender a un precio de venta más alto, ya que antes de tener el empaque su producto al ser vendido se le disminuía el costo por ser empacado, con esto la empresa tendrá más ingresos y más utilidades.

Tabla 3: Estado de Resultados

	INICIAL	%	2009	%	2010	%	2011	%	2012	%
<b>ACTIVO</b>										
<b>CIRCULANTE</b>										
Bancos	167,500	67%	17,500	4%	37,570	2%	10,922	1%	13,903	0.5%
<b>TOTAL DE CIRCULANTE</b>	<b>167,500</b>	<b>67%</b>	<b>17,500</b>	<b>4%</b>	<b>37,570</b>	<b>2%</b>	<b>10,922</b>	<b>1%</b>	<b>13,903</b>	<b>0.5%</b>
<b>NO CIRCULANTE</b>										
Mobiliario y equipo de oficina	22,000	9%	22,000	5%	22,000	1%	22,000	1%	22,000	1%
Depreciación acumulada de equipo de oficina	-		<b>1,613</b>	<b>7%</b>	<b>3,373</b>	<b>15%</b>	<b>5,133</b>	<b>23%</b>	<b>6,893</b>	<b>31%</b>
Equipo de cómputo	14,500	6%	14,500	3%	14,500	1%	14,500	1%	14,500	0%
Depreciación acumulada de equipo de cómputo	-		<b>2,791</b>	<b>19%</b>	<b>5,836</b>	<b>40%</b>	<b>8,881</b>	<b>61%</b>	<b>10,150</b>	<b>70%</b>
Equipo de transporte	40,000	16%	40,000	9%	40,000	2%	40,000	2%	40,000	1%
Depreciación de equipo de transporte	-		<b>4,583</b>	<b>11%</b>	<b>9,583</b>	<b>24%</b>	<b>14,583</b>	<b>36%</b>	<b>19,583</b>	<b>49%</b>
Maquinaria y equipo	-		82,000	19%	117,000	6%	117,000	5%	117,000	4%
Depreciación acumulada de maquinaria y equipo	-		<b>2,870</b>	<b>4%</b>	<b>10,856</b>	<b>9%</b>	<b>19,046</b>	<b>16%</b>	<b>27,236</b>	<b>23%</b>
Edificio	-		90,000	21%	90,000	4%	90,000	4%	1,146,256	39%
Depreciación acumulada de edificio	-		<b>1,125</b>	<b>1%</b>	<b>3,375</b>	<b>4%</b>	<b>5,625</b>	<b>6%</b>	<b>19,616</b>	<b>2%</b>
Activos ambientales	-		178,000	41%	1,922,413	92%	2,159,413	100%	2,159,413	74%

Depreciación acumulada de activos ambientales	-		2,225	1%	118,608	6%	254,845	12%	397,993	18%
<b>TOTAL DE NO CIRCULANTE DIFERIDO</b>	<b>76,500</b>	31%	<b>411,292</b>	95%	<b>2,054,281</b>	98%	<b>2,134,799</b>	99%	<b>2,900,697</b>	99%
Gastos de constitución	6,000	2%	6,000	1%	6,000	0.3%	6,000	0.3%	6,000	0.2%
Amortización de activos diferidos	-		275	5%	575	10%	875	15%	1,175	\$0.20
<b>TOTAL DIFERIDO</b>	<b>6,000</b>	2%	<b>5,725</b>	1%	<b>5,425</b>	0.3%	<b>5,125</b>	0.2%	<b>4,825</b>	0.2%
<b>TOTAL ACTIVO</b>	<b>250,000</b>	<b>100%</b>	<b>434,517</b>	<b>100%</b>	<b>2,097,276</b>	<b>100%</b>	<b>2,150,846</b>	<b>100%</b>	<b>2,919,426</b>	<b>100%</b>
<b>PASIVO</b>										
<b>CIRCULANTE</b>										
Provisiones ambientales					27,767		88,440		159,380	
<b>TOTAL CIRCULANTE</b>	-		-		27,767		88,440		159,380	
<b>TOTAL PASIVO</b>	-	<b>100%</b>	-	100%	27,767	100%	88,440	100%	159,380	100%
<b>CAPITAL CONTABLE</b>										
Capital social	250,000	100%	250,000	58%	250,000	12%	250,000	12%	250,000	9%
Aportaciones de capital			200,000	46%	1,200,000		1,300,000		1,400,000	
Apoyo del gobierno					792,207		792,207		1,482,207	
Utilidades por aplicar	-		-	0%	-15,483	-1%	-172,698	-8%	-279,801	-10%
Utilidad del ejercicio	-	0%	-15,483	-4%	-157,215	-8%	-107,102	-5%	-92,361	-3%
<b>TOTAL DE CAPITAL</b>	<b>250,000</b>	<b>100%</b>	<b>434,517</b>	<b>100%</b>	<b>2,069,509</b>	<b>100%</b>	<b>2,062,406</b>	<b>100%</b>	<b>2,760,045</b>	<b>100%</b>
<b>TOTAL PASIVO + CAPITAL</b>	<b>250,000</b>	<b>100%</b>	<b>434,517</b>	<b>100%</b>	<b>2,097,276</b>	<b>100%</b>	<b>2,150,846</b>	<b>100%</b>	<b>2,919,426</b>	<b>100%</b>

Fuente: Elaboración propia

El sistema de contabilidad ambiental desarrollado en este trabajo fue con base a la literatura y a los elementos que integran la certificación de buenas prácticas agrícolas, así como la aplicación de un estudio de caso de la empresa Agrícola La Tunita S.P.R. de R.L. Las prácticas ambientales que la empresa realiza son de manera voluntaria con el objetivo de lograr el proceso de certificación así mismo el sistema de contabilidad que permite informar su actuación ambiental, así como los costos y beneficios de este procedimiento.

Tabla 4: Identificación de los Costos-Beneficios de una Empresa Certificada Por Buenas Prácticas Agrícolas

conceptos	beneficios	costos	utilidad	beneficios por buenas prácticas agrícolas
INGRESOS	1,200,000.00			Económicos
EGRESOS				
Costos de producción		241,705.00		
Gastos de operación		445,571.00		Ambientales
Gastos ambientales				
Honorarios por Asesoría de Inocuidad Agroalimentaria		27,831.00		Sociales
Sueldo del gerente de inocuidad		15,534.00		Salud
Análisis de Laboratorio		4,690.00		Nuevos clientes
Gastos varios (jabón, bolsas de basura, contenedores, trapeadores, escobas)		8,432.00		Mercados Internacionales
Provisiones ambientales		80,000.00		Mas fuentes de empleo
Depreciación de activos ambientales (Barreras de protección, sanitarios, comedores, almacén de maquinaria, Almacén de productos químicos, invernadero convertible, riego por goteo, cortina de sombra)		136,237.00		Obtención de fondos externos
	1,200,000.00	960,000.00	240,000.00	

Fuente: Elaboración propia

## CONCLUSIONES

La contabilidad medioambiental por sí sola, no parece suficiente para ejercer un verdadero y real control sobre las responsabilidades medioambientales, pero es una manera que contribuir a que se informe lo que algunas empresas ya están haciendo acciones a favor del medio ambiente. El sistema de contabilidad medioambiental, como ha quedado claro, es un elemento específico, de suma utilidad en términos de lo que a la técnica contable aporta, pero que de manera aislada no haría más que registrar los gastos operativos en los que la empresa incurre en aras de mejorar sus productos, o sacar al mercado productos inocuos reportando el costo de las materias primas canalizadas a los procesos, pero permite demostrar a diferencia de otra, que una empresa es responsable con el medioambiente y es más rentable que otra que no lo es. Existen solo tres empresas en la región del Valle de Autlán que cumplen con la normatividad en materia de sanidad e inocuidad agroalimentaria, los cuales hasta el momento son voluntarios y buscan minimizar la contaminación física, química y microbiológica y están diseñados para informar a otros acerca de su actuación, atienden las recomendaciones y comunican mediante informes su actuación ambiental, económica y social de sus procesos de producción, que terminan en productos agrícolas seguros y saludables, lo que les permite tener ventajas competitivas a diferencia de otras empresas que no realizan estas prácticas; pueden ser exportadores mexicanos, dar más fuentes de empleo, percibir divisas que contribuyen a la economía nacional, flujos de efectivo mas altos.

Mediante el sistema de contabilidad ambiental se puede demostrar que la empresa realiza actividades para el cuidado del medioambiente de manera precisa. La información que conforman los estados financieros con datos ambientales, traducen en términos monetarios las acciones que muestran a la empresa como socialmente responsable con el medioambiente, situación que no se puede identificar en los estados financieros tradicionales, por lo anterior se considera que la contabilidad ambiental fomenta el desarrollo sustentable de la empresa.

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# EXPERIENCIAS Y DESAFÍOS EN LAS UNIDADES DE INFORMACIÓN PÚBLICA EN EL ESTADO DE MORELOS, MÉXICO

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## RESUMEN

*Los Estados democráticos se caracterizan por la participación de sus ciudadanos en la gestión de los asuntos públicos, consiguiendo que las instituciones y administraciones sean consideradas como propias, cercanas y abiertas a sus necesidades y aspiraciones; pero sobre todo que adquieran la legitimación social de su quehacer. Para lograrlo, resulta indispensable el establecimiento de mecanismos que hagan posible la apertura de las instituciones a la ciudadanía, y contribuyan a ganar la confianza ciudadana. En el Estado de Morelos, el 27 de agosto del año 2003, se promulga la Ley de Información Pública, Estadística y Protección de Datos Personales. Derivado de ello, se crea la obligación para todas las entidades públicas estatales y municipales de garantizar el ejercicio del derecho de acceso a la información pública, a través de su correspondiente Unidad de Información Pública. Después de una década de la promulgación de la ley antes citada, resulta pertinente evaluar los avances logrados en este rubro; en virtud de que, debemos tener presente, que la implementación de una política pública de transparencia tiene un coste económico, pues se debe invertir en estructuras administrativas, recursos humanos y materiales, formación de personal, difusión de la información, etc, que deben preverse y asumirse para evitar que el contenido de la ley quede en un discurso retórico o como contenido programático.*

**PALABRAS CLAVE:** Estado democrático, transparencia, información pública, política pública, unidad de información pública.

## EXPERIENCES AND CHALLENGES IN THE UNITS OF PUBLIC INFORMATION IN MORELOS, MÉXICO

### ABSTRACT

*Democratic states are characterized by the participation of its citizens in the management of public affairs, getting institutions and administrations are considered as itself, nearby, and open to their needs and aspirations, but over all to acquire social legitimacy of their work. To achieve it, is essential for the establishment of mechanisms to allow the opening of the public institutions, and contribute to win public trust. In the State of Morelos, on 27 August 2003 promulgating the Law on Public Information, Statistics and Data Protection. Derived from this, is an obligation for all state and local public entities to ensure the exercise of the right of access to the public information, through its corresponding Public Information Unit.*

*After a decade of enactment of the law cited above, are relevant to assess the progress made in this area, by virtue of that, we must remember that the implementation of a public policy of transparency has a cost, the you should invest administrative structures, human and material resources, staff training, dissemination of information, etc., and assumed to be provided to prevent the content of the law remains a rhetorical or programmatic content.*

**KEYWORDS:** Democratic state, transparency, public information, public policy, public information unit.

**JEL:**

## **INTRODUCCIÓN**

La organización de la sociedad actual, se fundamenta en los derechos humanos internacionalmente reconocidos, que la mayoría de los estados contemporáneos se han comprometido a respetar, proteger, garantizar y promover al firmar la Declaración Universal de los Derechos Humanos de 1948. El artículo XIX de la Declaración Universal de los Derechos Humanos instituye el derecho de la ciudadanía al acceso a la información, el cual, en los últimos quince años se ha venido desarrollando en las legislaciones nacionales y a la fecha, más de 60 países han aprobado leyes al respecto. En el caso de México, el derecho de acceso a la información es relativamente nuevo; la Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental entró en vigor en el año 2002. Dicha ley es de competencia federal; por lo que las entidades federativas han tenido que promulgar sus respectivas leyes estatales.

El Congreso de nuestra entidad, incorporó el referido derecho, en los artículos 2º y 23-A de la Constitución del Estado; y, posteriormente, el 27 de agosto del año 2003, se promulga la Ley de Información Pública, Estadística y Protección de Datos Personales. Derivado de la legislación antes citada, se crea la obligación para todas las entidades públicas estatales y municipales de garantizar el ejercicio del derecho de acceso a la información pública, a través de su correspondiente Unidad de Información Pública (UDIP).

## **REVISIÓN DE LA LITERATURA**

La legislación del Estado de Morelos establece la existencia de un órgano garante del derecho de acceso a la información pública: El Instituto de Información Pública y Estadística (IMIPE), el cual cuenta con un índice de indicadores (Índice Integral de Transparencia en Morelos), mediante el cual evalúan el grado de cumplimiento de las Unidades de Información Pública de cada uno de los sujetos obligados. Periódicamente, el IMPE realiza evaluaciones a cada una de las UDIP's para determinar el grado de avance en el cumplimiento de sus obligaciones relacionadas con la transparencia y rendición de cuentas.

## **METODOLOGÍA**

El presente trabajo comprende el análisis de las evaluaciones realizadas a las Unidades de Información Pública, en los tres últimos periodos de las administraciones municipales pasadas, esto es, durante los trienios 2003- 2006, 2006 – 2009 y 2009 – 2012. La muestra de los sujetos obligados, está compuesta por las UDIPS de los 33 municipios que conforman el Estado de Morelos; por lo que no forman parte del estudio, los demás sujetos obligados.

## RESULTADOS

Tomando en consideración la metodología señalada, podemos observar el grado de avance de la UDIP's, respecto a su obligación de garantizar el derecho de los ciudadanos a acceder a la información pública que se encuentra en resguardo de las administraciones municipales, en los periodos antes señalados:

**I.-** Respecto al establecimiento de las Unidades de Información Pública, en todos los municipios se han presentado errores de origen; por ejemplo en el acuerdo de creación de uno de los municipios se establecieron veinte titulares de la Unidad de Información Pública; además señalaba nombres de los servidores públicos y no el de los cargos; por lo que al ya no estar laborando las personas mencionadas para éste ayuntamiento, dicho acuerdo carece de validez legal. La misma situación prevalecía respecto al Acuerdo de creación del Consejo de Información Clasificada.

**II.-** Por cuanto a la integración del Catálogo de Información Clasificada y el Catálogo de Información de Datos Personales, aún cuando la mayoría de las UDIP's los tienen integrados, en muchos casos no están actualizados. Aunado a lo anterior, existe la tendencia de las autoridades municipales a integrar al Catálogo de Información Clasificada, aquella información que por alguna razón no es su deseo poner a disposición de los particulares, aún cuando no cumpla los requisitos de ley para clasificarla como confidencial o reservada.

**III.-** Es importante señalar que el IMIPE evalúa las instalaciones y atención al ciudadano; por lo que existen varios rubros que se deben atender; tales como:

a) La oficina debe contar con un espacio suficiente para que el usuario redacte su solicitud. Al respecto, podemos afirmar que en la mayoría de los casos, la UDIP's no cuentan con las condiciones óptimas.

b) Debe haber formatos de solicitudes de información disponibles y a la vista del público. Por lo general es el IMIPE, quien proporciona los formatos a cada una de las entidades obligadas.

c) También deben existir señalizaciones visibles para ubicar la Unidad de Información Pública dentro de la institución. La mayoría de las UDIP's no cumplen con esta obligación.

d) Es obligatorio colocar tanto en el palacio municipal, como en la misma oficina de la Unidad de Información Pública, material que promueva el ejercicio del derecho de acceso a la información, tales como carteles, lonas, pósters, trípticos, folletos, etc. Al respecto, la publicidad utilizada es la elaborada, difundida y proporcionada por el IMIPE.

**IV.-** Para garantizar el ejercicio del derecho a la información pública, es necesario contar con un sistema de organización y sistematización de la información, mediante el cual se haga visible dicha información, razón por la cual con fecha 31 de diciembre del año dos mil ocho, se publicaron en el Periódico Oficial del Estado de Morelos "Tierra y Libertad" número 4671, los Lineamientos Archivísticos para los Sujetos Obligados en Términos de lo que dispone la Ley de Información Pública, Estadística y Protección de Datos Personales del Estado de Morelos. En cuyo artículo 12 establece la obligación a las entidades públicas de conformar un Área

Coordinadora de Archivos determinada por el titular de la entidad. El Área Coordinadora de Archivo es la encargada de implementar el sistema de control archivístico del Ayuntamiento, el cual debe contener tres apartados:

- \*Archivo de Gestión o de Trámite.
- \*Archivo de Transferencia Concentración.
- \*Archivo Histórico.

La mayoría de los municipios no cuentan con un área que específicamente se encargue del manejo del archivo municipal, situación que incide de manera negativa en varios aspectos. En consecuencia, es necesario llevar a cabo el establecimiento del Área Coordinadora de Archivos; el acuerdo en el que se nombre, se debe publicar en el Periódico Oficial del Estado de Morelos “Tierra y Libertad”. El sistema archivístico, entendido como aquel que tiene por objeto la gestión integral de los documentos públicos, constituye la premisa indispensable para la operatividad y efectividad del propio derecho de acceso a la información; pues las condiciones para garantizar el derecho de acceso a la información son:

- Que el documento exista.
- Que sea localizable por la propia entidad pública.
- Que sea identificable por la población.

La problemática a la que se enfrenta el ciudadano para obtener la información de una UDIP en el Estado de Morelos, en algunos casos, no es la negativa de los servidores públicos, sino la imposibilidad de la propia administración para la localización de los documentos, debido a la falta de la organización y sistematización del archivo municipal.

V.- En cuanto al funcionamiento cotidiano de las UDIP's, es de resaltarse que no tienen implementado un adecuado seguimiento a las solicitudes de información pública presentadas por la población, tanto de las recibidas por escrito en la oficina, como de las recibidas a través del Sistema INFOMEX. Derivado de lo anterior, la mayoría de los municipios tienen recursos de inconformidad interpuestos en su contra ante el IMIPE. Uno de los aspectos más importantes que derivan de las obligaciones de transparencia, es el referente a la obligación de los sujetos obligados a contar con un portal de internet, en el que se publique la información conforme a los indicadores establecido en la Ley de Información Pública, Estadística y Protección de Datos Personales del Estado de Morelos; El Reglamento de dicha Ley; y el Índice Integral de Transparencia en Morelos. Sobre el particular, se observa que un alto porcentaje de los municipios no tienen actualizada la información; además, no la publican en términos de lo establecido en los documentos antes referidos. También es indispensable considerar que el nombramiento de los titulares de las UDIP'S es producto de compromisos políticos o promesa de campaña, que trae aparejados serios inconvenientes, tales como que el servidor no cuente con el perfil adecuado, con todo lo que ello representa.

Además, que la Unidad de Información Pública en ocasiones resulta ser el “incómodo” de la administración municipal, al que no lo proveen de recursos financieros, materiales o humanos indispensables para el desempeño de la función. El mayor de los desafíos está en la implementación de la ley de transparencia y acceso a la información pública y en la consolidación de la autonomía de los órganos garantes; en consecuencia, resulta imprescindible replantear la naturaleza jurídica de las UDIPS como órganos autónomos de la administración municipal.

El servidor público, titular de la Unidad de Información Pública enfrenta un dilema cuando existe el interés de los funcionarios del Ayuntamiento de ocultar cierta información. En este sentido, para garantizar la efectividad del derecho de acceso a la información, sería conveniente pensar que la Unidad de Información Pública no se encuentre sometida funcional ni orgánicamente la Administración Pública Municipal, para que el titular pueda actuar con independencia. Su diseño y su concepción debe ser órganos especializados, técnicos, imparciales y cuya operación debe garantizar la imparcialidad y compromiso, no con quien lo designa y mantiene en el cargo, sino con el cumplimiento de la ley.

Otro de los desafíos es resolver el problema de límites, es decir, de establecer la frontera: hasta donde debe extenderse la publicidad y a partir de dónde debe preservarse el secreto, la confidencialidad. En cuanto al problema de la frontera ente lo público y lo privado, considero que la respuesta debe buscarse en el equilibrio o armonización de la realidad, pues cada caso presenta particularidades que deben tomarse en cuenta; por lo que la jurisprudencia será la que se encargue de ir fijando los criterios que orienten a los operadores jurídicos.

## CONCLUSIONES

El derecho de acceso a la información pública, constituye una característica fundamental de todo gobierno democrático, en México tiene su fundamento en el artículo 6º de la Constitución Política de los Estados Unidos Mexicanos. En concordancia con lo anterior, el Congreso de nuestra entidad lo incorporó en los artículos 2º y 23-A de la Constitución del Estado; y, posteriormente, el 27 de agosto del año 2003, se promulga la Ley de Información Pública, Estadística y Protección de Datos Personales. Una sociedad es democrática cuando sus ciudadanos están más y mejor informados; es decir, tienen garantizado el derecho de acceso a la información y la libertad de expresión; en este sentido, la transparencia se convierte en una herramienta para evitar el uso de información privilegiada,

Los gobiernos municipales han fracasado en su intento de cumplir con la transparencia a la que están obligados por ley, entre los principales obstáculos a los que se enfrentan, tenemos: la falta de participación ciudadana, la secrecía y le ocultamiento de información pública por parte de los servidores públicos municipales, malas prácticas o resistencias a cumplir las resoluciones de los órganos garantes, no existe una verdadera voluntad política para que la transparencia sea una realidad.

Precaria difusión del derecho de acceso a la información. Es importante tener en cuenta que una Ley de Acceso a la Información, por muy liberal y progresista que se diseñe no garantizará a los individuos su derecho a acceder a la información pública, sino que en la realidad debe constituir una verdadera herramienta para la instrumentación de una política pública de transparencia real y efectiva, que aunada a una voluntad política auténtica impulsora del principio de transparencia. Sobre esa nueva base, se requerirá bastante voluntad, recursos, infraestructura y capacidad para construir muchas políticas de transparencia, tantas como la diversidad de nuestros municipios.

La implementación de una política pública de transparencia tiene un coste económico, pues se debe invertir en estructuras administrativas, recursos humanos y materiales, formación de personal, difusión de la información, etc, que deben preverse y asumirse para evitar que el contenido de la ley quede en un discurso retórico o como contenido programático. Las entidades públicas, no proporciona la información completa, y en general la ofrecida no es detallada, ni puesta al público con la oportunidad y periodicidad necesarias; por lo que prevalece el espíritu del

corporativismo o marketing sobre el de la rendición de cuentas. Por lo que el desafío es la implementación de una cultura política para que existan gobernantes comprometidos con la transparencia. Deben existir incentivos atractivos que motiven la capacitación permanente de los responsables de resguardar, administrar y liberar la información.

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# COMPETITIVIDAD DE LAS EMPRESAS FAMILIARES DEL SECTOR ALIMENTOS DE TIPO GOURMET EN LA CIUDAD DE ENSENADA, BAJA CALIFORNIA

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## RESUMEN

*El constante auge a nivel mundial sobre la comida saludable, y el ambiente competitivo que se vive en la región de Ensenada por acaparar al turismo local y extranjero, provoca que cada día surjan más familias dedicadas a la producción de alimentos cultivados de manera orgánica. Con este tipo de productos algunas familias se han convertido en proveedores locales de los restaurantes que han adoptado el concepto de comida gourmet, incluso han llegado a crear sus propios restaurantes ofreciendo platillos preparados artesanalmente y con insumos de la región. Una problemática que se ha observado es, el constante cierre y apertura de empresas que se dedican a este giro y que son atendidas por las mismas familias productoras. Parte de esta investigación pretende caracterizar a las empresas familiares de tipo gourmet, además de establecer la relación existente entre el alcance de la competitividad de estas empresas y la gestión de liderazgo desarrollada en la administración de dichos negocios. Para el logro de los objetivos, se diseñó un estudio descriptivo correlacional, donde se adecuó y validó un instrumento de recolección de datos, que se aplicó a una muestra de quince negocios. Los resultados preliminares arrojan que existe estrecha y significativa relación entre la gestión de liderazgo y la competitividad de estas empresas.*

**PALABRAS CLAVE:** Empresa Familiar, Competitividad, Gestión de Liderazgo, Gourmet

## COMPETITIVENESS OF FAMILY-OWNED BUSINESSES IN THE GOURMET FOOD SECTOR IN ENSENADA, BAJA CALIFORNIA

### ABSTRACT

*The constant global increase in healthy food consumption and the competitive environment for attracting local and foreign tourists in Ensenada every day cause more families to dedicate themselves to the production of organically grown food. Some of these families have become the food suppliers for restaurants that have adopted the gourmet food concept; others have even opened up their own restaurants, offering homestyle food cooked with locally grown produce. The continuous opening and closing of such family-owned gourmet restaurants, however, has become a problem. Part of this research aims to characterize these family businesses and to establish the relation between the extents of their competitiveness and the leadership management in their administration. For this, a descriptive correlational study was designed, where a data collection instrument was adapted and validated, and later applied to fifteen businesses. The preliminary results show that there is a significantly close relationship between leadership management and business competitiveness.*

**JEL:** L21, M10, M20

**KEYWORDS:** Family Business, Competitiveness, Management Leadership, Gourmet

## INTRODUCCION

Una situación inquietante de las empresas familiares de tipo gourmet en la región de Ensenada es que, a pesar de ir en crecimiento, abriendo cada día nuevos lugares, igualmente también han cerrado rápidamente. Debido a esto es que surge el interés de analizar porque algunas empresas no tienen la capacidad de permanecer en el mercado y se ven forzadas a cerrar. El principal objetivo de este estudio es hacer un análisis a este tipo de empresas para identificar las características de este tipo de empresas que pueden ayudar o dificultar en éxito de las mismas; también se pretende analizar si hay relación entre la competitividad de las empresas y la gestión de liderazgo desarrollada en este tipo de negocios. Finalmente en esta investigación se presentan los resultados encontrados y las conclusiones a las cuales se llegaron con el análisis de los resultados obtenidos.

## REVISIÓN DE LA LITERATURA

La globalización es un tema del cual se habla diariamente, y como empresa no se debe hacer caso omiso a esto. La globalización está haciendo que los mercados sean cada vez más competitivos, y que los consumidores sean más exigentes con la calidad de los productos y servicios. Debido a esto los encargados de las empresas deben estar siempre a la vanguardia de la información y procedimientos para lograr competitividad en el mercado. A nivel microeconómico son los sectores, empresas y productos en los que se evalúa la competitividad. Este nivel de análisis es evaluado por lo que se podría llamar, la aproximación moderna de la competitividad. Algunas formas de medir y definir la competitividad en este nivel, se basen cuantitativamente en la participación en el mercado, indicadores de productividad y/o costo, márgenes de ganancia y/o beneficios netos (Lombana, Gutiérrez & Rozas, 2009).

Actualmente en Ensenada se está presentando un aumento en el establecimiento de empresas nuevas dedicadas a brindar el servicio de alimentos, administradas por una sola familia o por personas con lazos familiares. La empresa familiar, es la figura empresarial dominante en la estructura económica de la mayoría de los países occidentales. Estudios realizados en Europa, Estados Unidos y América Latina señalan que las empresas familiares llegan a suponer entre el 70% y 90% del total de empresas en un país (Amat 2000). Dentro de las empresas familiares en el sector alimentos que se encuentran en la región, están algunas que se dedican a la elaboración de productos de tipo gourmet. Según La Real Academia Española Gurmé se refiere a una adaptación gráfica propuesta para la voz francesa Gourmet, la cual define a “persona que gusta de comer y beber exquisitamente”. Lo Gourmet por lo tanto está asociado a lo más excelso de la gastronomía. Para fines de este estudio se entiende como productos Gourmet, a los alimentos preparados con insumos seleccionados cuidadosamente y de la mejor calidad, además de haberse producido principalmente de manera orgánica dentro de la región de Ensenada, Baja California.

Toda empresa necesita una persona capacitada que se encuentre al frente de ella, con los conocimientos apropiados para tomar decisiones y acciones en beneficio del negocio. Según Bateman & Snell (2009) existen diferentes tipos de liderazgo como el estilo autocrático y el democrático. El estilo democrático aporta una mejor participación y aceptación del grupo lo que es favorable por la disposición de las personal a alcanzar los objetivos. Por otro lado el estilo

autocrático obtiene como resultado más resistencia por parte del grupo, por sentir imposición y poca participación en las decisiones del negocio.

En este estudio se plantean dos objetivos: la caracterización de la empresa familiar de tipo gourmet y determinar si hay relación en el logro de la competitividad de este tipo de empresa, con la manera en que se desarrolla la gestión de liderazgo en el establecimiento.

## METODOLOGÍA

Con el fin de alcanzar los objetivos antes planteados, se realizó un estudio descriptivo correlacional. En este tipo de estudios, se analiza un fenómeno a partir de una variable dependiente y otra independiente, para dar respuesta al problema planteado. La recolección de datos numéricos del objeto de estudio y sus variables, se realizó a través de una encuesta tomada y adecuada a partir del Mapa de Competitividad desarrollado por el Banco Interamericano de Desarrollo (BID). Para este estudio se tomó una muestra de quince restaurantes; seis del Valle de Guadalupe y nueve de la zona urbana de Ensenada, Baja California. Para caracterizar a las empresas familiares de tipo gourmet, se utilizó la prueba de estadística descriptiva; mientras que para determinar si existe relación entre competitividad y la gestión de liderazgo se aplicó el análisis de correlación bivariada de Spearman. Estas pruebas se llevaron a cabo en el programa Statistical Package for the Social Sciences (SPSS).

### Análisis de Datos

La caracterización de las empresas se realizó a través del análisis estadístico de los datos sociodemográficos recolectados durante el trabajo de campo, los aspectos incluidos fueron: puesto y escolaridad de quienes contestaron la encuesta, tiempo en funcionamiento y número de empleados de las empresas objeto de estudio. La determinación de la correlación entre competitividad y gestión de liderazgo se realizó a través del cálculo del coeficiente rho de Spearman. En la Tabla 1 muestra los rangos de relación estadística entre las variables para la escala de medición según Martínez et al. (2009).

Tabla 1: Rangos de Relación Estadística Entre Variables

Un valor <i>rho</i> entre	Indica una relación de:
0 y .25	Escasa o Nula
.26 y .50	Débil
.51 y .75	Entre Moderada y Fuerte
.76 y 1	Entre fuerte y Perfecta 5

*En esta tabla se describen los rangos de intensidad de relación entre variables para la escala de medición rho de Spearman. Fuente: elaboración propia.*

## RESULTADOS

Una vez aplicada la metodología descrita y analizados los datos sociodemográficos de las empresas los resultados obtenidos para la caracterización de las empresas familiares de tipo gourmet se muestran a continuación:

### Puesto de Quien Contesto la Encuesta

Los propietarios que contestaron la encuesta representaron el 20 % que equivale a 3 personas, dos personas representadas por el 13.3% tenían el puesto de chef, el 26.7% de los encuestados

manifestaron ser los gerentes del restaurant que representan a 4 personas, 4 personas más de las encuestadas representadas con 26.7% dijo tener otro tipo de puesto y el 13.3% que representan 2 personas no contesto el tipo de puesto que desempeñaba en la empresa.

*Escolaridad de quien contesto la encuesta:* La escolaridad de los encuestados se encuentra mayormente concentrada en el nivel de licenciatura representando el 60% que equivale a 9 personas, seguido de esto se situó el nivel de escolaridad en preparatoria con el 26.7% equivalente a 4 personas, una personas cuentan con un posgrado y correspondiente al 6.7 % de los encuestados y el 6.7% restante contesto que tiene algún otro tipo de escolaridad, equivalente a una persona.

*Tiempo en Funcionamiento de las Empresas Objeto de Estudio:* Se encontró que las empresas objeto de estudio en su mayoría tienen funcionando en el mercado cuatro años o más, y representan el 53.3% equivalente a 8 empresas del total de las encuestadas, las empresas de reciente creación que tiene menos o hasta un año de funcionamiento se sitúan en segundo lugar con el 33.3% correspondiendo a 5 de ellas, con el 6.7% equivalente a una empresa tiene de un a dos años en funcionamiento, el 6.7% restante corresponde a una empresa con un tiempo de funcionamiento de dos a tres años en el mercado.

#### Número de Empleados de las Empresas Objeto de Estudio

En el caso del número de empleados de las diferentes empresas encuestadas, el 33.3% que equivalen a 5 empresas tienen de once a quince empleados, el 13.3% que equivalen a 3 empresas tienen 16 o más empleados, el 26.7% equivalente a 4 empresas cuenta cinco a diez empleados, otra de las empresas que representan el 6.7% tiene de uno a cinco empleados, y por último el 13.3% que equivalen a 2 empresas no contestaron. Se analizaron las variables de Competitividad y Gestión de Liderazgo con la prueba estadística antes descrita, en la Tabla 2 se presentan los resultados de correlación entre estas dos variables, donde muestra que la correlación que se da se encuentra en un rango de 0.845 con un nivel de significancia del 0.000 a un nivel de confianza del 99%, lo que nos indica que la relación existente es entre fuerte y perfecta.

Tabla 2: Correlación Entre las Variables Competitividad y Gestión de Liderazgo

Variables	Método de Estimación	Competitividad	Gestión de Liderazgo
Competitividad	<i>rho</i> Spearman Sig. (2 colas)	1	0.845** 0.000
Gestión de Liderazgo	<i>rho</i> Spearman Sig. (2 colas)	0.845** 0.000	1

*Esta tabla nos presenta el nivel de correlación entre las variables de Competitividad y Gestión de Liderazgo. \*\* Correlación significativa a un nivel de 0.01 (2 colas) lo que nos señala una confianza del 99%.(Martínez et al. 2009) Fuente: Elaboración propia con resultados de trabajo de campo.*

## CONCLUSIONES

Con base en el análisis de los resultados se logró la caracterización de las empresas familiares de tipo gourmet, obteniendo que, en su mayoría, las personas que cuentan con la información más importante sobre el funcionamiento de la empresa tienen el puesto de gerente, mostrando que no basta con ser el empresario y propietario de un restaurante de este tipo para conocer bien a la empresa, se necesita tener un acercamiento más profundo tanto con los empleados como con las demás actividades que en ella se realizan para mantener la empresa en correcto funcionamiento. Es notable que los resultados muestren que la mayoría de las personas encuestadas tienen un

nivel de escolaridad de licenciatura, que aunado a la experiencia son factores de especial importancia para que una empresa tenga éxito.

Esto parece indicar que una persona con nivel de licenciatura posee los conocimientos necesarios para poder manejar una empresa, dependiendo del área de formación puede tener mayores bases sobre algún campo u otro del conocimiento, pero es un hecho que han desarrollado habilidades importantes para manejar una empresa con éxito. Otro aspecto importante es que las empresas en su mayoría llevan en operación cuatro años o más, obteniendo así experiencia suficiente para mantenerse a flote en los mercados cada día más competitivos. Las empresas encuestadas en su mayoría mantienen en nómina de 11 a 15 empleados, un indicador más de que las empresas de tipo gourmet se encuentran dentro de las favoritas de la región. Por lo que se han visto en la necesidad de crecer y aumentar los esfuerzos por ofrecer el mejor servicio con la mejor calidad en sus productos.

Finalmente, en cuanto a la relación entre la competitividad de las empresas familiares de tipo gourmet y la gestión de liderazgo, se encontró que existe una estrecha relación entre estas dos variables. Lo que indica la importancia del líder dentro de la empresa, la manera en cómo se dirija a sus empleados y como aborde los temas relevantes para la empresa es lo que indicara el rumbo de la misma.

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# CULTURA ECOLÓGICA AMBIENTAL, RESIDUOS SÓLIDOS BASADO EN LA LEGISLACIÓN MUNICIPAL CASO: MUNICIPIO DE AYAPANGO ESTADO DE MÉXICO

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## RESUMEN

*Dentro del contexto global los gobernantes han establecido una serie de leyes internacionales, nacionales, estatales y locales, las cuales se han cumplido parcialmente y esto ha permitido que los habitantes de las comunidades, no tengan claramente identificados cuales son los problemas, elementos y los factores que provocan daño al medio ambiente. Es por ello que esta investigación que se realizó en el Municipio de Ayapango, Estado de México, presenta una problemática que se viene originando desde hace varios años atrás la cual es la deficiencia en la cultura ecológica, que como se sabe no es otra cosa que el no separar la basura orgánica de la inorgánica, siendo esta última la que provoca grandes daños ecológicos al medio ambiente. Por lo anteriormente mencionado la investigación tiene como objetivo dar propuestas para implementar una cultura ambiental, la cual facilitaría la recolección de todos los residuos sólidos como papel, cartón y PET, entre otros, generados por los mismos habitantes del municipio, además de cumplir con los objetivos establecidos dentro del capítulo II y IV del Bando Municipal 2011, así mismo, el trabajo en conjunto con el municipio aledaño, existe un relleno sanitario intermunicipal Juchitepec – Ayapango mismo que tiene como misión poner a disposición final y controlar los residuos sólidos urbanos. La finalidad proponer Estrategias de Cultura Ecológica Ambiental sobre Residuos Sólidos (Caso: Municipio de Ayapango Estado de México), permitió lograr la vinculación de un trabajo en conjunto entre habitantes y el Gobierno del Municipio. También consintió que la forma de recolección de la basura a los domicilios de cada una de las familias del municipio y de su delegación se da una vez por semana, lo cual es llevada a cabo por el recorrido del carro recolector de residuos asignado. Cabe recalcar que para lograr una Reducción en los Residuos Sólidos, se debe de iniciar por una cultura ecológica eficiente, en la cual se le obligue a los habitantes en caso de ser necesario y aplicando la ley a separar la basura orgánica de la inorgánica para ello, es de suma importancia motivarlos a cooperar a través de la información, beneficios y el objetivo de implantar dicha cultura.*

**PALABRAS CLAVES:** Cultura Ecológica Ambiental, Residuos Sólidos, Legislación Municipal.

## ABSTRACT

*Within the overall context rulers have established a number of international laws, national, state and local, which have been partially implemented and this has allowed the residents of the communities, which do not have clearly identified the problems, elements and factors causing harm to the environment. That is why this research was conducted in the municipality of*

*Ayapango, State of Mexico, presents a problem that has been causing a number of years ago which is the deficiency in ecological culture, which as we know is nothing that not to separate organic waste from inorganic, the latter being the major causes ecological damage to the environment. By the above research aims to give proposals to implement an environmental culture, which would facilitate the collection of all solid waste such as paper, cardboard and PET, among others, generated by the inhabitants of the municipality, in addition to meeting the objectives within Chapter II and IV of the Municipal Bando 2011, also, working together with the adjacent town, there is a municipal landfill Juchitepec - Ayapango same mission is to make available to end and solid waste control. The purpose Ecological Culture propose Environmental Strategies Solid Waste (Case: Ayapango Township Mexico State), allowed the adherence of a joint work between people and the Government of the Municipality. Also agreed that the form of garbage collection to the homes of each of the families of the municipality and its delegation is given once a week, which is conducted by the carriage path assigned garbage collector. It should be noted that to achieve a reduction in solid waste , should be initiated by efficient ecological culture in which he forces the population when necessary and applying the law to separate organic waste from inorganic to do, is very important to motivate them to cooperate through information , benefits and in order to implement that culture.*

**JEL:** L38, L88, Q53, Q54, Q57, R11, R59, Z18

**KEYWORDS:** Environmental Ecological Culture, Solid Waste, Municipal Law.

## **INTRODUCCIÓN**

La cultura ecológica de las personas no está determinada por su estatus social, su religión, o su grado de educación, pues depende en gran parte de la persona misma y de la participación que se tenga hacia el tema, aunque si bien es claro que la ideología, forma de vivir o pensar en una comunidad no se puede cambiar de la noche a la mañana, pues se necesita de perseverancia, paciencia y un gran trabajo en equipo entre las partes gubernamentales, sociales y educativas, con el propósito de poder lograr los cambios significativos en pro del medio ambiente. Cuando se inicia la investigación mediante el proceso de observación participante se encuentra que en el municipio de Ayapango Estado de México, se hace notorio que existe esa falta de prioridad hacia el tema del medio ambiente que se ve reflejado en el Plan de Desarrollo Municipal o bien llamado Bando Municipal (BM) del periodo 2009 - 2012 (el estudio se realizó en el año 2011), porque las propuestas por mejorar estas deficientes condiciones ambientales no han sido tan eficaces y, no solo porque se deba al gobierno y a las instituciones educativas, sino que finalmente quienes deben participar en dichas acciones es la comunidad, que es la que tiene uno de los roles más importante para mejorar la situación del problema de la basura. Por lo que, al hacer un adecuado uso de los Residuos Sólidos (RS) basados en una cultura ambiental, donde se lleve a cabo la separación de los mismos, se puede obtener un resultado de hasta el 80% de su aprovechamiento a un bajo costo en su proceso de separación. Por otro lado si los RS son mezclados se le da paso a lo que se conoce comúnmente como basura, teniendo como resultado el aprovechamiento de solo un 30% de toda esa basura generada y el proceso de separación tendría un costo más elevado. Por lo anterior, en ambos caso se requiere de una Cultura Ambiental (CA), basada en Políticas Ambientales Gubernamentales (PAG), y en especial a las establecidas en el BM del Municipio de Ayapango Estado de México.

## **REVISIÓN LITERARIA**

La cultura ecológica se puede definir como la acción de separar los residuos generados en cualquier ambiente espacial en la que el ser humano pueda generarlos, basándose en principios que la misma sociedad adopte de manera formal o informal. Para Steward (1972), define a la ecología cultural y/o cultura ecológica como una serie de principios, metodologías y conceptos que se aplican en diferentes condiciones espaciales y temporales al estudio del hombre, su sociedad y su cultura. Por lo que la cultura ecológica se logra a través de una lucha constante de adoptar prácticas que le permitan al hombre tomar conciencia de la importancia que esta implica; dependiendo de su entorno sociocultural. Por lo que el objetivo primordial de la cultura ecológica es estudiar los diferentes procesos en los cuales el ser humano pueda y logre adaptarse a un entorno sociocultural en relación a su ambiente, además de explicar cómo un grupo de personas se comportan de acuerdo al grupo al que pertenecen, ya sea de nivel educativo o en su defecto nivel social. Así mismo, la cultura es un aspecto que va definir en gran medida la forma en que el ser humano puede adaptarse a un grupo social, y la forma en que estos se adaptan a su entorno; de esta forma es como la cultura ecológica influye en gran parte en la relación del hombre con el ambiente. Las características de la cultura basado en los autores Lichtinger W. Víctor, Arriaga B. Raúl E., Bolaños-Cacho R. Jorge A. Y Aguilar E. Juan M. en su Guía para la Gestión Integral de los residuos sólidos municipales (2001); para lograr una cultura ecológica ya sea en un grupo social o comunidad es necesario considerar las siguientes características, que deben de ser:

*Aprendida:* La cultura ecológica deber ser aprendida desde una educación formal o informal; es decir la primera se puede lograr a través de una institución educativa la cual, se pueda formar desde el nivel básico y continuar con ella a través del avance del nivel educativo; mientras que la informal se logra por una unión social la cual fomente la participación social de una comunidad.  
**Compartida:** La cultura ecológica solo se puede lograr a través de una unificación como sociedad, al no ser un atributo que se busque de forma individual.

*Comprenderla:* Para formar parte de un grupo social con cultura ecológica se debe de comprender los términos básicos que faciliten la acción de cada uno de los planes propuestos por diferentes miembros de la comunidad.

*Realista:* Lo que realmente se debe de hacer y, que los planes de acción que se piensen ejecutar estén dentro del alcance de la comunidad a fin de evitar un problema ambiental o su caso detener o disminuir si este ya existe.

*Adaptiva:* Toda la comunidad participativa se debe de adaptarse a las políticas propuestas para logara el objetivo planteado inicialmente. Por otro lado al hablar de Residuos, se toma en consideración al autor (Castells, 2000). “Residuo; es aquella sustancia u objeto generado por una actividad productiva o de consumo, de la que hoy desprenderse por no ser objeto de interés directo de la actividad principal. Otra definición de residuo es la siguiente: dentro de la Ley General para la Prevención y Gestión Integral de los Residuos, publicada por la *Nueva Ley DOF 08-10-2003*, dentro del artículo 5° define que se entiende por:

*XXIX. Residuo:* Material o producto cuyo propietario o poseedor desecha y que se encuentra en estado sólido o semisólido, o es un líquido o gas contenido en recipientes o depósitos, y que puede ser susceptible de ser valorizado o requiere sujetarse a tratamiento o disposición final conforme a lo dispuesto en esta Ley y demás ordenamientos que de ella deriven. Mientras que por RS urbano se entiende como:

*XXXIII. Residuos Sólidos Urbanos:* Los generados en las casas habitación, que resultan de la eliminación de los materiales que utilizan en sus actividades domésticas, de los productos que

consumen y de sus envases, embalajes o empaques; los residuos que provienen de cualquier otra actividad dentro de establecimientos o en la vía pública que genere residuos con características domiciliarias, y los resultantes de la limpieza de las vías y lugares públicos, siempre que no sean considerados por esta Ley como residuos de otra índole. Por lo que se define como RS, a aquellas sustancias, productos o sub-productos en estado sólido de los que su generador dispone, o está obligado a disponer, de acuerdo a ley, o por los riesgos de salud y ambiente que originan. Por **Residuos Sólidos Municipales (RSM) son todos aquellos que son** de origen domiciliario, limpieza de calles, instituciones y afines, y se clasifican de acuerdo a los autores Tegobanoglous G., Theisen H. Vigil S., que en su libro “Gestión Integral de Residuos Sólidos” vol. I; la clasificación de los residuos se da en base a su uso y manejo, pues hay tipos de residuos que requieren de un manejo especializado por su origen, además de evitar mezclarlos ya que podría ocasionar grandes perjuicios si estos no son tratados de forma adecuada y correcta.

Por último se menciona las leyes del BM que se vinculan con la Cultura Ecológica Ambiental (CEA), RS y leyes municipales, donde en su **CAPÍTULO II AGUA POTABLE Y DRENAJE, ARTÍCULO 71.-** Se prohíbe el depósito de residuos o lodos al drenaje a los particulares que realicen actividades de lavado de hortalizas, y deberán contar con los medios necesarios para evitar el ensolvamiento de este servicio, tales como desarenadores y rejillas hacia la descarga. **CAPÍTULO IV RECOLECCIÓN DE RESIDUOS SÓLIDOS URBANOS, Y LIMPIEZA DE ÁREAS PÚBLICAS ARTÍCULO 76.-** El Servicio de Recolección de Residuos Sólidos Urbanos y su disposición final estará a cargo del Organismo Público Descentralizado encargado de Operar el Relleno Sanitario Regional Juchitepec - Ayapango, que coordinará las actividades correspondientes a la recolección de residuos sólidos urbanos a nivel domiciliario, comercial e industrial. **ARTÍCULO 77.-** El Servicio de Limpieza de Áreas Públicas estará a cargo de la Dirección de Servicios Públicos y se encargará del barrido y la limpieza permanente de las áreas designadas como espacios públicos municipales.

El Servicio de Recolección de Residuos Sólidos Urbanos, se encargará de la recolección de residuos sólidos urbanos, debiendo depositarlos en el Relleno Sanitarios Regional Juchitepec - Ayapango, de acuerdo a la Norma Oficial Mexicana NOM-083-SEMARNAT-2003, a la Ley General para la Prevención y Gestión Integral de los Residuos, al Código para la Biodiversidad del Estado de México y demás disposiciones oficiales vigentes en la materia. **ARTÍCULO 78.-** Serán remitidas a las autoridades competentes y sujetas a la sanción correspondiente, las personas que se sorprendan tirando basura, animales muertos, escombros, desechos o cualquier contaminante en las barrancas, canales de desagüe, canales, caños, pozos de visita, áreas o vías públicas, así como en la propiedad de terceros y del municipio. **ARTÍCULO 79.-** Los vecinos, transeúntes y visitantes deberán observar las disposiciones del Reglamento de Recolección de Residuos Sólidos Urbanos y

Limpieza de Áreas Públicas y demás disposiciones oficiales vigentes en la materia, con el fin de mantener limpias las calles, caminos, barrancas, carreteras y cualquier otra área dentro de la municipalidad. **ARTÍCULO 80.-** Las personas que ejerzan el comercio en el mercado municipal, tianguis o la vía pública, son responsables de mantener y dejar limpio el espacio que ocupan, depositando los residuos al final de su jornada en los lugares designados para tal efecto, de acuerdo a lo que señale el Reglamento de Recolección de Residuo Sólidos Urbanos y Limpieza de Áreas Públicas y demás disposiciones oficiales vigentes en la materia. **CAPÍTULO XII DEL EQUILIBRIO ECOLÓGICO Y LA PROTECCIÓN AL AMBIENTE ARTÍCULO 99.-** Se declara del interés público la protección, conservación y restauración del ambiente, así como la prevención y corrección de los procesos de deterioro de los ecosistemas que se encuentren dentro del territorio municipal, por lo cual, queda prohibida la tala de árboles y el pastoreo en zonas en donde la autoridad así lo determine o cuando la zona ya haya sido reforestada. **ARTÍCULO 100.-**

Las disposiciones en materia ecológica, contenidas en este Bando y en el Reglamento Municipal para el Equilibrio Ecológico y de Protección al

Ambiente, son de aplicación y cumplimiento obligatorio en el territorio municipal, sin perjuicio y en complemento de la observancia de las disposiciones estatales y federales en la materia. **ARTÍCULO 101.-** Son facultades del Ayuntamiento en materia de ecología y medio ambiente: **I.** Expedir el Programa de Ordenamiento Ecológico Municipal, en concordancia con los programas de ordenamiento ecológico estatal y los de carácter regional; **II.** Expedir, con fundamento en el artículo 15 de la Ley General de Desarrollo Forestal Sustentable vigente y previo a su instalación, las licencias o permisos, para el establecimiento de centros de almacenamiento o transformación de materias primas forestales; **III.** Dar aviso a las autoridades ambientales de las obras y actividades públicas o privadas que puedan causar perjuicio al ambiente; **IV.** Denunciar a personas físicas o morales que sin autorización de la autoridad federal, estatal o del Ayuntamiento, descarguen aguas residuales que contengan contaminantes, desechos materiales peligrosos o cualquier sustancia potencialmente dañina a la salud de las personas, la flora o la fauna del municipio; **V.** Denunciar y dar seguimiento, ante las autoridades correspondientes, a las personas que incurran en los delitos ambientales previstos en el Código Penal Federal, el Código Penal del Estado de México, la Ley General del Equilibrio Ecológico y la Protección al Ambiente, el Libro Cuarto del Código Administrativo del Estado de México y sus Reglamentos respectivos; **VI.** Vigilar, en coordinación con las autoridades competentes, que los residuos sólidos peligrosos que se generen dentro del municipio sean manejados de acuerdo con la Ley General para la Prevención y Gestión Integral de los Residuos; **VII.** Aplicar acciones para corregir los efectos adversos que cause cualquier tipo de contaminante al ambiente y a las personas; **VIII.** Celebrar convenios con el Gobierno Federal, el Gobierno del Estado de México y con otros municipios para llevar a cabo acciones que mejoren el ambiente del municipio; y el **XI.** Expedir los reglamentos y disposiciones a fin de conservar el equilibrio ecológico y la protección al ambiente en la jurisdicción municipal. **ARTÍCULO 102.-** En el derecho que asiste al Ayuntamiento como órgano colegiado, aplicará y sancionará las disposiciones contenidas en el Bando y los Reglamentos en materia de equilibrio ecológico y protección al ambiente, para lo cual estará facultada el área de ecología a través de su titular para llevar a cabo los procedimientos respectivos y aplicar las sanciones cuando cualquier persona física o moral transgreda los ordenamientos señalados.

## METODOLOGÍA

La investigación presenta una metodología de tipo cualitativa, ya que para su elaboración se ha tomado en cuenta diferentes apoyos teóricos según cada una de sus autores así, como también el comportamiento en el manejo de los RS generados dentro del municipio de Ayapango; es decir si llevan a cabo una CEA que, a pesar de existir políticas para su aplicación esta se maneje de forma deficiente provocando el problema de la basura. El estudio que se llevó a cabo es bajo un nivel descriptivo al describir las causas por las cuales hasta la fecha no se ha manejado una CEA correcta, además de explicar las causas por la cual este problema se ha manejado de forma deficiente por los habitantes y el gobierno del municipio. Presenta un diseño de tipo no experimental transversal al plantear Estrategias de CEA sobre RS en el municipio, para lo cual se establecen herramientas básicas y sencillas que favorecerán a la reducción del problema de la basura pero, que por sencillas que parezcan no se llevan a cabo (como lo es el simple hecho de separar todos los desechos generados) ya sea por falta de interés de los habitantes, de su gobierno o en su caso de ambas partes.

## CONCLUSIONES

Se puede concluir que la cultura ecológica de las personas no está determinada por su estatus social, su religión, o su grado de educación, sino que depende en gran parte de sí mismo y de la participación que tenga en su comunidad, como se relacione con su entorno y cómo conozca y respete las leyes que rigen a los RS. Así mismo hay que tomar en consideración y de debe quedar muy claro que la idolología, forma de vivir o de pensar de una comunidad no se puede cambiar de la noche a la mañana, pues se necesita de perseverancia, paciencia y un gran trabajo en equipo entre la parte gubernamental, social y educativa para lograr cambios significativos en pro del medio ambiente. Se hace notorio que en Municipio de Ayapango el tema del medio ambiente en el periodo 2009 – 2012, no era tan prioritario, debido a que las propuestas por establecer y mejorar la CA sobre RS es deficiente y no han sido tan eficaces, por lo que no solo se deba al gobierno, pues finalmente debe participar la comunidad y determinar la forma de como juega un rol importante para mejorar la situación del problema de la basura. Es por lo anterior, que en ambos caso se requiere de una CA, basada en PAM.

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# PERSPECTIVAS DE REFORMA HACENDARIA AL IMPUESTO AL VALOR AGREGADO 2013, EN MÉXICO

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## RESUMEN

*En este trabajo se aborda el análisis a la iniciativa de decreto en México, por el que se reforman, adicionan y derogan diversas disposiciones de la Ley del Impuesto al valor agregado correspondiente al año de 2013, para aplicarse en el periodo fiscal 2014. Estos cambios comprenden la eliminación del tratamiento a la región fronteriza, de una tasa preferencial de 11%, a 16%, lo cual resulta inequitativo frente a las operaciones similares que se realizan en el resto del territorio nacional, afectando en su economía a 7.5 Millones de habitantes de esta región, de acuerdo a datos de (INEGI, 2009). La eliminación de las exenciones a un gran número de regímenes especiales, para ampliar la base gravable del IVA, como la compra, renta y pago de hipoteca de casa habitación; los servicios de enseñanza; limitar la exención en materia de transporte público terrestre de personas, para dejarlo únicamente al servicio de transporte prestado en áreas urbanas, suburbanas o zonas metropolitanas, entre otras, lo mas trascendental es el gravar las importaciones temporales del régimen de la industria manufacturera de exportación (IMMEX), que antes estaba exento, así como el depósito fiscal automotriz y el caso del recinto fiscalizado y recinto fiscalizado estratégico.*

**PALABRAS CLAVES:** IVA, Fiscal, Exenciones

## PERSPECTIVES OF TAX LAWS REFORM TO THE VALUE ADDED TAX 2013, IN MEXICO

### ABSTRACT

*On this paper the analysis for the Mexican revenue bill will be covered. This initiative discusses why the reform, adds and derogate a number of la dispositions regarding the value-added tax laws to the year 2013, to be issued during the fiscal year of 2014. These changes cover the elimination of the bordering areas preferential treatment and change it form 11% to 16%, which ultimately means and increase concerning similar operation throughout the nation, affection the economy of 7.5 million inhabitants of this region, information provided by (INEGI, 2009). The removal of this fiscal exemption to a great number of specialized regimes, to apply the value-added tax, in values such as shopping, renting, and mortgage payments; the schooling services; will limit the exemption for public transportation, to be left un touched only in Metropolitan areas among others. The most transcendental of the tax increase, for the short term, will affect the Manufacturing and exporting industry (IMMEX in Spanish) which was not coves in the tax revenue in the past. This will also affect the car industry as we as the fiscal premises and the strategic fiscal premises.*

**JEL:** G1, H2, H3

**KEY WORDS:** VAT, Fiscal, Exemptions

## INTRODUCCIÓN

La reforma hacendaria constituye una gran reforma social que pretende acelerar el crecimiento y la estabilidad económica de México, en pos de garantizar a los mexicanos una gran red de protección social, presentada al Congreso de la Nación por el presidente Enrique Peña Nieto el 8 de Septiembre de 2013, para su discusión y análisis. Muchas de las disposiciones fiscales se aplicarán sobre el sector formal de la economía, sin que se contemplen medidas efectivas para reducir de forma significativa la actividad informal, que incluso podría verse incrementada, advirtió el economista en jefe de Scotiabank México, Mario Correa. Uno de los temas relevantes de la propuesta de reforma fiscal para 2014 en México, se refiere entre otras a la ley del Impuesto al Valor Agregado, que entró en vigor en el año de 1980, y que abrogó a la entonces Ley Federal sobre Ingresos Mercantiles (ISIM).

El ISIM gravaba las operaciones mercantiles durante las etapas que había entre la producción del artículo y su comercialización, generando efectos acumulados y en cascada en los precios; es decir el impuesto se arrastraba de etapa en etapa, ocasionando que el costo y el precio del bien aumentarían; en consecuencia, el consumidor final recibía todo el impacto económico acumulado de este gravamen, además, el impuesto era de difícil control contable y producía efectos negativos sobre todo en las pequeñas y medianas empresas, que tienen una capacidad contributiva menor. La estructura de la actual Ley del Impuesto al valor Agregado, impide la fácil aplicación de sus disposiciones y genera confusión en cuanto a la forma de interpretar algunas partes de la misma, todo ello producto del gran número de modificaciones y reformas de que ha sido objeto, sin que se haya mejorado la recaudación ni la simplificación de las obligaciones fiscales, por lo que se puede considerar que este gravamen cuenta con una estructura con nivel de eficiencia no optimizado. Lo anterior, se traduce en incertidumbre jurídica para los contribuyentes, lo que se considera como un obstáculo al potencial recaudatorio de dicha contribución, toda vez que se implementó con el propósito de mejorar la recaudación del país lo cual desde el punto de vista técnico, permitiría que el país alcanzara los niveles requeridos de recaudación en el marco de los principios jurídicos tributarios de equidad, justicia y proporcionalidad.

## REVISIÓN DE LITERATURA

Por tratarse de un tema que se relaciona con reformas a las leyes que rigen a México, en este caso a la Ley del Impuesto al Valor Agregado (LIVA), se enfoca la revisión documental de las disposiciones que se relacionan con la misma, esto se refiere a las iniciativas de decreto impuestas por el Ejecutivo (Presidente), de México, además los resultados de las Comisiones Dictaminadoras del Senado y del Congreso de la Unión, conjuntamente con las fuentes periodísticas y dependencias de gobierno que manejan información como el INEGI, la Secretaría de Hacienda y Crédito Público, Secretaría de Economía, así como los organismos empresariales como son CANACINTRA, COPARMEX, CONCANACO. La estructura tributaria es un sistema financiero que limita o contrae el gasto privado permitiendo con ello el gasto público; la manera en que este sistema financiero extrae los recursos de los agentes privados es mediante el establecimiento de diversos impuestos que pueden gravar en términos generales la renta o el consumo.

Si se parte de la idea de que cualquier impuesto disminuye el bienestar de la sociedad o impone costos adicionales a sus actividades, dependiendo de cuál sea su base gravable, se puede concluir que los impuestos son malos; no obstante si se piensa desde una óptica diferente, asumiendo que los recursos que el gobierno retira de la economía, son devueltos vía bienes y servicios, se estaría dando sentido a la función tributaria del gobierno pensando que lo que hace es coordinar de manera estratégica la canalización de recursos con fines sociales y económicos para lograr: mejores niveles de vida, crecimiento económico y una redistribución del ingreso y la riqueza en una proporción "justa".

En la exposición de motivos que se señalan en la Iniciativa de Decreto por el que se reforman, adicionan y derogan diversas disposiciones de la Ley del Impuesto al Valor Agregado, se menciona que el impuesto al valor agregado (IVA) representa la segunda fuente de ingresos tributarios en México; sin embargo, cabe destacar que a nivel internacional su recaudación resulta ser una de las más bajas. Muestra de lo anterior es que mientras que en México en 2012 la recaudación del IVA fue de 3.74% del producto interno bruto (PIB), en promedio en los países de América Latina y en los países miembros de la Organización para la Cooperación y el Desarrollo Económicos (OCDE) era de 6.5% y 6.9% del PIB, respectivamente.

Así, de manera comparativa, la recaudación del IVA en México es inferior en 56% a la que en promedio se registró en Argentina, Chile y Uruguay, cuya recaudación asciende a 8.0%, 7.7% y 9.7% del PIB, respectivamente (8.5% del PIB en promedio). El bajo potencial recaudatorio del IVA en México se explica fundamentalmente por la aplicación de diversos regímenes especiales como lo son la tasa del 0% a un amplio número de bienes y servicios, así como la aplicación de una tasa reducida en la región fronteriza. Estas tasas, además de erosionar la base gravable dificultan su administración, ya que dan lugar a un gran número de solicitudes de devolución, las cuales demandan de parte de la administración tributaria importantes recursos, tanto materiales como humanos, para revisar la veracidad de la información, documentación y operaciones reportadas en dichas solicitudes.

Durante más de 30 años de aplicación en nuestro país del IVA se han realizado reformas que han erosionado sensiblemente su base gravable, de tal forma que la proporción del consumo gravado pasó de 72% a 54% de 1980 a 2013; lo que implica una disminución de 18 puntos porcentuales. La Ley del Impuesto al Valor Agregado establece que las operaciones realizadas por los residentes de la región fronteriza, objeto de dicho impuesto, están gravadas a una tasa preferencial de 11%. Este tratamiento resulta inequitativo frente a las operaciones similares que se realizan en el resto del territorio nacional. La aplicación de una tasa reducida en dicha región, además de implicar una menor recaudación, dificulta la administración y el control del impuesto, por lo que se abren espacios para la evasión y elusión fiscales.

Se considera que los factores que justificaron, en su momento, la aplicación de un tratamiento preferencial en materia del IVA en la mencionada región fronteriza, han desaparecido, por lo que ya no se justifica mantener dicho tratamiento y se estima necesario que, en términos de la obligación prevista en el artículo 31, fracción IV de la Constitución Federal, todos los contribuyentes paguen el impuesto a una misma tasa, eliminando privilegios, lo que generará que la tributación sea más justa al sujetarse todos a la misma tasa impositiva. La OCDE publicó en Octubre del 2010; Perspectivas OCDE: México Políticas Clave para un Desarrollo Sostenible, entre las cuales una de las Recomendaciones clave de la OCDE, se detalla a continuación:

• Ampliar la base fiscal eliminando los subsidios, exenciones, excepciones y privilegios fiscales ineficientes y mejorando los incentivos para operar en la economía formal; revisar la eficiencia del gasto y eliminar los subsidios a la energía. Sin embargo señala también que a mediano plazo, una reforma que contribuya a ampliar la base fiscal debe incluir medidas para aumentar la eficiencia en el gasto público, limitar o idealmente eliminar los subsidios a la energía y mejorar la recaudación de impuestos, así como reforzar los incentivos para que las empresas y los trabajadores se incorporen al sector formal.

## METODOLOGÍA

En el presente estudio, se procedió a revisar documentalmente las disposiciones legislativas que se relacionan con la reforma hacendaria relativa a la Ley del Impuesto al Valor Agregado, así como las sucedáneas a la misma. El resultado obtenido consiste en un análisis objetivo de las expectativas que de manera a priori se perfilan como posibles de suscitarse, por lo que el método cualitativo predomina como básico, para el desarrollo de este trabajo. Se trata pues de establecer un criterio sustentado en opiniones de especialistas y de probables situaciones que se presentarán una vez que entre legalmente en operación las reformas fiscales que en este caso corresponde a la Ley del Impuesto al valor agregado, que conjuntamente con la miscelánea de orden fiscal integral, permeará y propiciará un panorama fiscal a partir del 1° de Enero del 2014. Es entonces a partir de esa fecha cuando se inicie el conteo numérico de los resultados de la implementación de la reforma hacendaria. Los comentarios resultantes a la fecha del presente trabajo, si bien se fundamentan en la revisión literaria de referencia, no incluyen el resultado de la realidad cuantitativa de los resultados fiscales, ya que esta se presentará durante el avance y duración del proceso de implementación de los puntos revisados en el apartado de resultados, parte siguiente del presente trabajo.

## RESULTADOS

Los países desarrollados decidieron hace tiempo gravar con un Impuesto al Valor Agregado (IVA) a todos los productos y servicios que se enajenan, algunos de ellos gravan todo lo que se vende a una sola tasa, mientras que otros gravan a distintas tasas, de acuerdo a la naturaleza de dichos productos y servicios, existen casos de países donde aparecen ciertos productos exentos del pago del IVA, como sucede en México con los alimentos y medicamentos. Islandia es el país donde más alta es la tasa del IVA: 25.5%, pero también existen tasas como 7%, para gastos de calefacción, materiales impresos, gastos en restaurantes, en la hotelería, y casi todos los alimentos.

Existen países que cobran un IVA de hasta un 10% como son: Andorra 4.5%, Japón, Taiwán y la Isla de Jersey de 5%; Panamá, Singapur y Tailandia 7%; Liechtenstein 7.6%; Suiza 8%; y Egipto, Corea del Sur, Líbano, Malasia, Australia, Indonesia, Paraguay y Vietnam 10%. Otros países del mundo cobran el IVA que va del 11% al 15%: Ecuador, Guatemala, Kazajastán, Filipinas, Sri Lanka y Venezuela 12%; Bolivia, El Salvador y Nepal 13%; India 13.5%; Sudáfrica 14%; Palestina 14.5%; y Etiopía, Mauricio, Nueva Zelanda, Fidji, Trinidad y Tobago, Chipre y Luxemburgo 15%.

Gravan el IVA del 16 al 20%: Colombia, Jordania, Kosovo, Perú, Guyana, Israel, Pakistán, México y República Dominicana 16%; Montenegro, Saint Kitts y Nevis, Bosnia y Herzegovina y China 17%; Barbados 17.5%; Georgia, Rusia, Azerbaijón, Macedonia, Serbia, Turquía y España 18%; Chile, Alemania y Holanda 19%; Francia 19.6%; Austria, Bulgaria, República Checa, Estonia, Italia Eslovaquia, Eslovenia, Reino Unido, Uzbekistán, Marruecos, Albania, Armenia,

Ucrania, Bielorrusia y Moldavia 20%. Otros países que gravan el IVA de más de 20%: Bélgica, Lituania, Irlanda y Argentina 21%; Letonia y Uruguay 22%; Croacia, Finlandia, Grecia, Polonia y Portugal 23%; Rumania 24%; Noruega, Suecia, Dinamarca y Hungría 25%; Islandia 25.5%.

Como se observa, en los países donde se grava el IVA, se encuentran diferentes tasas que reflejan las variaciones señaladas, resaltando que aquellos que presentan más desarrollo, presentan tasas reducidas para muy pocos rubros, siendo la tasa porcentual promedio el 16.05%, tasa que en la medida se aplica actualmente en México, considerando también que en la región o zona fronteriza se grava el 11%, por lo que en resumen se observa que en algunos países hay tasas reducidas de IVA para ciertos productos y servicios, en otros hay tasa cero.

La Ley del Impuesto al Valor Agregado contempla en el territorio nacional el cobro generalizado el 16%, excepto en la región, zona o franja fronteriza, donde se grava el 11%. Esta iniciativa se concretó con fecha 31 de Octubre de 2013, al homologarse la aplicación de la contribución generalizada en todo el país, incluidas las partes del territorio donde aparecía la tasa del 11%. Es importante resaltar que México y Estados Unidos comparten alrededor de 3,000 km de frontera. A lo largo de esta frontera se han ido desarrollando zonas metropolitanas internacionales desde Tijuana-San Diego en el oeste, hasta Matamoros-Brownsville en la desembocadura del Rio Bravo.

Dichas ciudades hermanas comparten, entre otras muchas cosas, “compradores”. Gracias a las mejores condiciones de precios en numerosos productos, gran parte de la población mexicana hace las compras del otro lado de la frontera, desde la leche para el desayuno hasta aparatos electrónicos y objetos de gran valor. El costo de transporte es mínimo (incluido el costo social de la fila para cruzar) y el ahorro es mucho. De ahí que les sea difícil a los empresarios mexicanos competir en igualdad de circunstancias.

El impacto de esta medida es inminente, puesto que la faja, regiones y zonas fronterizas están conformadas por 7.5 millones de habitantes (INEGI, 2009), que están siendo afectados con la homologación del impuesto, que si se hubieran efectuado las negociaciones entre la clase política y los diferentes sectores de las regiones fronterizas, se habrían utilizado estrategias como el aplicar el incremento de manera escalonada, a fin de observar poco a poco los efectos que se irían presentando en la economía de regiones importantes en el país como son las ciudades fronterizas de Nogales, Tijuana, Mexicali, Nuevo Laredo y Ciudad Juárez claves en el desarrollo del país dentro de las actividades del comercio internacional con Estados Unidos y otros países del mundo.

Se estima, de acuerdo a lo anterior, que se presentará un efecto inflacionario importante y consecuentemente afectará a la economía de estas regiones, independientemente de lo que los sectores productivos vayan a pagar más del impuesto, por lo que su flujo de efectivo se va ver afectado. En referencia a gravar las importaciones temporales del régimen de la industria manufacturera de exportación (IMMEX), que de acuerdo al Decreto correspondiente estaba exento, inicialmente el Poder Ejecutivo había planteado gravar al 16%, lo cual se eliminó de acuerdo a la modificación de ley correspondiente, por lo que las empresas que tengan un programa de importación temporal, tendrán un año para certificarse y comprobar que lo que realmente se importa temporalmente, sea utilizado o empleado en la producción de la industria manufacturera de exportación, para ser retornado al extranjero.

Analizando las nuevas cargas fiscales se contempla un eventual golpe a la industria maquiladora nacional, la Secretaría de Hacienda informó que sólo las 100 mayores empresas exportadoras de

México serán certificadas de inmediato para que queden exentas del pago del IVA a importaciones temporales. De esta forma, de un total de 6,250 empresas maquiladoras en México que el SAT tiene contabilizadas, sólo algunas serán beneficiadas, lo que sin duda ocasionará desempleo en México y fuga de capitales hacia países más amigables a la inversión cuando las empresas no sean capaces de lograr la certificación, cuyos términos en este momento se desconocen.

Según el SAT la medida de aplicar el IVA a las importaciones temporales obedece a que se ha detectado entre las maquiladoras diversas prácticas de elusión y evasión del pago del IVA. De acuerdo con Aristóteles Núñez, jefe del SAT, “alrededor de 60% de lo que se exporta a través de las maquiladoras lo hacen 100 empresas y esas 100 empresas podrían ser sujetas a certificados; las demás tendrán que asegurarnos que están haciendo la debida exportación”. Se debe mencionar que las empresas automotrices y maquiladoras tendrían así tres opciones respecto del IVA en importaciones temporales: 1) pagar el impuesto y luego recuperarlo; 2) a través de una fianza, gastando sólo en la prima, o 3) exentar esa contribución con el esquema de certificación

Sin embargo, no se desdeña el hecho de que la homologación del 16% del IVA en las fronteras, aunado a la eliminación del mismo impuesto en las importaciones temporales de las maquiladoras exportadoras tendrá un impacto en dichas regiones, ya que precisamente las empresas situadas en ellas, son las que más generan IVA en el país, aportando aproximadamente un monto superior al 40% de lo recaudado a nivel nacional, es importante agregar a lo anterior que la participación en la creación de empleos, con 12 millones de plazas directas. (INEGI, 2009). Aunado a lo anterior, aún cuando no es parte del tema a tratar en este trabajo, es pertinente mencionar lo relativo al incremento al Impuesto sobre la Renta, sus modificaciones y ajustes para empresas maquiladoras de exportación y en general para todas, de acuerdo con corridas efectuadas por Rodrigo Alpizar, de la Cámara Nacional de la Industria de Transformación, (CANACINTRA, 2013), Juan Pablo Castañón de Consejo Patronal de la República Mexicana (COPARMEX, 2013) y Jorge Dávila de la Confederación de Cámaras Nacional de Comercio (CONCANACO, 2013), hacen ver que en cada mes, unas 20 empresas regresarán a su país de origen. En tres años más de 800 compañías ya no tendrían operaciones en territorio nacional, lo que se traduciría en la pérdida de de más de tres millones de empleos tan solo en la zona fronteriza.

De acuerdo a lo anterior, lo que representaba un golpe enorme para la industria maquiladora de exportación, se convierte ahora en un paliativo ya que se decide que para el año 2014, las empresas pertenecientes a este gremio podrán certificarse y comprobar que son maquiladoras de exportación puras, contándose con el plazo conveniente para hacerlo al inicio del próximo año, con fechas tentativas de término del plazo pendiente de indicarse por parte de la autoridades fiscales. En otro contexto de la reforma a la Ley del Impuesto al Valor Agregado (LIVA), La Comisión de Hacienda de la Cámara de Diputados aprobó mantener la exención del impuesto a los servicios educativos, espectáculos públicos, rentas, ventas e hipotecas de casa habitación, sin embargo, aprobó gravar con 16% el chicle, los alimentos para mascotas, la venta de perros y gatos y especies pequeñas, como fue la propuesta del

Ejecutivo Federal. Las nuevas disposiciones fiscales contemplan gravar además con el IVA, a la goma de mascar, por lo que se estima que con ello, se va a generar una pérdida anual de mil 300 millones de pesos entre las empresas productoras, bajo la premisa de que el chicle no goza de las características de un alimento, la Secretaría de hacienda y Crédito Público a cargo del Secretario Luis Videgaray, le impuso el gravamen del 16%, por lo que los efectos se pueden bosquejar atendiendo las expresiones de representantes del gremio: “afecta principalmente a trasnacionales como Mars, de Silvia Dávila, con marcas como Orbit y Wrigley; Mondelez, que lleva Roberto

Soto con productos como Bubbalo, Trident y Clorets; PepsiCo, de Pedro Padierna, con la línea de Sonrics; la mexicana Canel's del potosino Roberto Navarro, y más pequeños como Consorcio Chiclero de Manuel Aldrete. Se calcula que el negocio del chicle ronda los 8 mil 200 millones de pesos al año". (El Imparcial, 2013).

Respecto a los regímenes aduaneros: Depósito Fiscal Automotriz, Recinto Fiscalizado y Recinto Fiscalizado Estratégico, la Comisión Dictaminadora del Congreso y del Senado de la República que en lo sucesivo se denominará en este trabajo "La Comisión", considera acertada la propuesta del Ejecutivo Federal de eliminar la exención que prevé la Ley del Impuesto al Valor Agregado (LIVA), en las importaciones temporales de mercancías, por lo que estima conveniente realizar diversas adecuaciones a la citada ley, a efecto de que se pague el IVA en la introducción de bienes a los regímenes aduaneros de importación temporal para elaboración, transformación o reparación en programas de maquila o de exportación; de depósito fiscal para someterse al proceso de ensamble y fabricación de vehículos; de elaboración, transformación o reparación en recinto fiscalizado y de recinto fiscalizado estratégico.

Con el fin de ampliar lo anteriormente expuesto, La Comisión propone que quienes introduzcan los bienes a los regímenes aduaneros que se propone gravar, puedan obtener una certificación por parte del Servicio de Administración Tributaria (SAT), cuando reúnan los requisitos que mediante reglas de carácter general que al efecto emita dicho órgano desconcentrado, y que permitan un adecuado control de las operaciones realizadas al amparo de los regímenes mencionados. La certificación permitirá a las empresas contar con un crédito fiscal consistente en una cantidad equivalente al 100% del IVA que deba pagarse por la importación temporal, el cual se podrá aplicar contra el IVA que deba pagarse por las citadas actividades. En ese sentido, La Comisión estima que es conveniente diferir, hasta un año después de que se haya publicado en el Diario Oficial de la Federación las reglas sobre certificación, la entrada en vigor de la citada obligación, a fin de dar tiempo a que las empresas puedan obtener la citada certificación antes de la entrada en vigor de las nuevas disposiciones.

La Comisión que dictamina coincide que con esta propuesta se solucionarán los problemas de control que en la práctica genera este régimen como consecuencia de la flexibilidad que paulatinamente se dio en su marco regulatorio, situación que modificó substancialmente el régimen originalmente otorgado en materia de IVA, lo que incentivó prácticas de evasión y elusión fiscales que, en el extremo incluyen la introducción al país de mercancías para fines de venta sin cumplir con el pago de impuestos correspondiente y la solicitud de devolución de IVA de insumos importados temporalmente sin este impuesto. Tomando en cuenta que la reforma hacendaria despierta expectativas, el Banco de México levanta cada mes la "Encuesta sobre las Expectativas de los Especialistas en Economía del Sector Privado" y contempla un sondeo a expertos independientes y de grupos financieros más relevantes, los resultados a la encuesta de Octubre de 2013, refleja entre otros, el siguiente:

La probabilidad que más creció en la encuesta respecto a la pregunta ¿"Cuál es la probabilidad de que en algunos de los próximos trimestres se observe una reducción respecto del trimestre previo en el Producto Interno Bruto (PIB), real ajustado por estacionalidad?" La respuesta fue que creció en un 29% la probabilidad de que el dato del PIB del tercer trimestre de 2013, sea negativo, lo cual resulta interesante en virtud de que han aparecido durante dos trimestres consecutivos datos de crecimiento negativo, lo cual tiene que ver probablemente con la entrada en vigor de los nuevos impuestos, atendiendo además del IVA, con el resto de las contribuciones contempladas.

En el orden, las respuestas más trascendentes son: “la debilidad del mercado externo y la economía mundial 22%; la política fiscal que se está instrumentando 17%; la incertidumbre sobre la situación económica interna, 14%; De lo anterior llama la atención lo referente a la política fiscal que hace un año aparecía con un 2% de las respuestas y a Octubre del presente aparece con un 17% (Banco de México, 2013). Interpretando esto último, significa que existen analistas que no confían en que durante el gobierno de Peña Nieto, la política fiscal vaya a ser contracíclica, en el entendido de que los nuevos impuestos y el crecimiento del déficit podrían obstaculizar el crecimiento del país. De acuerdo a esto, se puede concluir en lo siguiente: “Las políticas fiscales contracíclicas deben aplicarse como cuando uno bebe tequila: En moderación”. Las palabras de Agustín Carstens en el Buttonwood Gathering of the Economist son importantes en un momento en que el Gobierno Federal en México pretende aplicar políticas fiscales contracíclicas sin moderación. (Sarmiento, 2013).

En el Sector Turismo esta medida también tendrá su impacto al ser aprobado el incremento del IVA del 11% al 16%, ya que se estima que los precios tendrán un aumento generalizado del 4.5%, que repercutirá a este sector y a los habitantes de estas áreas que verán mermados sus ingresos reales. Con base en estudios recientes elaborados por la Escuela de Turismo y el Centro Anáhuac de Investigación en Turismo, se prevé una caída en el consumo de los turistas que llegan por avión a México a través de los aeropuertos de Cancún, Cozumel y Los Cabos.

El 55.5% de los visitantes que llegan vía aérea a México, lo hacen por estos tres aeropuertos, teniendo que el incremento del IVA se traspasara necesariamente a los visitantes. Efecto similar ocurrirá con los pasajeros de los cruceros, a través de lo cual el 66.8% del total llega a Cozumel, el 10.2% a Ensenada; el 9.7% a Majahual y el 3.4% a Los Cabos, teniendo consecuencias negativas para los destinos señalados y la actividad turística. Como comentario final se puede afirmar que de acuerdo a los datos preliminares de los efectos y expectativas de la reforma hacendaria en cuestión del IVA y demás contribuciones en México, el sentir general de los sectores afectados por estas modificaciones contributivas pasan de la etapa del optimismo a la del escepticismo con respecto a la economía mexicana.

## CONCLUSIONES

De acuerdo a las señales enviadas por organismos internacionales como la OCDE y la CEPAL, la reforma fiscal en México, presenta indicadores de ser agresiva y altamente recaudatoria, dado que en general, además de la homologación del IVA, se contemplan incrementos en el ISR, IEPS, atenuado con la derogación del Impuesto Especial a Tasa Única (IETU), así como del Impuesto a los Depósitos en Efectivo (IDE). La política hacendaria de 2013 para aplicarse a partir del 1 de Enero de 2014, presenta los cuestionamientos naturales que se pueden considerar inusuales para una Secretaría de Hacienda y Crédito Público que tradicionalmente ha sido muy profesional, el Presidente Enrique Peña Nieto no practica la revisión de sus iniciativas al interior de su gabinete presidencial, ya que las reformas se han planteado y tomado decisiones a la luz de la minoría de los secretarios de las dependencias involucradas.

Se estima que la homologación del 16% de IVA en las zonas, regiones y franja fronteriza propiciará un efecto inflacionario importante que afectará a la economía de dichas regiones, como es el caso del sector manufacturero, sector turismo y el sector bancario que consecuentemente verá reflejado un alza en los servicios financieros que están sujetos al impuesto. Se presentan facilidades administrativas para que las empresas que se certifiquen de conformidad con las reglas de carácter general que emita el Servicio de Administración Tributaria (SAT), puedan aplicar un crédito equivalente al monto del IVA que deban pagar en la importación temporal,

estableciéndose que la certificación tendrá una vigencia de un año y podrá ser renovada. Del análisis de la reforma propuesta, observamos que se trata de uno de los planteamientos más agresivos, con fines exclusivamente recaudatorios, que hemos visto en muchos años. Al decir del propio Secretario de Hacienda y Crédito Público, Dr. Luis Videgaray, con estas medidas se busca una recaudación adicional de 240 mil millones de pesos. Correspondiendo al renglón del Impuesto al Valor Agregado 54 mil millones de pesos.

La problemática que observamos es que se espera que estos recursos adicionales provengan de los mismos contribuyentes a los que tradicionalmente se ha venido gravando y que actúan en la economía formal. De esta propuesta de reformas no se desprende que existan medidas que coadyuven a una reactivación de la economía, al fomentar la inversión y el empleo y si fomentar que se siga presentando la economía informal. Los efectos esperados ante esta reforma es que se afecte la política de promoción de la industria maquiladora y con ello la afectación al empleo de este sector productivo la cual genera 12 millones de empleos directos y generando más del 40% del IVA recaudado en el país. Existen muchas dudas sobre el futuro de la economía mexicana, que involucra a la política fiscal, aprobada por el Congreso de la República, misma que en principio está diseñada para apoyar al crecimiento del país, se va a conformar un historial de fracaso o éxito al interior de las economías emergentes.

Consideramos que la mejor manera de incrementar la recaudación de un país no solo debe basarse en Reformas Hacendarias que incrementen las tasas impositivas o la generación de nuevos impuestos, es importante llevar a cabo una reactivación económica, mediante la cual se generen más trabajos formales, permitiendo que las actividades informales puedan cumplir con sus obligaciones fiscales. Desgraciadamente mientras las políticas tributarias se mantengan más que pro-cíclicas, y exista el ánimo de mantener la disciplina fiscal, las posibilidades de crecimiento son insuficientes.

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# CONSTITUCIONALIDAD Y LEGALIDAD DEL PROCEDIMIENTO ADMINISTRATIVO EN MATERIA ADUANERA

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## RESUMEN

*La Secretaría de Hacienda y Crédito Público tiene facultad para inspeccionar y vigilar permanentemente el manejo, transporte o tenencia de mercancías en los recintos fiscales y fiscalizados, las aguas territoriales y playas marítimas, la zona económica exclusiva adyacente, el mar territorial, los aeropuertos, una franja de doscientos kilómetros de ancho paralela y adyacente a las fronteras y una franja de cincuenta kilómetros de ancho a la paralela y adyacente a las playas. Dentro de estos lugares, la tenencia, transporte o manejo de mercancías de procedencia extranjera deberá ampararse en todo tiempo con alguno de estos documentos como lo son el pedimento de importación o factura legalmente expedida. Las facultades de comprobación en materia de comercio exterior ejercidas por la autoridad aduanera, implican la revisión de todos aquellos actos que los contribuyentes realizan o han realizado con motivo de sus operaciones de introducción al territorio nacional de mercancías o por la extracción de las mismas, poniendo particular interés en que se cumpla con todas las obligaciones que dispone la legislación aplicable vigente, así como las contraídas por terceros. Ahora bien, si la autoridad aduanera detecta irregularidades de carácter formal establecidas en la Ley Aduanera, procederá a iniciar un Procedimiento Administrativo en Materia Aduanera, de lo cual dicho procedimiento en la mayoría de las veces, carece de los requisitos establecidos en la Constitución Política de los Estados Unidos Mexicanos, en la Ley Aduanera, o en el Código Fiscal de la Federación; no debiéndose confundir el término “constitucionalidad”, con el de “legalidad”.*

**PALABRAS CLAVE:** Procedimiento en Materia Aduanera, Constitucionalidad, Legalidad

## CONSTITUTIONALITY AND LEGALITY OF THE ADMINISTRATIVE PROCEDURE IN CUSTOMS MATTERS

### ABSTRACT

*The Secretariat of Finance and Public Credit has the authority to inspect and monitor permanently the handling, transport or possession of goods in the enclosures and audited fiscal, territorial waters and sea beaches, the exclusive economic zone adjacent, the territorial sea, the airports, a band of two hundred kilometers wide parallel and adjacent to the borders and a stretch of fifty kilometers wide in the parallel and adjacent to the beaches. Inside of these places, possession, transport or handling of goods of foreign origin must rely on all the time with any of these documents as they are the weighs legally import or invoice issued. The powers of checking in the field of foreign trade carried out by the customs authority, involve the review of all those acts that the taxpayers are doing or have done on the occasion of its operations for the introduction of the national territory of goods or by the removal of the same, with a particular interest in compliance with all the obligations that you have the relevant legislation in force, as*

*well as the contracted by third parties. The powers of checking in the field of foreign trade carried out by the customs authority, involve the review of all those acts that the taxpayers are doing or have done on the occasion of its operations for the introduction of the national territory of goods or by the removal of the same, with a particular interest in compliance with all the obligations that you have the relevant legislation in force, as well as the contracted by third parties. However, if the customs authority detects irregularities of a formal nature laid down in the Customs Act, shall initiate an administrative procedure in Customs Matters, which the procedure in most of the times, lacks the requirements established in the Constitution of the United Mexican States, in the Customs Act, or in the Tax Code of the Federation; should not confuse the term "constitutionality", with the "legality".*

**JEL:**M2,M4

**KEY WORDS:** Procedure in Customs Matters, Constitutionality, legality

## **INTRODUCCION**

La Secretaría de Hacienda y Crédito Público tiene facultad para inspeccionar y vigilar permanentemente el manejo, transporte o tenencia de mercancías en los recintos fiscales y fiscalizados, las aguas territoriales y playas marítimas, la zona económica exclusiva adyacente, el mar territorial, los aeropuertos, una franja de doscientos kilómetros de ancho paralela y adyacente a las fronteras y una franja de cincuenta kilómetros de ancho a la paralela y adyacente a las playas. Dentro de estos lugares, la tenencia, transporte o manejo de mercancías de procedencia extranjera deberá ampararse en todo tiempo con alguno de estos documentos como lo son el pedimento de importación o factura legalmente expedida.

Los créditos fiscales es todo aquél pasivo del contribuyente a favor del fisco, es decir, son sanciones económicas impuestas por la autoridad fiscal por el incumplimiento de las obligaciones fiscales, de las cuales dichas sanciones se encuentran fundamentadas en las leyes fiscales.

Tales créditos fiscales proceden en virtud de haber omitido alguna obligación fiscal, y por ende, la autoridad fiscal está facultada para imponer dicha sanción, basándose en la constitucionalidad y legalidad para imponerla y recuperarse del perjuicio causado por el contribuyente, al no cumplir una obligación fiscal. En materia de comercio exterior, toda persona que traiga consigo mercancías de comercio exterior deberá importarlas o en su defecto mostrar el documento que ampare la legal estancia en el país, al no hacerlo, la autoridad fiscal está facultada para hacer un acto de molestia hacia la persona y exigirle que presente el pedimento de importación o factura legalmente expedida. Si la persona no presenta los documentos antes mencionados, la autoridad fiscal procederá a embargar precautoriamente dichas mercancías mediante un procedimiento llamado procedimiento administrativo en materia aduanera en donde la autoridad fiscal manifiesta que se intervino a una persona en posesión de mercancías extranjeras y por virtud de la cual dicha persona no mostró el documento legal que ampare dichas mercancías, ya sea pedimento o factura legalmente expedida. En Ensenada poco se sabe acerca de este procedimiento administrativo, en virtud de lo cual las personas que son molestadas por la autoridad, desconocen los alcances de dicha autoridad y, sobre todo, que dicho procedimiento debe de cumplir una serie de requisitos y formalidades para poder proceder contra los gobernados. En el presente trabajo se analiza la Constitución Política de los Estados Unidos Mexicanos, Ley Aduanera y el Código Fiscal de la Federación con el fin de proporcionar al gobernado un instructivo en donde pueda consultar, de manera clara y detallada, la constitucionalidad y legalidad del procedimiento administrativo en materia aduanera.

## REVISION LITERARIA

### Antecedentes

La gran mayoría de los procedimientos administrativos en materia aduanera, emitidos por la autoridad fiscal, carecen de requisitos constitucionales y legales que restringen los derechos de los contribuyentes. En la actualidad los contribuyentes se encuentran en una situación de constantes cambios jurídico-fiscales, por virtud de lo anterior, requieren de información acerca de sus derechos y alcances de la autoridad fiscal; es el caso del procedimiento administrativo en materia aduanera en su etapa más temeraria que es el embargo de bienes por no tener solvencia económica, ya que el momento en que la autoridad hacendaria ejerce su facultad coactiva para cobrar lo que se debe, por haber causado un daño en perjuicio al fisco federal. Con lo antes mencionado, es necesario dar a conocer al gobernado la forma de cerciorarse que la autoridad fiscal está actuando conforme a la Constitución y a las leyes dentro del procedimiento administrativo en materia aduanera, para que de esta manera los contribuyentes estén en aptitud de una mejor defensa fiscal en consecuencia de un acto de autoridad anticonstitucional o ilegal.

### Justificación

La presente investigación tiene gran importancia porque se basa radicalmente en los actos de autoridad por parte de la autoridad fiscal hacia los gobernados, derivándose actos administrativos que carecen muchas veces de valor constitucional y legal, resultando actos viciados que afectan los derechos y en consecuencia el patrimonio de los gobernados. Dentro del procedimiento administrativo en materia aduanera, la mayoría de las veces, la autoridad fiscal actúa de forma arbitraria violentando las garantías individuales de los gobernados consagradas en los artículos catorce y dieciséis constitucionales, consistentes en que nadie podrá ser privado de la libertad o de sus propiedades, posesiones o derechos, sino mediante juicio seguido ante los tribunales previamente establecidos, en el que se cumplan las formalidades esenciales del procedimiento y conforme a las leyes expedidas con anterioridad al hecho, así como también nadie puede ser molestado en su persona, familia, domicilio, papeles o posesiones, sino en virtud de mandamiento escrito de la autoridad competente, que funde y motive la causa legal de procedimiento.

### Objetivo General de Estudio

Proporcionar al contribuyente un material de consulta claro y detallado, recopilando fundamentos jurídicos establecidos en la Constitución Política de los Estados Unidos Mexicanos, las leyes y en la jurisprudencia, mediante el cual se especifica cómo debe de actuar la autoridad fiscal aduanera tratándose de un procedimiento administrativo en materia aduanera, los medios de defensa fiscal y administrativa con que cuenta el gobernado, con el fin de que el particular tenga conocimiento de cómo se realiza un acto de autoridad en materia de comercio exterior y posteriormente o durante el acto de molestia, interponga algún medio de defensa legal.

Para el logro de los objetivos planteados, en este trabajo se aplicará la metodología cualitativa, con un enfoque en la investigación acción en donde un contribuyente es intervenido por la autoridad fiscal y, por consecuencia, se buscan las vías de solucionarlo con diversos procedimientos de acción constitucional y legal, para una defensa fiscal oportuna y adecuada. En este orden de ideas, esta investigación será descriptiva, dado que se necesitará describir el problema, para después analizar y dar una correcta interpretación, en un marco legal, que a su vez necesitará de explicación, El alcance de este trabajo se basa en los actos administrativos

realizados por las autoridades fiscales en la circunscripción de la ciudad de Ensenada, Baja California.

## MARCO TEORICO

### Concepto de Estado como órgano regulador fiscal

El Estado realiza diversas actividades para la ejecución de sus finalidades. A través del Poder Ejecutivo desarrolla una actividad que se encamina a la realización de los servicios públicos y a la satisfacción de las necesidades generales, siendo esto así, es lógico que la administración de un Estado tenga que utilizar medios personales, materiales y jurídicos para lograr el cumplimiento de sus fines. De donde resulta que uno de los sectores más importantes de la actividad administrativa está constituido precisamente por la gestión de intereses económicos. Esta actividad, que tiene una importancia primordial en el Estado moderno, ha recibido el nombre de actividad financiera, la cual, según Donato Giannini, la cumple el Estado para administrar el patrimonio, para determinar y recaudar los tributos, para conservar, destinar o invertirlas sumas ingresadas, y se distingue de todas las demás en que no constituye un fin en sí misma, o sea en que no atiende directamente a la satisfacción de una necesidad de la colectividad, sino que cumple una función instrumental de fundamental importancia, siendo su normal desenvolvimiento una condición indispensable para el desarrollo de todas las restantes actividades.<sup>1</sup>

El origen de la palabra fisco se encuentra en el vocablo latino *fiscus*, que se utilizaba entre los romanos para llamar al tesoro del soberano en contraposición al *erario*, que era el tesoro del Estado; posteriormente se hizo excesivo el vocablo *fisco* para comprender el tesoro del Estado también, cuando los príncipes llegaron a tener disposición del tesoro público. Las antiguas leyes castellanas dieron el nombre de *fisco* o cámara del rey al tesoro o patrimonio de la casa real y el de *erario* al tesoro público o del Estado. Tanto en España, como en América, hoy día, ambos vocablos se consideran sinónimos.<sup>2</sup> La voz *hacienda* tiene su origen en el verbo latino *facera*, aun cuando algunos sostienen que deriva del árabe “*ckásena*”, que significa cámara del tesoro. Con el adjetivo de pública significa, toda la vida económica de los entes públicos y en sentido estricto hace mención a los ingresos, pertenecientes y gastos de las entidades públicas. La Hacienda Pública, como organismo y como concepto en el derecho positivo español, aparece por primera vez al crear Felipe V la Secretaría de Hacienda, dentro de la organización administrativa del reino español. De ahí pasa a América Latina, y a México, donde la dependencia del Gobierno Federal encargada de realizar la actividad financiera estatal se ha conocido tradicionalmente como Secretaría de Hacienda, agregándosele posteriormente la innecesaria expresión “y Crédito Público”.<sup>3</sup>

<sup>1</sup> *Achille Donato Giannini, I concetti fondamentali di diritto tributario, Italia, 1956.*

<sup>2</sup> *Sergio Francisco de la Garza, Derecho financiero mexicano, México, 1979*

<sup>3</sup> *Sergio Francisco de la Garza, Derecho financiero mexicano, México, 1979*

La palabra *fisco* significa en México, según la Suprema Corte de Justicia de la Nación, como “la parte de la Hacienda Pública que se forma con las contribuciones, impuestos y derechos, siendo autoridades fiscales las que intervienen en la cuestión de mandato legal, dándose el caso de que haya autoridades hacendarias que no son autoridades fiscales, pues aun cuando tenga la facultad de resolución en materia de Hacienda, carecen de esa actividad en la recaudación, que es la característica de las autoridades fiscales, viniendo a ser el carácter de autoridad hacendaria el género y de autoridad fiscal la especie”.

Existe obligación tributaria constitucional, en su artículo 31 fracción IV, mencionando: “son obligaciones de los mexicanos, contribuir para los gastos públicos, así de la Federación, como del Distrito Federal o del Estado y Municipio en que residan, de manera proporcional y equitativa que dispongan las leyes”.

Este dispositivo no sólo es el fundamento constitucional de las obligaciones tributarias de los mexicanos, comprende, además, a los extranjeros y a las personas jurídicas denominadas “morales”, nacionales o extranjeras, cuando sus actividades correspondan a las hipótesis contempladas por las normas fiscales. El texto constitucional diseña las reglas aplicables a la materia tributaria, de acuerdo con los siguientes principios: el destino de las contribuciones, la justicia tributaria y la formalidad fiscal. Dentro del mismo derecho constitucional, los tributos solo pueden destinarse a sufragar el gasto público de la Federación, de las entidades federativas (Distrito Federal y estados) y del municipio en que resida el contribuyente. En consecuencia, carece de validez un impuesto o contribución cuando no se destina a cubrir la prestación de los servicios públicos o los gastos relativos al desarrollo de las atribuciones, de los proyectos y de los programas públicos. En todos los sistemas jurídicos han existido, y existen, las obligaciones tributarias; desde luego que el hecho se debe a la necesidad de subsistencia del Estado y de la organización social. Esta necesidad existencial de recaudar tributos, impuso la obligación de definir la manera de hacerlo. Los tributos no pueden establecerse de forma arbitraria; siempre se someten a ciertas reglas de equidad, de las que destacan dos imperativos que obligan a los órganos creadores de los impuestos, derechos, productos y aprovechamientos, de la siguiente manera: toda carga fiscal debe ser proporcional y equitativa. La Constitución exige la proporcionalidad y la equidad en las cargas tributarias; el criterio de la equidad es lo que Aristóteles definió como proporcionalidad geométrica; en la aritmética la proporción es numérica, cuantitativa y omisa en considerar las cualidades de la persona o del bien que se pretende beneficiar o afectar, por ello el principio aristotélico de la justicia distributiva ordena tratar proporcionalmente igual a los iguales y desigualmente a los desiguales, porque el trato uniforme a los desiguales es injusto.<sup>4</sup>

<sup>4</sup> Sergio Francisco De La Garza, *Derecho Financiero Mexicano*, México, 1979.

En México, constitucionalmente el único sujeto activo de la obligación fiscal es el Estado, ya que el artículo 31 fracción IV de la Constitución Política de los Estados Unidos Mexicanos (CPEUM), al establecer la obligación de contribuir para los gastos públicos, únicamente menciona a la Federación, los estados y los municipios. De los sujetos activos previstos en la legislación mexicana, únicamente la Federación y los estados tienen plena potestad jurídica tributaria, es decir, no solamente pueden disponer libremente de las contribuciones que recaudan, sino que pueden dárselas así mismos a través de sus legislaturas respectivas. En cambio los municipios únicamente pueden administrar libremente su hacienda, pero no establecer sus contribuciones, tarea que está encomendada a las legislaturas de los estados. El sujeto pasivo es la persona que conforme a la ley debe de satisfacer una prestación determinada a favor del fisco, ya sea propia de un tercero, o bien se trate de una obligación fiscal sustantiva o formal. Al estudiar al sujeto pasivo de la obligación contributiva se encuentra que no siempre es la persona a quién la ley señala como tal, sino que en ocasiones es una persona diferente quién funge como tal.

## METODOLOGIA

En este tipo de investigación se aplicó la metodología cualitativa, con enfoque en la investigación acción en donde en un colectivo social se identifica un problema y se buscan las vías de solucionarlo con diversos procedimientos de acción sistemática y reflexión, para la

transformación de una situación específica en un colectivo social, siendo este colectivo, los contribuyentes de esta ciudad, los cuales constituyen la fuerza de trabajo de la sociedad, personas morales y personas físicas. En este orden de ideas, esta investigación fue descriptiva, dado que se necesitará describir el problema, para después analizar y dar una correcta interpretación, en un marco legal, que a su vez necesitará de explicación, todo esto basado en un método bibliográfico documental apoyado de leyes, libros de Derecho Fiscal, Aduanero y Administrativo, tesis de nuestro supremo tribunal, para hacer un trabajo de análisis, presentando el fin a la problemática. Primeramente se identifica el problema, de cómo el contribuyente se cerciora que el Procedimiento Administrativo en Materia

Aduanera se ha sujetado a lo dispuesto a nuestra Ley Fundamental y posteriormente a las leyes, por lo que se basa en la lectura como instrumento de recolección de información, esta lectura debe hacerse de modo científico, sistemático, objetivo, replicable y válido. Por lo que se dará lectura la Constitución Política de los Estados Unidos Mexicanos, al Código Fiscal de la Federación, a la Ley Federal del Procedimiento Contencioso Administrativo, a la Ley Aduanera y a diversos libros de Derecho Administrativo y Fiscal, también investigaciones realizadas sobre el Procedimiento Administrativo en Materia Aduanera. Como se mencionó anteriormente, el colectivo social que presenta la problemática de esta investigación, lo constituyen los contribuyentes de esta ciudad, los cuales constituyen la fuerza de trabajo de la sociedad, personas morales y personas físicas, que ascienden en esta ciudad a la cantidad de 60,000 contribuyentes.

## RESULTADOS

Del análisis la Constitución Política de los Estados Unidos Mexicanos, se determina que todos los actos de autoridad que vulneren o restrinjan la esfera jurídica del gobernado, deberá estar fundado y motivado, así también deberá estar firmado por el funcionario competente para emitir dicho acto de autoridad. De la Ley Aduanera y el Código Fiscal de la Federación, se desprenden las formalidades a seguir dentro del procedimiento administrativo en materia aduanera, cumpliendo con la legalidad de este procedimiento. De la Ley Federal de Procedimiento Contencioso Administrativo, existen varios medios de defensa para hacer valer frente a la autoridad, cuando ésta, arbitrariamente o con fundamento, se encuentra afectando los intereses de los contribuyentes, en específico dos, el recurso de revocación y el juicio de nulidad. De la Ley de Amparo, se desprende que este medio de control constitucional, se hace valer cuando la autoridad administrativa atente contra las garantías individuales (hoy llamados derechos humanos) dentro del proceso administrativo en comento.

El Procedimiento Administrativo en Materia Aduanera es conjunto de actos previstos en la Ley Aduanera, ligados en forma sucesiva, con la finalidad de emitir una resolución condenatoria o absolutoria, derivada de las incidencias detectadas por la autoridad aduanera en el ejercicio de sus facultades de comprobación en operaciones de comercio exterior, respetando las garantías del particular al valorar las probanzas y analizar las argumentaciones que pretendan acreditar la legal introducción, posesión, tenencia o estancia de las mercancías de procedencia extranjera en el territorio nacional o la salida de éste de mercancía nacional, en donde concurren toda una serie de actos que lastiman la esfera patrimonial de los contribuyentes, por ende, como ya se comprendió en la presente investigación, no hay verdad absoluta, se puede combatir a la autoridad para evitar un crédito fiscal en la que carece muchas veces de valor constitucional y legal, resultando actos viciados que afectan los derechos y en consecuencia el patrimonio de los gobernados. Ésta defensa legal, que consiste primeramente en suspender el embargo precautorio de las mercancías, para posteriormente pagar o analizar el crédito fiscal para su posible cancelación, está prevista en medios que se deben de conocer, para efecto de que el combate con la autoridad, al igual que los

actos de ésta, estén cuidadosamente llevados con apego a la ley.

Resultando el recurso de revocación y/o juicio de nulidad como los medios de defensa fiscal idóneos, para la solución de la problemática, traduciéndose en la mejor forma de suspender el procedimiento administrativo en materia aduanera para que no se embargue, esto en virtud de que según el Código Fiscal de la Federación puede interponerse dicho recurso de revocación y/o juicio de nulidad, pudiendo optar por interponer éstos al mismo tiempo, o uno u otro, que protegen a los contribuyentes de la imposición de la autoridad.

## CONCLUSIONES

Es potestativo analizar los actos de autoridad, atendiendo a lo dispuesto en nuestra Carta Magna, que todo acto de autoridad debe estar fundado, motivado y firmado por el funcionario competente, de las cuales el contribuyente la mayoría de las veces, al estar ante la presencia de una autoridad, se intimida, y esto no debería ser de esta manera, ya que se deben conocer nuestros derechos humanos para hacerlos valer ante el Poder Judicial de la Federación. Se recomienda que se tenga que tomar en cuenta lo estipulado en la Ley Aduanera y en el Código Fiscal de la Federación, para cerciorarse de que la autoridad administrativa además de apearse a la Constitución, (tratándose de un acto de autoridad), se apege a éstos ordenamientos, ya que en éstos están tipificadas las formalidades a cumplir en este tipo de procedimiento. En la Ley Federal del Procedimiento Contencioso Administrativo, los cuales permiten que con motivo del procedimiento seguido ante un tribunal fiscal contencioso administrativo, interpuesto para impugnar un crédito fiscal, de las cuales la autoridad llegó a esa determinación, que por lo general son multas estratosféricamente exorbitantes, de las cuales afecta la esfera jurídica patrimonial del gobernado.

En la actualidad la mayoría de las personas físicas y morales lamentablemente desconocen el procedimiento administrativo en materia aduanera, lo que los hace vulnerables a los actos de la autoridad fiscal, porque una vez iniciado el procedimiento administrativo en materia aduanera la autoridad tendrá que resolver la situación fiscal del intervenido, dictando así una resolución administrativa en donde se impondrá una multa notoriamente excesiva, y en el último de los casos el embargo de bienes por no tener liquidez monetaria. El sistema fiscal mexicano es inquisitorio, no obstante con la alta carga tributaria que tiene que soportar el contribuyente, la autoridad fiscal siempre buscará la forma de intervenir a los contribuyentes por medio de los actos de molestia, actos que la Constitución se los permite, siempre y cuando reúnan los requisitos que ella misma establece, en caso contrario, estarían atentando contra los derechos humanos, de lo cual el gobernado debe de conocer nuestros derechos fundamentales, así como también las leyes que se deben de cumplir para dar formalidad a dichos actos de molestia. Aunado a esto, si la autoridad fiscal cumple lo establecido en nuestra Carta Magna para molestar al gobernado, dicho gobernado debe de analizar si el procedimiento instaurado en su contra es legal, es decir, que cumpla con lo estipulado en la ley, por consecuencia, no se debe de confundir el término de “constitucionalidad”, con el término “legalidad”.

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# EL COMISARIO, DESCONOCIMIENTO DE SU RESPONSABILIDAD LEGAL DENTRO DE LA SOCIEDAD MERCANTIL EN EMPRESA FAMILIAR

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## RESUMEN

*El objetivo de esta investigación es conocer la importancia de la participación que tiene el Comisario en una Sociedad, las funciones y responsabilidades en aspectos legales, penales y fiscales a los que está sujeta la figura del comisario. Asimismo cumplir con requisitos para que funja como comisario de una Sociedad Mercantil. Su función es vigilar e inspeccionar las operaciones realizadas en una empresa, para conocer y analizar su participación ya que de él derivan una serie de responsabilidades que podría desconocer. Se ha planteado en varios países el control a través de un órgano especializado, en este caso adaptando la situación en México específicamente Monclova, Coahuila en el 2013 donde se realiza esta investigación debido a la insuficiente o nula vigilancia que ejerce el comisario sobre los administradores de la sociedad. Cuando el comisario conozca sus funciones, responsabilidades, derechos y obligaciones estará en posibilidades de aceptar el cargo sin riesgo a ser persuadido. Al encuestar a 30 comisarios de esta ciudad se obtiene como resultados que el 70% desconocen las responsabilidades que tienen y aceptan el cargo sin conocer los efectos.*

**PALABRAS CLAVE:** Comisario, Sociedad Mercantil, Responsabilidad

## COMMISSIONER, DISCLAIMER OF ITS LIABILITY IN THE FAMILY BUSINESS TRADING COMPANY IN

### ABSTRACT

*The objective of this research is to understand the importance of having the Commissioner participation in a society, the roles and responsibilities in legal, criminal and tax issues which is subject to the figure of the commissioner. Also meet requirements to act as commissioner of a trading company. Its function is to monitor and inspect the operations in a company, to meet and discuss their participation because it leads to a series of responsibilities that may not know. It has been raised in several countries control through a specialized organ, in this case adapted specifically the situation in Mexico Monclova, Coahuila where this research takes place due to insufficient or no supervision exercised by the Commissioner on the directors of the company. When the commissioner knows their roles, responsibilities, rights and obligations will be in a position to accept the position without risk of being persuaded. By surveying 30 commissioners of the city is obtained a result that 70% does not known as the responsibilities and accept the position without knowing the effects.*

**JEL:** K2, M1

**KEYWORDS:** Commissioner, Commercial Society, Responsibility

## INTRODUCCION

El objetivo de esta investigación es la magnitud legal que la empresa familiar le confiere al comisario y el pleno desconocimiento del impacto legal sobre la actuación del comisario dentro de la vigilancia de la sociedad mercantil, de acuerdo a la Ley General de Sociedad Mercantil en su artículo 164 menciona: “la vigilancia estará a cargo de uno o más comisarios”, así mismo en artículo 165 establece: quienes no podrán ser comisarios y en el artículo 166 establece las facultades y obligaciones de los comisarios, que si bien es cierto en la mayoría de los casos los comisarios no son expertos contables, ni fiscalistas, sin embargo al artículo 169 ordena que para el cumplimiento de su encomienda podrán apoyarse de los servicios técnicos y profesionales independientes, mismos que pueden ser contratados por el mismo comisario. La existencia y designación del comisario está sustentada en la Ley General de Sociedades Mercantiles, considerada como uno de los problemas que enfrentan las empresas constituidas porque los propietarios o accionistas desconocen cuál es su función e importancia dentro de la sociedad mercantil y con frecuencia designar a una persona que generalmente carece del perfil y por ende no cumple con la función encomendada como es la inspección y vigilancia de las operaciones de la sociedad, se destaca la presencia y participación en las sociedades de comercio por que se encargan de revisar el balance de la sociedad y elaborar un informe con respecto a los movimientos financieros, fiscalizar la actuación de los administradores. Los comisarios de Francia, Italia, Brasil, Argentina y México, están reconocidos y reciben atribuciones generales y permanentes de vigilancia y control.

Estas se sintetizan en la siguiente forma: a) Atribuciones específicas de revisión y de inspección de la contabilidad y de los bienes sociales, como la de cerciorarse de la regularidad de los libros de contabilidad y de verificar la caja y los valores que por cualquier concepto posea la sociedad. (Francia Art. 32, Italia Art. 2406). b) Atribución específica de asistir, con voz pero sin voto, a las asambleas de accionistas y a las juntas del consejo de administración. (Italia Art. 2405, Brasil Art. 127, fr. III). c) Atribución específica de rendir un informe a la asamblea conteniendo un dictamen del balance y las observaciones relativas a las irregularidades en la administración que hayan llegado a su conocimiento. (Francia Art. 34, Italia art. 2432), d) Atribución específica de convocar a una asamblea ordinaria o extraordinaria en caso de omisión de los administradores y cuando se juzgue de urgencia. (Francia Art. 32, Italia Art. 2406), e) Atribuciones genéricas y amplias de control sobre los administradores en la mayoría de las legislaciones, desde el punto de vista de la observancia de las disposiciones legales y estatutarias, como desde el punto de vista del cumplimiento del deber de diligencia que les incumbe. (Francia Art. 32, Segundo párrafo)

En la sección de literatura se fundamenta la designación del comisario en una Sociedad Mercantil, se parte de la razón del ser mismo, su naturaleza, nombramiento, capacidad, atribuciones, duración en el cargo y su responsabilidad, así como algunas referencias históricas para comprender la figura del comisario. En Metodología se utilizó el método cualitativo aplicando un instrumento de 12 reactivos a 30 personas que fungen como comisarios de empresas familiares.

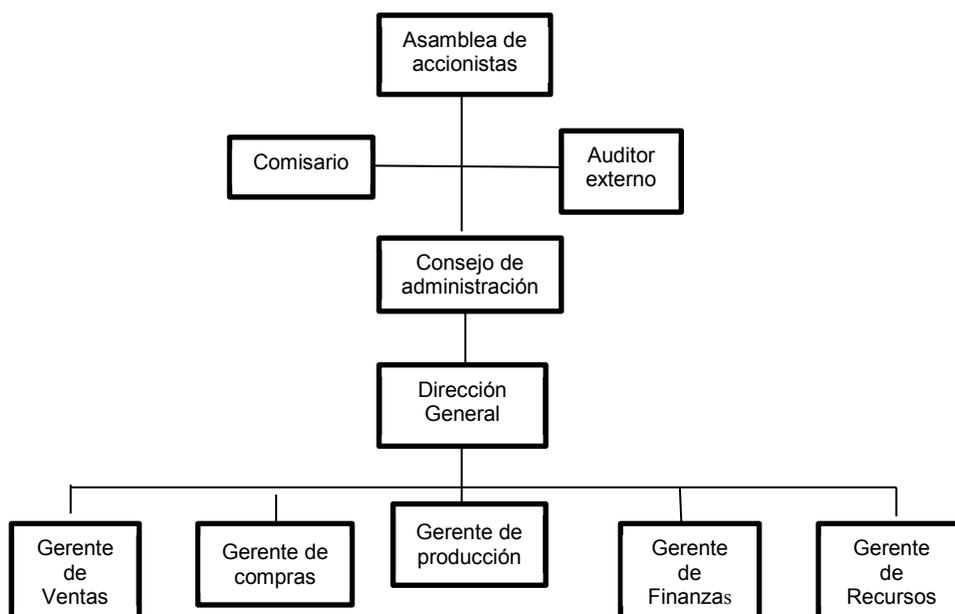
## REVISION DE LITERATURA

La Real Academia de la Lengua Española, define comisario: “persona que tiene poder y facultad de otra para ejecutar alguna orden o entender en algún negocio”. El derecho mercantil define al comisario como “un órgano necesario en una sociedad mercantil, el cual desempeña funciones

temporales, revocables y remuneradas, su designación corresponde a la asamblea de accionistas". A esta figura se le ha llamado el ojo de la asamblea que vigilara de una manera continua la actividad de los administradores, se encause dentro de las normas legales y estatutarias, y siguiendo lineamientos fijados por la asamblea general y los principios de una gestión diligente y honrada. (Brunetti, 1948) Las empresas familiares con fines de lucro se constituyen con la finalidad de maximizar y eficientar los recursos económicos, tecnológicos y humanos para obtener utilidad. En el inicio compran, producen y venden, de ahí que se desprende una actividad que asegure la veracidad de los resultados de la propia operación y administración de la empresa, que se define como la "Vigilancia".

La vigilancia de una empresa consiste en salvaguardar el patrimonio de los accionistas y garantizar un uso adecuado de los recursos de la empresa. Consiste en supervisar y comprobar, principalmente, la existencia de sistemas y controles adecuados en toda la organización. Controles que permitan generar confianza en los diversos niveles directivos, entre otros aspectos del cumplimiento de los objetivos, planes, metas, programas, presupuestos, proyectos. Nace así la figura del Comisario, que se define como el encargado de vigilar y cerciorarse que la operación y los resultados son reales, apegados a derecho y a la normatividad contable y fiscal. En la figura 1 se presenta la estructura legal de una empresa familiar en la que el comisario es parte de la asamblea de accionistas, de la cual se deriva el consejo de administración y la dirección general, así como las diferentes gerencias que forman parte de la empresa.

Figura 1: Estructura Legal de una Empresa Familiar



*En la figura se presenta la estructura legal de una empresa familiar en la que el comisario es parte de la asamblea de accionistas, de la cual se deriva el consejo de administración y la dirección general, así como las diferentes gerencias que forman parte de la empresa. El comisario es llamado el ojo de la asamblea que vigilara de una manera continua la actividad de los administradores, se encause dentro de las normas legales y estatutarias, y siguiendo lineamientos fijados por la asamblea general y los principios de una gestión diligente y honrada.*

#### Antecedentes de la Figura del Comisario

La figura del comisario nace en el año de 1888 en la Ley de Sociedades Mercantiles, en su artículo 37, que dice: “La vigilancia de la sociedad anónima debe ser confiada a uno o varios socios que se llamarán Comisarios”, dicho artículo se transcribe en el Código de Comercio del año 1889, en el artículo 91 donde se indica que: “la escritura constitutiva debe contener el nombramiento de uno o varios comisarios”, para efectuar la vigilancia ilimitada de las operaciones del negocio. Posteriormente en 1934 se modifica la LGSM quedando como se conoce actualmente.

#### Fundamento Legal de la Ley de Sociedades Mercantiles

Artículo 164. La vigilancia de la sociedad anónima estará a cargo de uno o varios Comisarios, temporales y revocables, quienes pueden ser socios o personas extrañas a la sociedad. Artículo 166. Son facultades y obligaciones de los comisarios:

- I. Cerciorarse de la constitución y subsistencia de la garantía que exige el artículo 152, dando cuenta sin demora de cualquiera irregularidad a la Asamblea General de Accionistas;
- II. Exigir a los administradores una información mensual que incluya por lo menos un estado de situación financiera y un estado de resultados.
- III. Realizar un examen de las operaciones, documentación, registros y demás evidencias comprobatorias, en el grado y extensión que sean necesarios para efectuar la vigilancia de las operaciones que la ley les impone y para poder rendir fundadamente el dictamen que se menciona en el siguiente inciso.
- IV. Rendir anualmente a la Asamblea General Ordinaria de Accionistas un informe respecto a la veracidad, suficiencia y razonabilidad de la información presentada por el Consejo de Administración a la propia Asamblea de Accionistas. Este informe deberá incluir, por lo menos:
  - A) La opinión del Comisario sobre si las políticas y criterios contables y de información seguidos por la sociedad son adecuados y suficientes tomando en consideración las circunstancias particulares de la sociedad.
  - B) La opinión del Comisario sobre si esas políticas y criterios han sido aplicados consistentemente en la información presentada por los administradores.
  - C) La opinión del comisario sobre si, como consecuencia de lo anterior, la información presentada por los administradores refleja en forma veraz y suficiente la situación financiera y los resultados de la sociedad.
- V. Hacer que se inserten en la Orden del Día de las sesiones del Consejo de Administración y de las Asambleas de Accionistas, los puntos que crean pertinentes;
- VI. Convocar a Asambleas ordinarias y extraordinarias de accionistas, en caso de omisión de los Administradores y en cualquier otro caso en que lo juzguen conveniente;

- VII. Asistir, con voz, pero sin voto, a todas las sesiones del Consejo de Administración, a las cuales deberán ser citados;
- VIII. Asistir, con voz pero sin voto, a las Asambleas de Accionistas, y
- IX. En general, vigilar ilimitadamente y en cualquier tiempo todas las operaciones de la sociedad.

Artículo 167. Cualquier accionista podrá denunciar por escrito a los Comisarios los hechos que estime irregulares en la administración, y éstos deberán mencionar las denuncias en sus informes a la Asamblea General de Accionistas y formular acerca de ellas las consideraciones y proposiciones que estimen pertinentes. Los comisarios son individualmente responsables para la sociedad por el cumplimiento de las obligaciones que la ley y los estatutos les imponen. Podrán, sin embargo, auxiliarse y apoyarse en el trabajo de personal que actúe bajo su dirección y dependencia o en los servicios de técnicos o profesionistas independientes cuya contratación y designación dependa de los propios comisarios de acuerdo al artículo 169 LGSM

#### Responsabilidad Solidaria

Exigir a los administradores la información financiera mensual que incluya un estado de situación financiera y un estado de resultados, como parte fundamental analizar y evaluar todas las operaciones de la sociedad, así como la de la documentación, registros y demás evidencias comprobatorias que den como resultado una opinión fundada y apegada al marco legal sobre la administración de la sociedad. En consecuencia como se dispone en la misma ley de Sociedades mercantiles, puede atribuirse al comisario Responsabilidad Legal, en tres aspectos: individual, solidaria y civil. La responsabilidad penal, solo en el caso de que el comisario tenga una conducta desleal a su cargo, como cómplice o encubra alguna actividad ilícita o fraude. (Art. 167 LGSM) Las personas designadas como comisario, deben ser conscientes del cargo conferido por sus obligaciones, alcances y responsabilidades, para ejercer de manera puntual su cargo y de ser posible lo acepten o rechacen según el desempeño de la administración en función de la sociedad.

#### **METODOLOGIA**

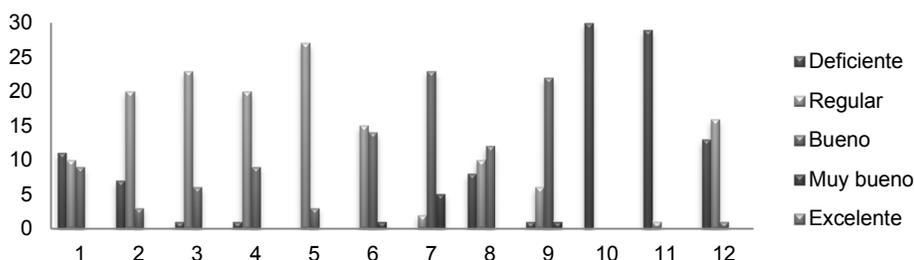
La presente investigación es de carácter cualitativo, en el trabajo desarrollado el principal objetivo es conocer la importancia de la participación que tiene el Comisario en una Sociedad, las funciones y responsabilidades en aspectos legales, penales y fiscales a los que está sujeta la figura del comisario. En esta investigación se utilizó la ley General de Sociedades Mercantiles como fundamento legal y fuentes información secundaria como libros, revistas, páginas web. Se aplicó un instrumento con 12 reactivos según Tabla 2, a 30 comisarios de empresas familiares, se seleccionaron en base a la Estadística de la tabla 1 del municipio de Monclova, Coahuila. Para validar el objetivo de la investigación utilizando la escala de Linkert, es un conjunto de ítems que se presentan en forma de afirmaciones ante las cuales se pide la reacción de los participantes, es decir se presenta cada afirmación y se solicita al comisario que externé su reacción eligiendo uno de las cinco categorías de la escala. A cada categoría se le asigna un valor numérico, así el participante obtiene una puntuación respecto a la afirmación, la cual puede tener dirección: positiva y negativa, esta dirección es muy importante para saber cómo se codifican las alternativas de respuesta. Si la afirmación es positiva significa que califica favorablemente al

objetivo de la actitud, de este modo, cuanto más de acuerdo con la afirmación estén los participantes su actitud será igualmente más favorable. (Hernández R., Fernández C, 2006)

**RESULTADOS**

Se presentan los resultados en la figura 2 del instrumento de la tabla 2 que se aplicó a 30 comisarios de empresas familiares del municipio de Monclova, Coahuila los cuales fueron seleccionados del estadístico de la tabla 1, donde muestra que existen 63 empresas medianas y grandes.

Figura 2: Resultado del Instrumento



En la figura 2 se obtienen los resultados del instrumento de la investigación de los 30 comisarios encuestados el 70% desconoce las funciones y responsabilidades en aspectos legales, penales y fiscales a los que está sujeta la figura del comisario. El 28% conoce parcialmente y solo el 2% de los encuestados tiene conocimiento de su función como comisario.

Tabla 1: Estadísticas del Municipio de Monclova, Coahuila Por Sector y Tamaño de Empresa

Tamaño de la empresa	Sector Productivo			Total 502
	Industria	Comercial	Servicios	
Micro	99	114	79	292
Pequeñas	90	32	25	147
Medianas	23	15	4	42
Grandes	7	8	6	21
<b>Totales</b>	<b>219</b>	<b>169</b>	<b>114</b>	<b>502</b>

La presente tabla es proporcionada por la Secretaría de Economía (2008), muestra que existen 502 empresas en el municipio de Monclova, Coahuila, las cuales están divididas en los siguientes sectores: industrial 219, comercial 169 y de servicios 114. A su vez también muestra la división por tamaño de empresa en cada sector. De las sesenta y tres empresas medianas y grandes se extrajo la muestra de 30 que representa el 48%

En el municipio de Monclova, Coahuila, existen 502 empresas las cuales están divididas en los siguientes sectores: industrial 219, comercial 169 y de servicios 114. A su vez también muestra la división por tamaño de empresa en cada sector. De las 63 empresas medianas y grandes se seleccionó una muestra de 30 comisarios de encuestados que representa el 48%. (Tabla 1)

Tabla 2: Instrumento

Instrumento	Deficiente	Regular	Bueno	Muy bueno	Excelente
1. El Comisario conoce por que aceptó el cargo.					
2. Conoce el Comisario sus responsabilidades.					
3. El Comisario conoce lo que implica aceptar el cargo.					
4. Cuenta el Comisario con experiencia en aspectos financieros y mercantiles.					

5. El Comisario sabe interpretar los estados financieros de las empresas.
6. Valida el Comisario actos o actividades que realiza la empresa.
7. El Comisario elabora correctamente el reporte anual.
8. Cuenta con conocimientos de auditoria.
9. El Comisario conoce lo que es la vigilancia.
10. Presenta el Dictamen de la empresa en que es Comisario.
11. Conoce las sanciones al incumplir con sus responsabilidades.
12. Tiene expertos que asesoren su actividad.

**Escala de evaluación**

Deficiente	1
Regular	2
Bueno	3
Muy bueno	4
Excelente	5

*La tabla presenta, el instrumento que se aplicó a 30 comisarios de empresas familiares, que consta de 12 reactivos en los que se utiliza la escala de Linkert para validar el objeto de la investigación que es conocer la importancia de la participación que tiene el Comisario en una Sociedad, las funciones y responsabilidades en aspectos legales, penales y fiscales a los que está sujeta la figura del comisario.*

En la tabla 2 se presenta el instrumento que se aplicó a 30 comisarios de empresas familiares medianas y grandes (Tabla 1), que consta de 12 reactivos en los que se utiliza la escala de Linkert para validar el objeto de la investigación que es conocer la importancia de la participación que tiene el Comisario en una Sociedad, las funciones y responsabilidades en aspectos legales, penales y fiscales a los que está sujeta la figura del comisario. En la figura 2 se obtienen los resultados de la participación de los 30 comisarios encuestados, el 70% desconoce las funciones y responsabilidades en aspectos legales, penales y fiscales a los que está sujeta la figura del comisario. El 28% conoce parcialmente y solo el 2% de los encuestados tiene conocimiento de su función como comisario.

**CONCLUSION**

Se identifica que existe un pleno desconocimiento de las obligaciones y responsabilidades del comisario que va a aceptar el cargo y de los accionistas de las empresas mercantiles que lo designaran. Estrictamente esta figura debe conocer y cumplir sus obligaciones para que este en posibilidades de expresar su opinión respecto a las operaciones financieras y en si todos los documentos de la compañía que reporta en la asamblea de accionistas. Se recomienda que antes de aceptar el cargo los candidatos a comisario deben recibir asesoría de expertos como son: administradores de empresas, contadores, abogados y notarios públicos para evitar caer en actos que violen las leyes mexicanas como el artículo 16 de la Constitución Política de los Estados Unidos Mexicanos que menciona: “nadie puede ser molestado en su persona, familia, domicilio, papeles o posesiones, sino en virtud de mandamiento escrito de la autoridad competente, que funde y motive la causa legal del procedimiento”. De acuerdo al porcentaje obtenido en el resultado del desconocimiento de las obligaciones, se propone al congreso de la unión integrar un apartado en la Ley para la designación del comisario que establezca: los requisitos indispensables para cumplir y evitar caer en delitos.

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# POLÍTICA PÚBLICA BASADA EN EL MARKETING 3.0 EN EL MUNICIPIO DE AYAPANGO ESTADO DE MÉXICO

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## RESUMEN

*En la actualidad los avances tecnológicos y el uso de las nuevas tecnologías han dejado atrás a muchas organizaciones de tipo público y privado, que si no tienen los recursos humanos, financieros, tecnológicos e instalaciones presupuestados, no les permitirá crecer y ser productivos, por lo tanto no pueden ser competitivos en los mercados y en las poblaciones. El Marketing 3.0 (MKT 3.0), es una herramienta que busca tener un contacto directo entre las autoridades municipales y la población, que les permite a los gobiernos locales comunicar a los ciudadanos su Política Pública (PP) por medio del uso de las nuevas tecnologías (teléfonos móviles, internet, las redes sociales, páginas Web, etc.), para cumplir con los objetivos y metas establecidas en el Plan Municipal de Desarrollo (PMD), llamado Bando Municipal (BM), donde se establecen los lineamientos generados de la PP, y así poder impactar positivamente las percepciones sociales con el fin de lograr moldear y generar una opinión favorable de parte de la ciudadanía respecto de su gobierno y sus acciones y estar enfocados a beneficiar a la comunidad que integra dicha localidad, proyectando una Responsabilidad Social (RS) basada en Valores (V) y donde exista un proceso de co-creación, es decir, que se tome en consideración la participación de la sociedad para la elaboración, implementación y evaluación de la PP y así saber cuál es el impacto que tiene o tuvo esta misma, saber si ha funcionado y en qué medida lo ha hecho, de manera que la sociedad sea tomada en cuenta en los procesos creativos que presentan las autoridades municipales basada en la PP, es decir, en los productos y/o servicios que se ofertan, como apoyar el desarrollo y posicionamiento de la comunidad en la región, y que tipo de campañas publicitarias se deben concretar para promover al Municipio en la región, estado, país y a nivel internacional, de tal forma que se conozca cuál es la opinión de la ciudadanía y cuáles son los sentimientos que le genera dicha PP, en la población y así mismo conocer las sugerencias de mejora continua, donde se logre el posicionamiento de la entidad. Por lo que el objetivo de la investigación es proporcionarles a las autoridades municipales la herramienta de MKT 3.0, como una herramienta de comunicación de la PP, para lograr la satisfacción en la población, mediante los productos y/o servicios que se brindan, cumpliendo con los lineamientos establecidos en el Plan Nacional de Desarrollo, Plan Estatal de Desarrollo y el BM.*

**PALABRAS CLAVES:** Política Pública, Marketing 3.0, Gobierno local

## PUBLIC POLICY FROM THE MARKETING 3.0 IN THE AYAPANGO MUNICIPALITY OF MEXICO STATE

### ABSTRACT

*Currently, technological advances and the use of new technologies have left behind many organizations public and private type that if they have the human, financial, technological and facilities budgeted, will not allow them to grow and be productive, so therefore can not be competitive in the markets and in populations. The Marketing 3.0 (MKT 3.0), is a tool that aims to have a direct contact between the municipal authorities and the population, which allows local governments to communicate to citizens the Public Policy (PP) through the use of new technologies (mobile phones, internet, social networks, websites, etc.), to meet the objectives and targets set out in the Municipal Development Plan (MDP), called Municipal Bando (MB), which sets the guidelines generated from the PP, so we can positively impact social perceptions in order to achieve shape and generate a favorable opinion from the public about their government and its actions and be focused to benefit the community which includes the town, projecting a Social Responsibility (SR) values from (V) and where there is a co-creation process, that is, to take into consideration the participation of society in the development, implementation and evaluation of the PP and so know the impact that has or had the same, tell if it worked and to what extent it has, so that society is taken into account in the creative processes that present municipal authorities from the PP, that is, in the products and / or services offered, such as supporting the development and positioning of the community in the region, and that type must be specified advertising campaigns to promote the municipality in the region, state, country and internationally, so that ascertaining the views of the public and what feelings it generates said PP, population and likewise meet continuous improvement suggestions, which achieves the positioning of the entity. So the aim of the research is to provide municipal authorities MKT 3.0 tool as a communication tool for PP, for attaining satisfaction in the population through the products and/or services provided in compliance with the guidelines established in the National Development Plan, National Development Plan and the MB.*

KEY WORDS: Public Policy, Marketing 3.0, Local Government

## INTRODUCCIÓN

Según los expertos, Kotler & Kartajaya (2011), establecen que el Marketing 1.0 se centraba únicamente en el producto, con una comunicación unidireccional, y el 2.0 tenía como eje al consumidor destacando la interacción, el 3.0 toma en cuenta lo que piensa y requiere el consumidor para ofrecer productos basados en los valores. “A partir de ahora las propuestas que surjan deben cubrir varios aspectos del consumidor, incluyendo sus emociones”. En un artículo establece Pachini, (2013) que el Marketing 3.0 es un marketing basado en una consciencia mundial por ser mejores personas entre nosotros y para con el mundo. De la misma manera el Marketing 3.0 se basa en los valores que tiene la marca y que a la vez se los transmite a sus consumidores, al igual que una correcta responsabilidad social y con el medio ambiente, humanizando a la marca, haciéndola más amigable y lo principal, generando más confianza. Esta nueva visión es descrita por Kotler como “el conocer al cliente es mucho más que una persona interesada en un producto, sino también la participación de la empresa en preservar el mundo de una mejor manera”. En una palabra, Kotler lo define como “cuidado del planeta”. Entonces el Marketing 3.0 es el que toma en cuenta los valores de la marca, producto o servicio, en este tipo de mercadotecnia es donde se debe definir la Misión de la organización, ya que desde aquí se deben empezar los esfuerzos para acercarnos al consumidor (Ramírez, 2013).

Es por eso que si es congruente con la Misión de la organización, se puede dar a conocer y transmitir los valores a las personas, teniendo mayor porcentaje de aceptación y convencimiento de su parte para, finalmente, llegar a tener un ciclo mercadológico de éxito, en el que la persona

se transforma en un cliente y no solo eso, sino que además queda cautivo al sentirse satisfecho con el producto o servicio que se ofrece y regresa a “nosotros” quedando satisfecho (Ramírez, 2013). Castellanos (2010) establece que el Marketing 3.0 surgió como respuesta ante varios factores: las nuevas tecnologías, los problemas potenciales de la globalización y el interés de los individuos por expresar su creatividad, sus valores y su espiritualidad. El Marketing 3.0 toma en cuenta de manera continua, en todo momento lo que piensa y requiere el consumidor para ofrecer productos y/o servicios basados en valores con una responsabilidad social. El nuevo marketing está en función de las nuevas tecnologías y las necesidades del cliente. El cliente es el que nos dirá que es lo que quiere. Estas nuevas tecnologías, redes sociales y la globalización han tenido un gran impacto en cómo los consumidores y las empresas interactúan. Hoy, el consumidor está mucho más informado y conectado. Por lo tanto, el proceso de creación de *marketing* debe ser más abierto y de colaboración horizontal. (Hatch, 2012). El desarrollo de las Tecnologías de la Información y la Comunicación (TIC), y más concretamente de Internet y la World Wide Web (WWW), hacen posible la interacción entre actores, en cualquier parte del mundo, en tiempo real y a bajo coste.

En el mundo global de la actualidad, las TIC, en conjunto con la web 2.0 (aplicaciones digitales que generen colaboración y de servicios que reemplacen las aplicaciones de escritorio... redes sociales, blogs), juegan un papel fundamental. Estas nuevas herramientas han fundado las redes, la viralidad y la interrelación entre consumidores y usuarios... (Chávez, 2012). Estas nuevas herramientas han venido a revolucionar nuestras formas de interacción con las personas, las empresas no se quedan atrás, estas deben buscar al consumidor para poder estar en contacto con él. El consumidor no sólo compra, también opina; crea marcas, productos, conceptos; da ideas; concursa y gana para campañas publicitarias, productos, servicios. Se concibe al consumidor como persona, un ser integral con mente, corazón y espíritu. (Chávez, 2012). Es por eso que las organizaciones deben de estar en estrecha relación y comunicación con el consumidor debido a que el consumidor es el que hace a la marca, a los productos, se escucha la opinión de los ellos y así la empresa saber cómo llegar a él y como penetrar en la mente, en el corazón y en el espíritu del consumidor. Por lo tanto, en la actualidad el Marketing 3.0, en tiempos de redes sociales, ya no basta con presentar los productos con publicidad clásica.

Las personas no son vistas ya sólo como consumidores, sino como “personas completas” con “espíritu humano”, que quieren que el mundo se haga mejor. Desean que los productos y los servicios que eligen les llenen no sólo a nivel funcional y emocional, sino también a nivel espiritual. De esta manera las redes sociales son el intermediario de comunicación directa entre la organización y el consumidor o viceversa, permitiendo tener un contacto directo entre ambos. Ramírez (2011) en su artículo “Marketing 3.0, del cliente a la persona”, menciona que Kotler establece que, de nada servirá el “marketing más bonito”, mientras que los valores no se vivan primero por la dirección de la empresa y después formen parte de su ADN. Estos valores hay que traspasarlos también a los empleados, sólo así el consumidor será a largo plazo el “nuevo propietario de la marca”. El marketing 3.0 puede ser aplicado en diferentes sectores, uno de ellos es en los gobiernos locales, en donde por medio de su política pública pueden transmitir, por medio de las nuevas tecnologías y aplicaciones, valores, la responsabilidad social que tiene el municipio con la comunidad, tener un proceso de co-creación en donde el ciudadano forme parte de los procesos creativos del municipio y forme parte de esa política pública.

Según Joan Subirats (2009), la Política Pública es “la norma o conjunto de normas que existen sobre una determinada problemática así como el conjunto de programas u objetivos que tiene el gobierno en un campo concreto”. Mény&Thoenig (2009), establecen que las políticas públicas son “las acciones de las autoridades públicas en el seno de la sociedad y que ésta se transforma en

un programa de acción de una autoridad pública”. Las políticas públicas para Aguilar (1992), son “las decisiones de gobierno que incorporan la opinión, la participación, la corresponsabilidad y el dinero de los privados, en su calidad de ciudadanos electores y contribuyentes.” De acuerdo a Austin Ranney (1967), toda política pública presenta las siguientes características: Primero, pretende alcanzar un fin o meta determinada. Segundo, provee un curso deseado del evento. Tercero, plantea una línea de acción preferida. Cuarto, contiene una intención manifiesta. Finalmente, contempla la implementación o puesta en operación de dicha acción.

La creación de valores dentro de la organización ayuda a que esta tenga más claro de que es lo que busca y estos valores deben de ser transmitidos a los trabajadores, a proveedores, clientes y a todo aquello que le rodea, así la organización está comprometida con la sociedad y con sí misma. Las redes sociales son el intermediario perfecto para transmitir los valores hacia los clientes y estos últimos puedan identificarse con la marca o la organización. En la generación de políticas públicas se debe de armonizar los valores económicos con los valores sociales, de manera que más allá de alcanzar importantes objetivos (incremento de la recaudación fiscal, ser más competitivos a nivel internacional, fomentar directrices que promuevan la creación de crecimiento de empresas con altos niveles de utilidades o de erradicar el número de gente desempleada, entre otros), éstos se pueden integrar a los valores sociales que han de fundamentar el mejoramiento de los problemas de la población, en lo cual coinciden tanto las empresas privadas como los organismos gubernamentales. La responsabilidad social es un compromiso que los miembros de una sociedad, ya sea como individuos o como miembros de subgrupos, tienen con la sociedad en su conjunto; es decir, un compromiso que implica la consideración del impacto, positivo o negativo de una decisión o acción. (REFERENCIA). La Responsabilidad Social es otro elemento que forma parte del marketing 3.0 y que toda organización debe de tener con hacia la sociedad, utilizando algún recurso para transmitirla. Una de las actividades y áreas estratégicas de todo gobierno es la de comunicación, entendida ésta no sólo como la oficina, las políticas, las acciones o el gabinete de comunicación social, sino también todo aquello que el gobierno hace o deja de hacer y que también comunica, como puede ser el carácter del gobernante o la falta del mismo, la calidad de los servicios o su ausencia y, en general, los actos rutinarios de todo gobierno, así como sus omisiones. (Valdez & Huerta, 2011). Según establecen Valdez & Huerta (2011), que la comunicación en un gobierno local se enfoca, principalmente, a impactar positivamente las percepciones sociales con el fin de lograr moldear y generar una opinión favorable de parte de la ciudadanía respecto de su gobierno y sus acciones.

La comunicación de las políticas públicas está presente en el proceso de diseño, construcción, implementación y evaluación de las mismas. Es por eso que en todo proceso de las políticas públicas debe de haber comunicación entre los actores involucrados, es decir entre el gobierno y la población, para que en primer lugar se pueda conocer a profundidad la problemática que intenta solucionar o el efecto que pretende generar, mismo que sólo es posible conocerlo a través de una adecuada comunicación entre estos. En segundo lugar para implementar una política pública viable y trascendente se tiene que contar con la participación activa de la sociedad, misma que se puede lograr, siempre y cuando exista una adecuada y pertinente comunicación. Por último, para poder realizar una adecuada evaluación de la política pública, (saber si ha funcionado y en qué medida lo ha hecho) se requiere conocer la opinión de la población, saber sobre el impacto que tiene o tuvo la política pública, las opiniones y sentimientos que le genera dicha política hacia la población y así mismo conocer las sugerencias de mejora.

Es decir, debe haber un proceso de co-creación en donde la sociedad sea quien dice que es lo que quiere, en donde la sociedad forma parte en la elaboración de las políticas públicas con base a las necesidades que ellos tienen, de la misma manera ellos pueden evaluar las políticas públicas

establecidas por los gobiernos locales. Por lo tanto, de acuerdo a Valdes & Huerta (2011) la política pública en materia de comunicación busca, en primer lugar, que la gente conozca lo que el gobierno está haciendo, el porqué de sus acciones y la forma cómo lo está realizando, es decir, comunicar las acciones y logros del gobierno, así como el llamar la atención de los ciudadanos para que estos vean y tomen conciencia acerca de lo que sus representantes hacen en su beneficio.

En segundo lugar, el objetivo de la comunicación es moldear la percepción social, de tal forma que se mejore la imagen y la reputación de los actores e instituciones gubernamentales, ya sea por dar cumplimiento cabal a compromisos de campaña, generar acciones y obras que benefician a la sociedad o, en general, por realizar actos que generan respaldo y apoyo por parte de la sociedad. Por otro lado, las TIC son herramientas que permiten a los poderes públicos presentar con mayor transparencia sus proyectos, iniciativas y políticas de manera que podamos conocer las prioridades y objetivos gubernamentales y exigir la rendición de cuentas de las actuaciones o inacción de los gobiernos. (Echevarría, 2001). El buen uso y aprovechamiento del potencial de las TIC en la organización y funcionamiento de las Administraciones Públicas, es de vital importancia ya que de esta manera se sitúan como organizaciones prestadoras de servicios de calidad, eficaces, eficientes y en continua adaptación a los cambios para responder a las necesidades sociales en las mejores condiciones posibles. Las TIC pueden ser un magnífico aliado y motor de cambio en la medida en que los Gobiernos y Administraciones Locales lideren procesos de democracia participativa a escala local. Es decir, cómo los gobiernos locales pueden ampliar las posibilidades de decisión y participación de los ciudadanos en la toma de decisiones, en la medida en que tecnológicamente es posible y los ciudadanos cuentan con más medios para informarse y crearse una opinión propia. Es por eso que las TIC pueden ser un nuevo factor de cambio para la organización y el funcionamiento de las Administraciones Públicas. Ello debido a su novedad y a las posibilidades que éstas incorporan para innovar la gestión:

- Agilizando la comunicación e intercambio de datos;
- Desarrollando estructuras horizontales;
- Permitiendo trabajar a distancia y crear espacios virtuales de generación de ideas, debate y conocimiento.

¿Cómo una organización pública municipal puede hacer Marketing 3.0? Para que un municipio esté involucrado en el marketing 3.0 debe de tomar en cuenta la participación de la población ya que es relevante debido a que los ciudadanos deben de estar incluidos en los procesos creativos de la organización, es decir, proceso de diseño, construcción, implementación y evaluación de las Políticas Públicas basadas en un Plan Municipal de Desarrollo, en las campañas publicitarias del municipio, en la toma de decisiones, hasta poder ayudar a crear un hashtag exitoso en las redes sociales. Al aplicar un Marketing 3.0 las organizaciones públicas se deben preocupar por todos los agentes involucrados y que están interesados en todo su entorno: empleados, la ciudadanía, clientes, proveedores y colaboradores, etc.

Los gobiernos locales deben de poseer una política de puertas abiertas, estando listos para escuchar propuestas, iniciativas y comentarios de quienes están involucrados.

De la misma manera el Municipio debe de reflejar esa responsabilidad social que tiene el gobierno con la misma sociedad, así la población se sentirá identificada y se sentirá parte del mismo gobierno, haciendo las cosas con transparencia y responsabilidad. La nueva tendencia se une además a una serie de conceptos que están surgiendo en el mundo empresarial y que buscan resaltar, más que nunca, los valores que cualquier organización debe manejar, practicar y difundir. Y cuyo objetivo es “hacer del mundo un mejor lugar”, (Philip Kotler, 2011). Es por eso

que un gobierno municipal debe de crear valores basados en una responsabilidad social, de manera que el municipio los maneje, practique y los difunda.

## **METODOLOGÍA DE LA INVESTIGACIÓN**

*Tipo de Investigación:* La investigación es de tipo cualitativa debido a que se enfrenta con problemas de comunicación de la Política Pública a la comunidad en donde al proponer estrategias idóneas se pueda llevar a cabo una comunicación eficiente y eficaz de la Política Pública entre el Municipio y la Sociedad, proyectando valores basados en una responsabilidad social, siendo el uso de las nuevas herramientas tecnológicas el intermediario de comunicación.

*Nivel de investigación:* La investigación de Política Pública basada en el marketing 3.0 en el municipio de Ayapango Estado de México es una investigación descriptiva ya que busca especificar propiedades, características y rasgos importantes de cualquier situación que se analice. Describe elementos que integran a la Política Pública y al Marketing 3.0. Y esta investigación es descriptiva porque solo será una propuesta de estrategias para poder desarrollar la Política Pública basada en el Marketing 3.0.

*Diseño de la investigación:* La investigación no experimenta son estudios que se realizan sin la manipulación deliberada de variables y en los que sólo se observan los fenómenos en su ambiente natural para después analizarlos, es por ello que esta investigación es no experimental ya que a través de la observación del sujeto y del entorno se identifican los problemas que se tienen al comunicar la Política Pública. Es una investigación transversal que a través de las variables establecidas, tanto independiente como dependiente y por medio de los indicadores que las integran y definen se obtienen datos para poder llevar a cabo la comunicación de la Política Pública a la población con valores basada en una responsabilidad social por medio de las nuevas tecnologías en el municipio de Ayapango Estado de México.

## **RESULTADOS**

La investigación se encuentra en fase de análisis y desarrollo, por lo que hasta el momento no se pueden dar resultados finales.

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# DETRIMENTO PATRIMONIAL POR HURTO VEHÍCULOS EN COLOMBIA

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## RESUMEN

Este trabajo formula un modelo basado en concepto de riesgo operativo para estimar el detrimento patrimonial para propietarios y las pérdidas estimadas por compañías aseguradoras por el hurto de vehículos en Colombia. Se recurre a la información histórica de hurtos durante los periodos 2006-2012, tanto para las empresas aseguradoras, como de los siniestros asumidos por los ciudadanos. El artículo muestra estadísticas de este problema social y calcula algunos indicadores que relacionan este fenómeno con el desempleo. También se caracterizan las distribuciones de pérdidas agregadas DPA, por compañía de seguros, por ciudad y la distribución para la pérdida patrimonial de los ciudadanos. A partir de procesos de convolución basado en simulación Montecarlo se agregan las distribuciones de frecuencia y severidad obtenidas a partir de los datos históricos sobre pérdidas por hurto de vehículos en Colombia. Para las compañías de seguros se estima la exposición a riesgo del capital por hurto vehículos y para los ciudadanos se estima el detrimento patrimonial por siniestros de vehículos no asegurados. La información de pérdidas calculadas para un periodo de tiempo a un nivel de probabilidad permite desarrollar políticas y estrategias de cubrimiento, mitigación o la formulación de planes de mejoramiento de la gestión del riesgo en las operaciones relacionadas con el fraude y el hurto calificado de vehículos a nivel de las compañías de seguros, a nivel político o social. Se propone una base formal para el establecimiento de un enfoque cuantitativo del análisis de pérdidas para la supervisión de la gestión del riesgo operativo en las empresas del sector asegurador, así como la estimación de pérdidas esperadas para los ciudadanos.

**PALABRAS CLAVE:** Hurto Vehículos. Riesgo, Riesgo Operacional, Exposición Del Capital

## ABSTRACT

*we present a model for estimating the patrimonial detriment of citizens and losses estimated by insurers for theft of vehicles in Colombia. Use the historical information on thefts in 2006-2012 periods, both for insurers, of claims made by citizens. The article shows statistics of this social problem and calculate some indicators that relate this phenomenon with unemployment. LDA aggregate loss distributions, are also characterized by insurance company, city and distribution for patrimonial loss of citizens. From processes of convolution based on simulation Monte Carlo add frequency and severity distributions obtained from historical data on losses by theft of vehicles in Colombia. For insurance companies estimated the exposure to risk of the capital by theft vehicles and for citizens deemed the patrimonial detriment for claims of non-insured vehicles. The information loss calculated for a period of time to a level of probability allows you to develop policies and strategies of covering, mitigation, or the formulation of plans to improve the management of risk in operations related to the fraud and theft qualified vehicles at the level of the insurance companies, at the level political or social. Proposes a formal basis for the establishment of a quantitative approach to the analysis of losses for the monitoring of the*

*management of operational risk in the companies in the insurance sector, as well as the estimate of losses expected for the citizens*

**KEY WORDS:** Risk, operational risk, capital charge

## INTRODUCCIÓN

La gestión, medición y valoración de riesgo en los mercados financieros y posteriormente en el total de las empresas que estructuran la economía, se focaliza en la generalidad de las propuestas realizada por el Comité de Basilea (Basilea I-II-III) y en la norma ISO 31000, donde se manifiesta la importancia de los conceptos asociados al proceso de gestión, cuantificación y de riesgos de mercado, crédito, operativos, entre otros. En el contexto de los riesgos operacionales, determinar las pérdidas esperadas, generadas como resultado de los diferentes eventos posibles, requiere la elaboración de algoritmos que, a un nivel de confianza deseado, determinen la severidad de las pérdidas esperadas y permita soportar la toma de decisiones tales como las estrategias de cubrimiento o las decisiones asociadas a definir los límites de tolerancia al riesgo, etc. El riesgo se define como la probabilidad de que suceda un evento, impacto o consecuencia adversa y en específico el riesgo operativo está anclado en todas las actividades normales de cualquier empresa u organización, toda empresa en la ejecución de las actividades normales del negocio, no está exenta de sufrir fallos operativos (Restrepo & Medina, 2012) (Smithson, Smith, & Wilford, 1998). La dinámica actual de los mercados asociada a procesos de globalización y tratados comerciales, exige que toda firma desarrolle un sistema de gestión de riesgos que permita identificar, cuantificar, controlar y monitorear los riesgos del negocio, con el propósito de anticipar el capital necesario o las estrategias de cobertura necesarias para cubrir las pérdidas potenciales.

En este artículo se analiza el caso del riesgo operativo asociado al hurto de vehículos para el sector asegurador en Colombia, aunque no hay cifras concretas respecto al detrimento patrimonial de los propietarios por el hurto calificado de vehículos, se estima que la gran mayoría de estos hurtos se realizan con fines comerciales y son los propietarios sufren la pérdida directa. No obstante, independientemente del motivo del hurto, es un fenómeno que por sus repercusiones en las dimensiones política, económica y social, se ha considerado como un problema de interés público. Este artículo tiene como objetivo proporcionar una base de conocimientos para construir una visión sistemática del análisis cuantitativo del riesgo operacional como base para la supervisión y la gestión. El enfoque sistémico se aborda desde tres partes, la primera se centra la atención en los conceptos y definiciones de riesgo operacional genéricos, a la luz de los criterios del Comité de Basilea, el numeral 2 presenta el estado actual del sector asegurador de vehículos en Colombia, mostrando estadísticas asociadas al robo y pago de primas entre 2006-2102 así como aspectos regulatorios y de supervisión del sector, el numeral 3 se muestran las aproximaciones teóricas en cuantificación de riesgos. En el numeral 4 se realiza el análisis estadístico y cuantificación del detrimento patrimonial asociado al hurto de vehículos. Por último se indican las conclusiones y trabajos futuros.

### Sector Asegurador

(Pinzón, 2012), muestra como la actividad de la industria aseguradora ha sido fuertemente influenciada por el comportamiento global de la economía, donde aspectos como la crisis de la Zona Euro y el riesgo de abismo fiscal en Estados Unidos, han hecho que la economía mundial se encuentre debilitada. Para 2013, aunque los riesgos de una recesión en USA y Europa son altos,

situaciones como la reactivación del mercado inmobiliario en Norteamérica, los incentivos fiscales y monetarios en China y ligeros cambios en la Zona Euro, permiten esperar una recuperación de la economía, con una tasa de crecimiento más fuerte a la registrada en el 2012, una inflación controlada y que la tasa de desempleo mundial disminuya gradualmente. La industria aseguradora presenta un rol protagónico en la economía del país, en primera instancia por su presencia como inversionista institucional que promueve el ahorro personal, resguarda el patrimonio de las personas naturales y jurídicas, salvaguarda el nivel y la capacidad de producción de las empresas en eventos fortuitos de alta siniestralidad y pérdidas severas y en segunda instancia por su alta participación en el Producto Interno Bruto (PIB); Según la Federación de Aseguradores Colombianos (FASECOLDA), entidad gremial sin ánimo de lucro que aglutina a las compañías de seguro y las sociedades de capitalización en Colombia, La industria aseguradora registró un crecimiento real del 10.6% en el 2012. Las primas de seguros alcanzaron el 2.6% del PIB, una penetración cercana a la del promedio latinoamericano. No obstante, (Salazar, 2013) argumenta como el sector asegurador carece de innovación y socialización de los seguros, plantea como la penetración es muy baja y los indicadores ubican al país por debajo del promedio latinoamericano y muy lejos de economías como la chilena, esta es una oportunidad del negocio, una vez que si tuviésemos los índices de la región, el mercado asegurador colombiano produciría 20 billones de primas al año, esto es cinco billones de pesos adicionales. Igualmente, considera que el reto más grande del sector es que los clientes dejen de percibirlo solo en el aspecto de transferencia de los riesgos y más en la gestión de riesgo.

Según (Libreros, 2013), el hurto de vehículos es una actividad ilícita que se realiza con tres objetivos diferentes. El primero, son vehículos hurtados por diversión y sin fines directamente comerciales, no existe predilección especial por la marca o el modelo y por lo general son abandonados luego de usarlos, la mayoría de las veces con severamente dañados. El segundo tipo de hurto, utiliza los vehículos en actividades ilegales como el transporte de objetos robados, de bienes ilícitos o para realizar actividades terroristas. El tercer tipo de hurto, se caracteriza por obtener beneficios económicos derivados de la venta por partes o en su estado integral luego de remover sus números de identificación. En este grupo participan las bandas organizadas, que reúnen una serie de conocimientos y redes para robar, transportar y modificar los vehículos para su venta, ya sea entero o desguazado, esta modalidad presenta interés por determinadas marcas y modelos de vehículos que el mercado demanda más.

(El País, 2013), exhibe como en Cali, durante el primer trimestre del 2013, se hurtaron 993 automotores, entre carros y motocicletas, cuyo costo comercial fue estimado en \$39.680 millones (USD). Esos hurtos fueron superiores en 2 % respecto a los de igual período del 2012, cuando habían sido 971 unidades. La Asociación del Sector Automotriz y sus Partes (Asopartes), arguye un detrimento patrimonial de los ciudadanos de la ciudad de Cali, porque el 65 % de esos automotores no estaban asegurados, y por lo tanto la pérdida para la ciudad ascendió a \$25.820 millones. El 35 % restante contaba con pólizas, lo que permitió a los ciudadanos recuperar alrededor de \$13.860 millones con las compañías de seguros.

Un estudio de la Cámara de Automóviles de FASECOLDA y retomado por el Instituto Nacional de Investigación y Prevención del Fraude (INIF), dejar ver como de enero a diciembre de 2012 – Tabla 3- el gremio asegurador vio desaparecer en el país un total de 6.451 vehículos por un valor aproximado de 162.428.335 millones de pesos de 2012 (USD) y 163.591.697 millones de pesos de hoy (USD).

Tabla 3: Resumen Mensual de Vehículos Hurtados 2012

MES	vehículos	Valor en Miles de \$ (2012)	Valor en Miles de \$ (2013)
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ENERO	489	12.493.034	12.797.283
FEBRERO	498	11.346.304	11.538.314
MARZO	555	14.848.147	15.007.755
ABRIL	464	12.139.084	12.254.612
MAYO	574	14.376.473	14.492.372
JUNIO	511	13.612.367	13.681.056
JULIO	600	18.629.963	18.708.484
AGOSTO	561	13.103.611	13.161.683
SEPTIEMBRE	571	12.695.622	12.746.657
OCTUBRE	551	12.443.930	12.458.283
NOVIEMBRE	531	13.420.501	13.414.064
DICIEMBRE	546	13.319.300	13.331.137
Totales	6.451	162.428.335	163.591.697

Fuente: FASECODPA Datos para 2012, actualizados a 2013 según el IPC

La estimación de las pérdidas esperadas y el detrimento patrimonial de la propiedad en este estudio, se ejecuta para 14 empresas aseguradoras de Colombia y para las tres principales ciudades del país: Bogotá, Medellín y Cali. Los datos para vehículos hurtados y asegurados corresponden al periodo 2006-2012 suministrados por las bases de datos de FASECOLDA. Los hurtos de vehículos no asegurados se desprenden de las bases de datos de ASOPARTES y corresponden al periodo 1992-2012.

### Marco Teorico

El comité de Basilea , propone tres metodologías para la estimación de la perdida económica por riesgo operativo enmarcadas en el enfoque de los modelos AMA (Advanced Measurement Approach), las cuales se resumen:

Cuadros de mando o scorecards

El modelo de medición interna, cuyas siglas son IMA

El modelo de distribución de pérdidas agregadas DPA

No obstante que el Comité de Basilea inclinará la balanza hacia los modelos IMA para cuantificar el capital económico por exposición al riesgo operacional, en la literatura y en la práctica el modelo DPA se ha posicionado como una metodología adecuada para estimar las perdidas esperadas. (Bühlmann, 2005), remonta la génesis del método DPA en las aplicaciones actuariales, emprendidas por el sector asegurador durante varios lustros, su efectividad la mimetizo como una de las técnicas importadas de los modelos actuariales, de alta predilección para ser aplicada en contextos específicas para cuantificación del riesgo operacional, y particularmente cuando la base de datos existente es relativamente pobre.

Es así como el modelo DPA, entrega un estimado del riesgo operacional de una organización y a sus unidades de negocio, con base en una distribución de pérdida que expresa los datos de pérdidas subyacentes. El gran potencial del método DPA radica en que se focaliza en los datos de pérdidas históricas (frecuencia y severidad), que normalmente se presentan y registran a nivel interno en las organizaciones y que se pueden complementar con datos externos. La técnica del DPA ha sido ampliamente utilizada en la literatura con alto acierto en la modelación de las distribuciones de pérdidas, fundamentales para el desarrollo de la matriz propuesta por Basilea, se presenta un resumen cronológico de los trabajos consultados: Restrepo, 2011; Aue y Kalkbrenner, 2007; Akkizidis y Bouchereau, 2006; Dutta y Perry, 2006; Böcker, 2006; Medina, 2006; Nešlehová et al, 2006; Chernobai y Rachevt, 2006; Degen et al, 2006; Shevchenko, 2005; Frachot et al, 2004; Frachot et al, 2003; Frachot et al, 2002; Cruz, 2002; Lee, 2001. Con la distribución de

pérdidas, se procede a simular los eventos para determinar la exposición al riesgo para la siguiente unidad de tiempo.

La simulación ha sido ampliamente aceptada en el ámbito académico y empresarial, para explicar, predecir, entrenar y ayudar a determinar soluciones óptimas., una vez que brinda profundidad a los análisis cuando se trata de evaluar situaciones con alto grado de incertidumbre, además de brindar una visión completa de la situación, supera limitaciones del análisis con base en datos históricos cuando describe el comportamiento de las variables en términos de una distribución de probabilidad y por tanto considera las probabilidades de ocurrencia de los eventos asociados con variables aleatorias. Para una aproximación exitosa a los modelos de simulación, es importante identificar, en primera instancia, las distribuciones de probabilidad adecuadas a la situación de análisis y posteriormente definir las interdependencias que permiten describir el comportamiento esperado de las variables a través de análisis y definición de covarianzas y correlaciones entre ellas.

(Evans, 1998) define la simulación como el proceso de construir un modelo lógico-matemático de un sistema o proceso de decisión, y experimentar con él para comprender el comportamiento del sistema o ayudar en la toma de decisiones. (Fiorito, 2006), muestra como la simulación es particularmente útil en problemas o situaciones que involucran incertidumbre y como un modelo es inservible si no ayuda al usuario a comprender el problema. Por ello, el punto principal en la simulación está puesto en conducir experimentos con el modelo y analizar los resultados. El modelo propuesto, fundamentado en información histórica de 2006 a 2012, será un modelo estadístico sobre la frecuencia y el monto de los eventos de pérdida con el objeto de estimar la provisión que las empresas deben realizar para el periodo 2013

Modelación de la severidad: En general, el modelo parte en primera instancia de ajustar diferentes distribuciones de probabilidad a la serie datos históricos de pérdidas operacionales desagregadas por tipología para cada línea de negocio y evento de pérdida. En este caso, será el hurto de vehículos por ciudad. En síntesis, es necesario hallar la distribución de probabilidad con mejor ajuste a los datos observados y estimar sus parámetros. Algunos autores como Lee, 2001; Cruz, 2002; González, 2004; Shevchenko y Donnelly, 2005 y Carrillo y Suárez, 2006, proponen la distribución Lognormal o la de Weibull como las más recomendables para modelar la severidad, no obstante, en la práctica es difícil que una distribución simple se ajuste a los datos de forma adecuada; por tanto, es recomendable recurrir a un abanico de distribuciones para variables aleatorias continuas. La modelación de la severidad, en términos generales se expresa, así: sea ( $X$ ) el monto de la pérdida en la celda ( $ij$ ) de la matriz de pérdidas (severidad del evento), una variable que con una distribución de probabilidad  $F_{ij}(x)$  definida con la ecuación 3.

$$F_{ij}(x) = P(X_{ij} \leq x) \quad (1)$$

Modelación de la frecuencia: Por su parte, la frecuencia se define como una variable aleatoria discreta que simboliza el número de eventos ocurridos en un período de tiempo determinado, con una probabilidad de ocurrencia establecida. Restrepo, 2011; Lee, 2001; Cruz, 2002; González, 2004 y Shevchenko, 2005, expresan la distribución de Poisson como la más adecuada para modelar dicha variable, sin descartar otras distribuciones alternas como la binomial o la binomial negativa.

Sea  $K_{ij}$  una variable aleatoria que representa el número de eventos de riesgo en la celda ( $ij$ ) de la matriz de eventos (frecuencia de los eventos). Dicha variable se determina por una distribución de probabilidad

$P_{ij}(n)$  definida como:

$$P_{ij}(n) = P(K_{ij} = n) \quad (2)$$

Independiente de las distribuciones de probabilidad elegidos para modelar la frecuencia y la severidad, es importante establecer las diferentes pruebas de bondad de ajuste, tales como Chi-cuadrado, Anderson-Darling (A-D), Kolmogorov-Smirnov (K-S), necesarias para cada distribución.

Obtención de la distribución de pérdidas agregada: Posterior a la caracterización de las distribuciones para la frecuencia y la severidad, el diagrama de flujo establece como paso siguiente obtener la distribución de pérdidas agregadas (DPA), lo que exige la combinación de las dos distribuciones mediante un proceso estadístico conocido como convolución.

$K_{ij}$ , es una variable aleatoria que representa el número de eventos en la celda ( $ij$ ) de la matriz de eventos, para un plazo comprendido entre  $(t, t + \tau)$ , con una distribución de probabilidad asociada  $P_{ij}(k)$  y  $X_{ij}$  es otra variable aleatoria que expresa la cuantía de la pérdida para un determinado evento con una función de densidad asociada  $F_{ij}(x)$ . Entonces, asumiendo independencia entre la frecuencia y la severidad, la pérdida total para un tipo de evento en el intervalo temporal  $(t, t + \tau)$  adopta la expresión dada en la ecuación 2. Y con respecto a la función de distribución de la variable S se obtiene:

$$= \left\{ \sum_{n=1}^{\infty} P_{ij}(n) * F^{n*}(x) \text{ para } x > 0 \right.$$

$$S(x) = \{ P_{ij}(n) \text{ para } x = 0$$

Donde,  $F^{n*}(x)$  es la probabilidad de que la cantidad agregada de ( $n$ ) pérdidas sea ( $x$ ). El asterisco denota la convolución en la función  $F$ , y  $F^{n*}$  es ( $n$ )-veces la convolución de  $F$  consigo misma. Para obtener  $S(x)$ , la literatura presenta dos alternativas, este artículo desarrolla la Simulación Montecarlo que consiste en obtener escenarios de rendimientos o precios de un activo mediante la generación de números aleatorios correlacionados que repliquen las distribuciones de probabilidad o los procesos estocásticos definidos para cada uno de los factores de riesgo (Medina & Restrepo, 2013). Este método supera la complejidad del algoritmo de Panjer para realizar la convolución de las frecuencias y la severidad, luego de ajustar los modelos de frecuencia y severidad, es posible mediante SM estimar la distribución de pérdidas agregadas mediante el uso de un número adecuado de escenarios hipotéticos, generados aleatoriamente, a partir de las distribuciones de severidad y frecuencia. La SM es una forma simple y flexible para encontrar esa distribución y determinar la carga de capital.

## RESULTADOS

A continuación se ilustra la metodología básica utilizada para caracterizar la DPA de la aseguradora Suramericana, análisis semejantes se realizan sobre las 13 empresas restantes del gremio asegurador y se resume de manera práctica los resultados para el portafolio de aseguradoras vehiculares en Colombia.

Por otra parte para determinar el detrimento patrimonial por ciudad, debido a que no existe información sobre la severidad de la pérdida para los vehículos no asegurados, se recurrió a información secundaria con el fin de estimar el valor unitario de los vehículos hurtados y asegurados calculados mediante la DPA de las aseguradoras y se encuentra la distribución de mejor ajuste para los vehículos hurtados no asegurados y mediante la convolución del valor unitario y la frecuencia del hurto se determina el detrimento patrimonial. Los cálculos y análisis se soportan en el software @risk y en R. Análisis para el portafolio de aseguradoras A continuación se presenta un resumen de las funciones de probabilidad ajustadas para la frecuencia mensual y la severidad por compañía de seguros, se enfatiza en que los análisis abordados para su selección replican lo expuesto en el literal anterior. La Tabla 4 contiene la caracterización del hurto y severidad mensual de vehículos por empresa, como puede observarse, el valor-P de cada una de las distribuciones seleccionadas es mayor al nivel de significancia al cinco por ciento, esto permite afirmar que la distribución de probabilidad seleccionada se ajustan a los datos de la muestra.

Tabla 4: Caracterización del Hurto Mensual de Vehículos Por Empres

Aseguradoras	Frecuencia		Severidad	
	Distribucion	P-Value	Distribucion	P-Value
BBVA	Binomial neg.	0,914	Loglogistic	0,7452
Bolivar	Binomial neg.	0,9629	Weibull	0,9662
Colpatria	Binomial neg.	0,8165	BetaGeneral	0,9927
Colseguros	Binomial neg.	0,3744	Lognorm	0,7787
Equidad	Binomial neg.	0,6056	Loglogistic	0,6056
Estado	Binomial neg.	0,5227	Weibul	0,9662
Generali	Binomial neg.	0,1202	Invgauss	0,4238
Liberty	Binomial neg.	0,9579	Pearson	0,8913
Mapfre	Binomial neg.	0,018	Logistic	0,9927
Previsora	Binomial neg.	0,4162	Invgauss	0,881
QBE	Geometrica	0	Pearson	0,8685
Royal	Binomial neg.	0,941	Logistic	0,8913
Solidaria	Poisson	0,9207	Lognorm	0,8913
Suramericana	Binomial neg.	0,053	Loglogistic	0,2315

Las pruebas de bondad de ajuste se realizaron al 95% de confianza y como se indica en la tabla los P-Valor superan el 5% de significancia exceptuando las empresas Mapfre y QBE.

Con base en lo anterior se procesa a realizar el proceso de simulación Montecarlo descrito en el numeral XXX, con el fin de obtener el VaR mensual para cada una de las compañías de seguros. Los resultados se resumen en la Tabla 5. Este vector se tomara en cuenta posteriormente para el cálculo del valor en riesgo asociado en el portafolio asegurado.

Tabla 5: Var Al 95% Mensual Por Compañía en COP

Compañía	VaR al 95% (COP)
BBVA	250.769.925,67
Bolivar	1.294.883.198,89
Colpatria	784.922.270,14
ColSeguros	3.680.026.452,71
Equidad	543.720.270,57
Estado	871.202.793,09
Generali	478.221.554,20
Liverty	2.912.112.948,32
Mapfre	1.221.565.912,44
Previsora	1.538.818.691,37
QEB	631.062.459,23
Royal	801.692.514,99
Solidaria	1.383.515.272,47
Suramericana	6.111.343.071,18

Finalmente y aplicando el resultado expuesto en el literal XXX para la estimación del VaR se tiene que la pérdida máxima del portafolio de aseguradoras en un mes para un nivel de significancia del 95% es de 8.784.582.562,19 COP.

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# INVESTIGACIÓN DE MERCADOS PARA IMPLEMENTAR A TRASPATIO UN SISTEMA DE PRODUCCIÓN ACUA-AGRÍCOLA SUSTENTABLE EN LA COMUNIDAD EN BENITO JUÁREZ, SONORA, MÉXICO

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## RESUMEN

*Actualmente contar con fuentes de información primarias es una parte importante en las empresas ya que les permite contar con caminos a seguir más fundamentados en sus procesos y futuros proyectos. Según (Kotler 2006) la investigación de mercados que es considerada una herramienta fundamental para el proceso de recolección y uso de información para una mejor toma de decisiones en mercadeo, la cual permite conocer la pertinencia de algún nuevo proyecto. Por lo antes mencionado se realizó una investigación de mercados en la comunidad de Benito Juárez Sonora, México con las familias del área para proporcionar información precisa, para la toma de decisión acerca de la implementación del sistema de producción Acua – Agrícola a traspatio en los hogares de la región para que las mismas familias manejen y administren su producción, esta podría ser para autoconsumo, comercialización o recreación. De lo anterior surge la pregunta de investigación: ¿Es factible la implementación de un sistema de producción que se integre la actividad acuícola con la agrícola con las familias de Benito Juárez a traspatio?. Para dar respuesta a la pregunta de investigación se realizó una investigación de mercados donde se determinó la población a estudiar para posteriormente obtener una muestra y así recabar información para procesarla y llegar a las conclusiones de dicho proyecto.*

**PALABRAS CLAVE:** Investigación de mercados, producción Acua-Agrícola sustentable y Benito Juárez, Sonora México.

## MARKET RESEARCH TO IMPLEMENT A SUSTAINABLE BACKYARD ACUA-AGRICULTURAL PRODUCTION SYSTEM IN THE COMMUNITY OF BENITO JUAREZ, SONORA, MEXICO

### ABSTRACT

*Currently have primary information sources is an important part in business because it allows them to have more informed ways forward in their processes and future projects. According to (Kotler 2006) that market research is considered an essential tool for the process of collection and use of information for better decision -making in marketing, which allows to know the relevance of any new project. As mentioned above was conducted market research in the community of Benito Juarez Sonora, Mexico with area families to provide accurate information for decision-making on the implementation of the production system Aqua - Agricultural to backyard in homes of the region to manage families themselves and manage their production, this could be for self-*

*marketing or recreation. From the above research question arises: Is it feasible to implement a production system that integrates aquaculture with agricultural families Benito Juárez backyard?. To answer the research question we conducted a market research which determined the study population to subsequently obtain a sample and gather information and to process and come to the conclusions of the project.*

**JEL.:** M31, Q32, R51 y Q32.

**KEYWORDS:** Marketing Research, Production Aqua - Agricultural Sustainable and Benito Juárez, Sonora Mexico.

## **INTRODUCCIÓN**

El Sistema de Producción Acua – Agrícola, es un proyecto de la Universidad Estatal de Sonora UES, Unidad Académica Benito Juárez, que consiste en el desarrollo de producción de manera hidropónica, integrando la actividad acuícola con la hortícola el cual tiene cuatro años de investigación, dentro de sus procesos está la operación del sistema está a cargo de la Dirección de Unidad como administrador, un Coordinador General que es un docente de la misma universidad y alumnos que practican y desarrollan investigación como Encargados de Producción y Obreros. Según González L., (2013), el sistema integrado, es la fusión de la actividad acuícola con la actividad agrícola, mediante la cual se busca desarrollar en cultivo de peces dando la recirculación adecuada del agua para la producción de productos agrícolas, por consiguiente se busca incrementar una fuente de empleo e ingresos para la sociedad, así como productos libres de agroquímicos para una mejor calidad de vida. Como una alternativa para diversificar la actividad acuícola del Estado, el cultivo Acuapónico se presenta como una opción viable de desarrollo en la zona rural, sin embargo dado que en la mayoría de las veces se utiliza agua dulce para su cultivo, es de vital importancia que este se desarrolle de manera intensiva para optimizar el uso del agua, en Sonora como en muchas partes del país y del mundo, el agua dulce se ha convertido en un factor limitante para el desarrollo de esta actividad, es por ello que se han desarrollado sistemas de producción en los cuales, el agua que se desecha del cultivo de la tilapia es utilizada para cultivar y producir otras especies como hortalizas ya sea: Tomate, lechuga, pepino, chiles, albahaca, menta, etc., estos sistemas se denominan “Sistemas integrales o bien se les conoce como Aquaponia”.

## **REVISIÓN DE LITERATURA**

Actualmente los Agronegocios se han convertido en motores de la economía en el siglo XXI, representando un 50% del comercio global (Monterroso 2003), por lo que se considera como un conductor de desarrollo económico, mismos que estimulan a otros giros relacionadas con esta actividad. Según FAO (2013) se considera como Agronegocios la expansión de los negocios del sector agropecuario y rural y de sus cadenas, a partir de relaciones que involucran estructuras contractuales, alianzas o asociaciones ejecutadas principalmente por el sector privado a partir de los productores del sector agropecuario, sostenibles a largo plazo, que involucran, además de un conjunto asociado de agricultores, a diversos agentes exógenos o de las cadenas agroindustriales y que podrían contar o no, con el apoyo de las políticas públicas.

En la actualidad, los elementos administrativos claves de cualquier empresa u organización son los individuos, la estructura, la tecnología, el ambiente interno y externo, así como la información; los directivos requieren de ésta última como fundamento para enfrentarse y superar los cambios del entorno y sobre todo los que provoca la competencia y los que el fenómeno de la

globalización implica. Por otro lado los empresarios que no cuentan con la información necesaria para tomar decisiones adecuadas y oportunas, pondrán a su negocio en una posición de desventaja frente a sus competidores, además serán incapaces de resolver con bases sólidas la incertidumbre y los problemas de índole administrativa que se presenten, por tal motivo son necesarias y de vital importancia la realización de investigaciones de mercados como parte de la mercadotecnia de una empresa. La mercadotecnia según Kotler (2006), considerado como el padre de la mercadotecnia moderna, asegura que esta disciplina es un proceso social y administrativo mediante el cual grupos e individuos obtienen lo que necesitan y desean a través de generar, ofrecer e intercambiar productos de valor con sus semejantes. Y afirma que en la actualidad se puede hablar de Mercadotecnia en donde existen elementos enfocados para que el producto y los valores de éste fortalezcan en todos los niveles, el lazo con los consumidores y también con los inversionistas, empleados, distribuidores, proveedores y todo aquel que forme parte del equipo, pues su finalidad es generar una relación ganar-ganar. Sin embargo, son pocas las compañías que desarrollan Marketing. De la tal ciencia se desprende una rama muy importante como lo es la Investigación de Mercados que es considerada como el proceso de recolección y uso de información para la toma de decisiones en mercadeo (Kotler, 2006) y es una herramienta fundamental para mejor toma de decisiones, lo cual permite conocer la factibilidad de algún nuevo proyecto o un nuevo negocio. Actualmente, en Sonora la acuicultura se ha desarrollado principalmente en el cultivo de camarón, obteniendo una producción cercana a las 50,000 toneladas.

(INEGI 2013) Sin embargo es necesario que la acuicultura se diversifique ya que se han conjuntado una serie de factores que posibilitarán un explosivo despegue de cultivos agrícolas diferentes al del camarón, cuya actividad ya empieza a resentir los efectos de presión por condicionantes ambientales, enfermedades, competencia al acceso de recursos financieros y saturación de mercados. Como una alternativa para diversificar la actividad acuícola del Estado, el cultivo de la tilapia se presenta como una opción viable de desarrollo en la zona rural, sin embargo dado que en la mayoría de las veces se utiliza agua dulce para su cultivo, es de vital importancia que este se desarrolle de manera intensiva para optimizar el uso del agua, en Sonora como en muchas partes del país y del mundo el agua dulce se ha convertido en un factor limitante para el desarrollo de esta actividad. Es por ello que se han desarrollado sistemas de producción en los cuales, el agua que se desecha del cultivo de la tilapia es utilizada para cultivar y producir otras especies como hortalizas ya sea: Tomate, lechuga, pepino, chiles, albahaca, menta, etc. Estos sistemas se denominan “Sistemas integrales o bien se les conoce como Aquaponía” la cual se desarrolla Investigación en la Universidad Estatal de Sonora (UES) Unidad Académica Benito Juárez, a partir del 1º de septiembre de 2012, antes Centro de Estudios Superiores del Estado de Sonora (CESUES) con el proyecto productivo del Sistema de Producción Acua-Agrícola que se desarrolla por maestros investigadores de diferentes áreas.

Hoy en día es de gran importancia el contar con una sana alimentación ya que México ocupa uno de los primeros lugares en obesidad a nivel mundial (OMS 2013), por tal motivo se realizó una investigación de mercados con las familias de la comunidad de Benito Juárez en el Sur de Sonora para proporcionar información para la implementación del sistema de producción Acua – Agrícola en el traspatio de sus hogares. Este proyecto se basa en desarrollar un cultivo integral en Acuaponía, siendo este el principal objetivo del Sistema el compromiso social de promover la implementación de este tipo de sistemas de producción entre los habitantes de la comunidad, para contribuir al autoempleo, la producción y consumo de productos de calidad y orgánicos en beneficio de la salud y de la economía familiar, aparte de servir como terapia para los adultos mayores, jubilados o pensionados al momento de hacerse cargo del sistema promoviendo el uso sustentable de los recursos naturales y así garantizar una bienestar en general a la sociedad.

## MÉTODOLOGÍA

### Objetivo

Realizar una investigación de mercados en la comunidad del Municipio Benito Juárez mediante el diseño y aplicación de un instrumento de medición, que permita determinar si los habitantes de dicha población estarían dispuestos a implementar un Sistema de Producción Acua-Agrícola (SIPROAA) a traspatios para el cultivo de hortalizas y la crianza de peces.

### Delimitaciones

Para este proyecto, se desarrolla un sistema de producción que se busca sea eficiente en el manejo del recurso agua, combinando la actividad acuícola con la agrícola para producir de manera integral tilapia negra (*Oreochromis niloticus*) con cultivos hidropónicos de tomate bola (*Lycopersicon esculentum*) en un sistema de recirculación de agua dulce, dicho proyecto está implementado en la localidad de Villa Juárez, en la Universidad Estatal de Sonora, Unidad Académica Benito Juárez y se desarrolla sólo con recursos propios de la Institución y con apoyos Estatales y se están gestionando recursos Federales para su eficiente operación. Esta investigación presenta las siguientes delimitaciones:

Está enfocada sólo a la pertinencia del proyecto en la comunidad.

La profundidad del estudio está sujeta a la información disponible por los integrantes del proyecto.

La decisión de la implementación del estudio desarrollado, queda a discreción de las familias que estaría dispuesto a implementarlo y manejarlo por medio de un programa social.

Las familias serán responsables de administrar el proyecto asegurando producción que puedan servir de indicadores para ver la factibilidad del proyecto.

*Sujeto:* La presente investigación se realizó con las familias de la Comunidad de Benito Juárez, donde la Universidad Estatal de Sonora está desarrollando un Sistema de producción Acua-Agrícola en el que se integre la actividad acuícola con la agrícola, en donde los integrantes del proyecto proporcionaron información requerida para la investigación de mercados, dicho proyecto productivo es desarrollado por maestros investigadores de la universidad, esto es por el interés de la Institución por buscar nuevas alternativas que incrementen la producción y rentabilidad del campo agrícola, así como coadyuvar con productores de las comunidades rurales para que diversifiquen sus actividades tradicionales de agricultura temporal, y en la búsqueda de promover el autoempleo y la producción de alimentos libres de agroquímicos.

*Materiales:* Para la realización de esta investigación de mercados se diseñó un instrumento para la recolección de los datos, se organizó equipos para aplicar las encuestas, también se apoyó de entrevistas abiertas con los integrantes del proyecto, asesoría de maestros de la Universidad Estatal de Sonora y expertos en los temas abordados. El cuestionario constaba de preguntas de opción múltiple y una abierta las cuales estuvieron enfocadas a la situación actual y expectativas del proyecto, otro método al que se recurrió fue al de observación, y consultas de fuentes directas como libros y páginas Web cuyos autores y páginas se encuentran en la sección de bibliografía.

*Procedimiento:* Como inicio de la investigación se realizó una plática con el Coordinador general del proyecto y el Supervisor de producción para conocer la situación actual del Sistema de

Producción Acua-Agrícola, posteriormente se propuso el trabajo a desarrollar, el cual fue realizar una investigación de mercados que ayude a una toma de decisiones eficientes en la implementación del proyecto en el traspatio de las familias de Benito Juárez. En la realización de la investigación de mercados se realizaron los siguientes pasos: Determinar las necesidades de información, Hipótesis, Población, Cálculo del tamaño de la muestra, Cuestionario, Trabajo de campo, Procesar información, Informe de resultados y las Conclusiones y recomendaciones

## RESULTADOS

### Necesidades de Información

Se determinó investigar si las familias de la localidad de Villa Juárez, Sonora, que desean implementar el proyecto de “Sistemas de producción Acua-Agrícola” en el traspatio de su hogar como una alternativa de desarrollo de autoconsumo o de algún beneficio económico.

*Hipótesis (H1):* La hipótesis de la investigación es la viabilidad de implementar los sistemas de producción Acua – Agrícolas a traspatios en los hogares de la comunidad de Benito Juárez, una vez analizada la información, se podrá conocer la aceptación o rechazo del proyecto por parte de los habitantes de la localidad.

HA: La familias de la comunidad de Benito Juárez SI están dispuestas a implementar el Sistema de producción Acua – Agrícola a traspatio.

HO: La familias de la comunidad de Benito Juárez NO están dispuestas a implementar el Sistema de producción Acua – Agrícola a traspatio.

Población: La población de esta investigación será la localidad de Villa Juárez, Sonora, México que forma parte del municipio de Benito Juárez, Sonora, donde según el censo de población y vivienda del año 2010 mostrado por INEGI el total de familias habitadas hasta ese año fue de 5, 643 familias y por ello la población objetivo son aquellas madres amas de casa y adultos mayores que cuenten con tiempo libre para implementar y atender el desarrollo del proyecto.

*Calculo del tamaño de la muestra:* La fórmula para calcular el tamaño de la muestra cuando se conoce el tamaño de la población es la siguiente:

Dónde:

N= Tamaño de la población

Z= Nivel de confianza

P= Probabilidad de éxito o proporción esperada

Q= Probabilidad de fracaso

D= Precisión (Error máximo admisible en términos de proporción)

$$n = \frac{N \times Z^2 \times p \times q}{d^2 \times (N-1) + Z^2 \times p \times q} \quad n = \frac{5,643 \times 1.96 (2) \times 0.05 \times 0.95}{0.03 \times (5,643-1) + 1.96 (2) \times 0.05 \times 0.95} \quad n = \frac{1,029.71}{8.22}$$

$n = 125.56 \text{ Familias}$

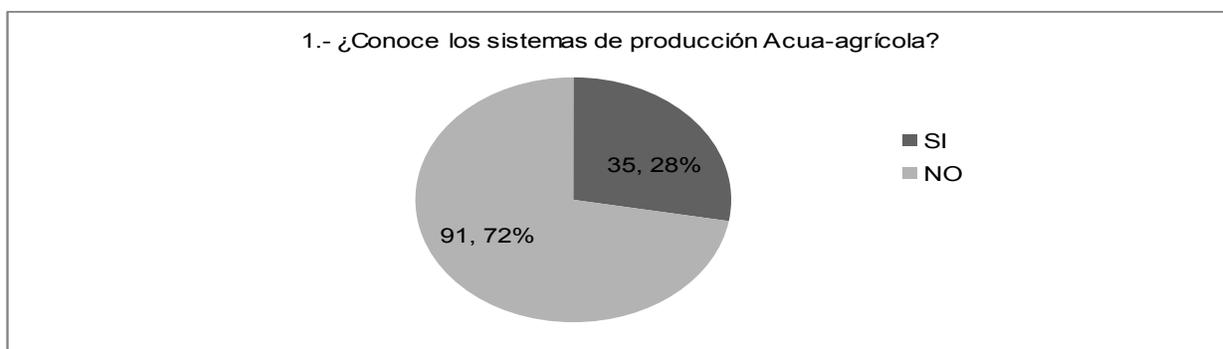
*Cuestionario:* Se formularon una serie de preguntas con el fin de recabar información precisa y sobre la aceptación del sistema en el traspatio de los hogares de las familias del municipio de Villa Juárez.

*Limitaciones:* La mayoría de las personas no tienen conocimiento alguno del funcionamiento de los sistemas de producción Acua-Agrícola, por otro lado al momento de aplicar la encuesta algunas personas no entendían palabras y por último algunas personas no les pareció que la encuesta tuviera doce reactivos y una sección de comentarios.

*Tabulación:* Se esquematizaron los datos obtenidos de las encuestas aplicadas mediante una hoja de cálculo de Microsoft Excel para obtener el total de datos precisos para graficar.

*Informe de resultados:* A continuación se muestran en representaciones graficas los resultados obtenidos en la aplicación de las encuestas.

Figura 1: Conocimiento de los Sistemas de Producción



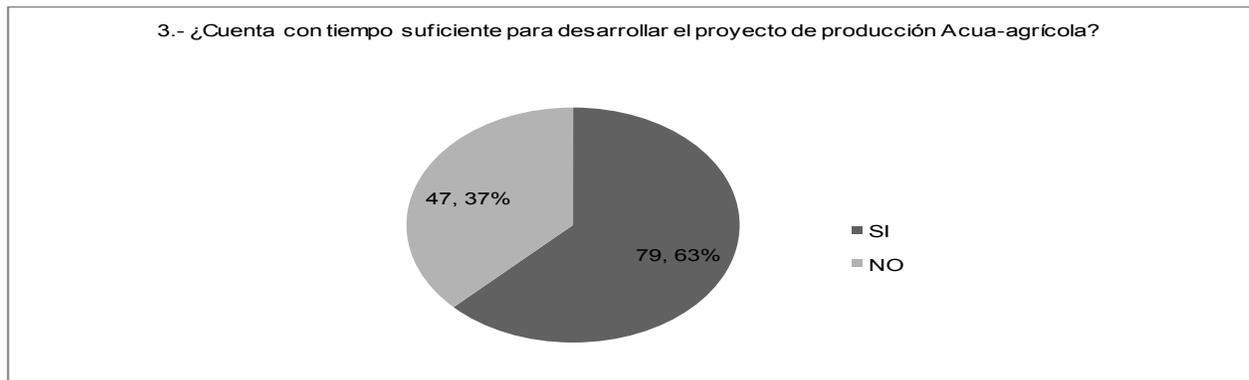
De un total de 126 personas encuestadas, el 28% de ellas contestaron que si cuentan con conocimiento de los sistemas de producción Acua – Agrícolas, mientras que el 72% restante no tiene conocimiento alguno de estos sistemas. De un total de 126 personas encuestadas el 65% de ellas si han escuchado alguna vez sobre los cultivos de productos orgánicos, mientras que el 35% restante no había escuchado hablar sobre ellos.

Figura 2: Conocimiento de los Productos Orgánicos



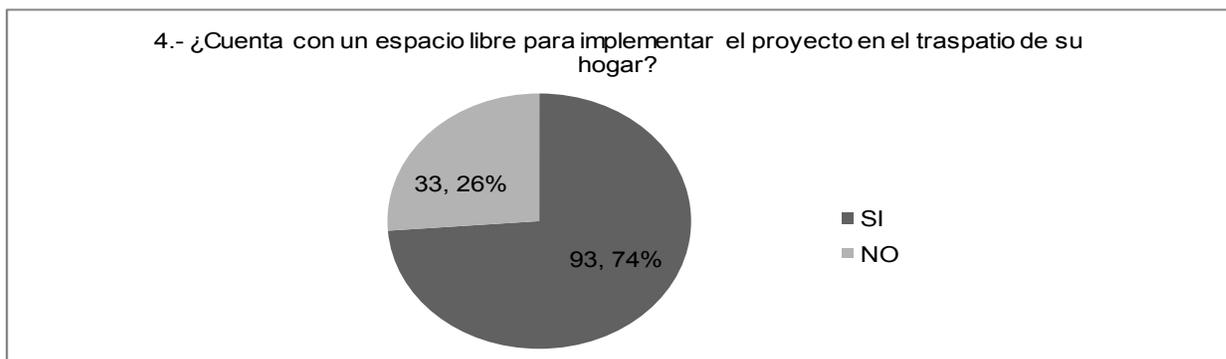
De un total de 126 personas encuestadas el 65% de ellas si han escuchado alguna vez sobre los cultivos de productos orgánicos, mientras que el 35% restante no había escuchado hablar sobre ellos.

Figura 3: Tiempo Para Desarrollar el Proyecto



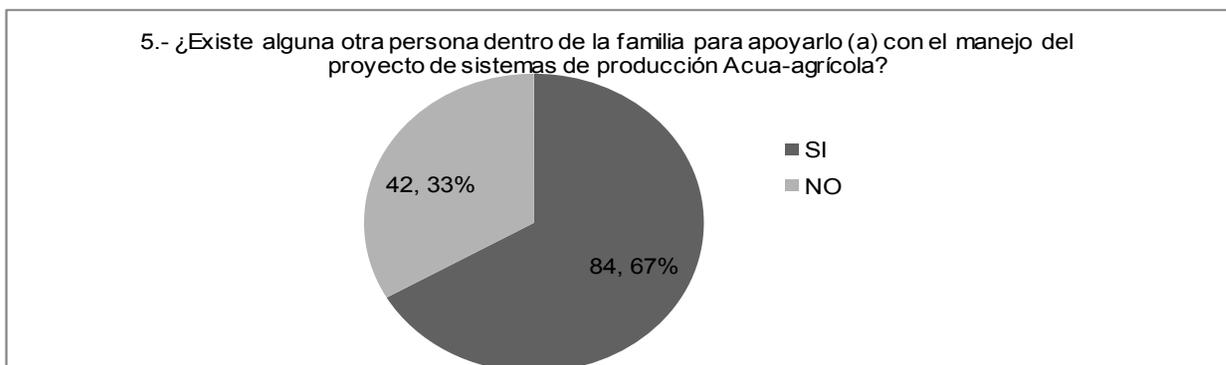
De un total de 126 personas encuestadas el 63% de ellas si cuentan con tiempo suficiente para desarrollar el proyecto de sistemas de producción Acua-Agrícola, mientras que el 37% restante no cuenta con tiempo suficiente.

Figura 4: Espacio Para Desarrollar El Proyecto



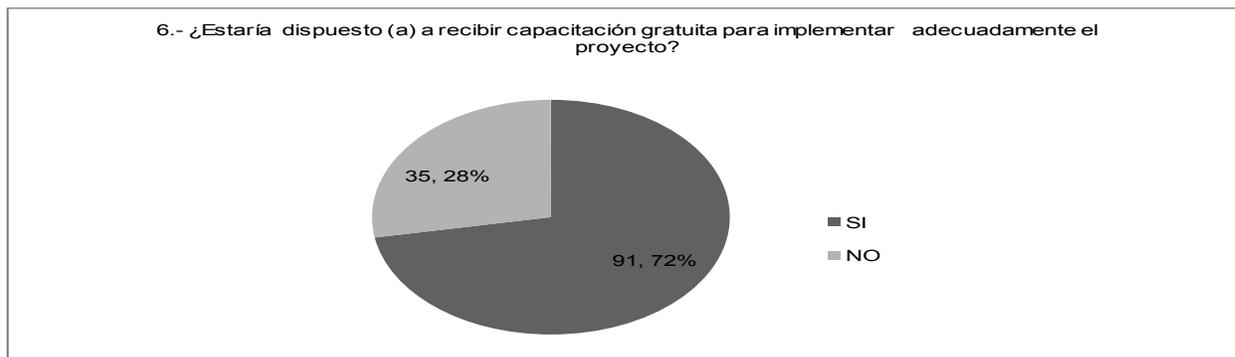
De un total de 126 personas encuestadas el 74% representantes de un total de 93 personas si cuentan con un espacio libre para implementar el proyecto en el traspatio de su hogar, mientras que el 26% de un total de 33 personas no cuentan con tiempo para implementarlo.

Figura 5: Apoyo Para Desarrollar el Proyecto



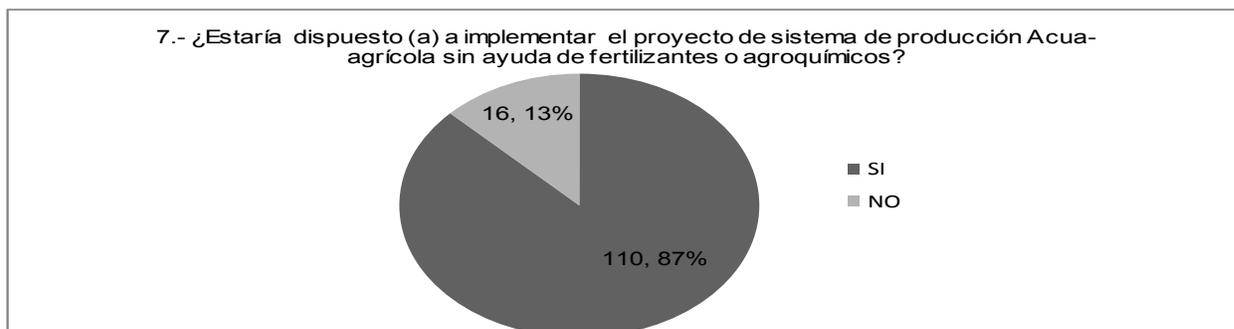
De un total de 126 personas encuestadas el 67% que representan un total de 84 personas si cuenta con alguna otra persona para que lo auxilie con el manejo del proyecto, mientras que el 33% restante equivalente a 42 personas no cuentan con una persona auxiliar.

Figura 6: Capacitación Para Desarrollar el Proyecto



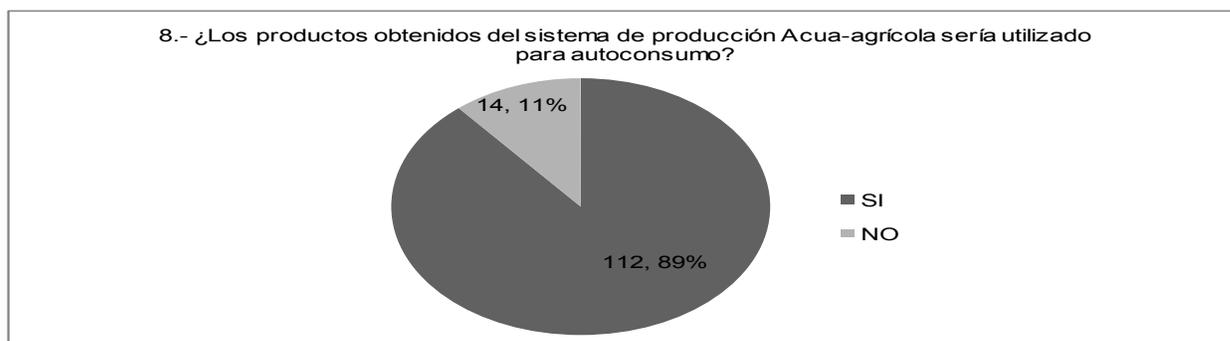
De un total de 126 personas encuestadas el 72% representadas de 91 personas si están dispuestos a recibir capacitación gratuita para implementar adecuadamente el proyecto mientras que el 28% restante equivalente a 35 personas no les gustaría recibir capacitación.

Figura 7: Uso de Fertilizantes Para Desarrollar el Proyecto



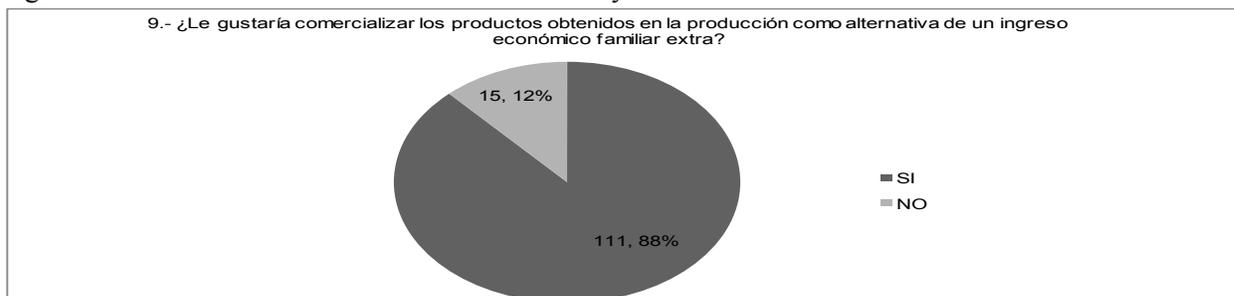
De un total de 126 personas encuestadas el 87% que representan a un total de 110 personas asumió que si estarían dispuestos a implementar el proyecto de sistemas de producción Acua-Agrícolas sin ayuda de fertilizantes o agroquímicos, mientras que el 13% restante equivalente a 16 personas no estarían dispuestos a hacerlo

Figura 8: Autoconsumo de los Productos del Proyecto



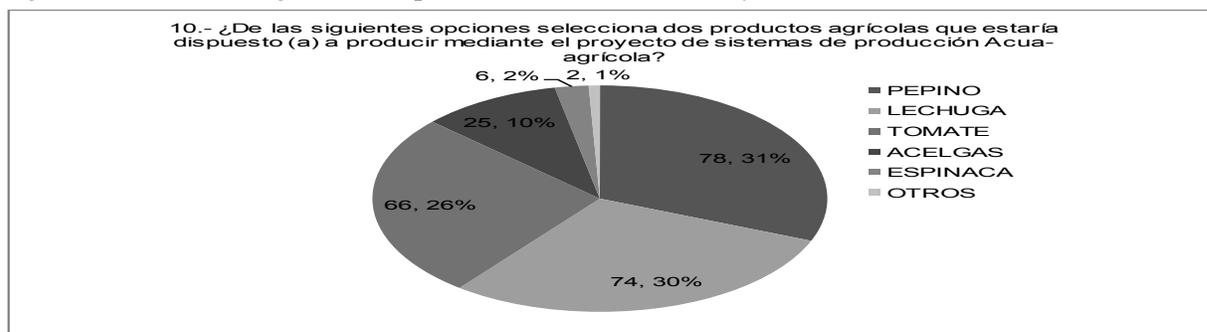
De un total de 126 personas encuestadas el 89% que representan a un total de 112 personas si estaría de acuerdo con que los productos obtenidos del sistema de producción Acua-agrícola los utilizarían para autoconsumo, mientras que el 11% restante equivalentes a 14 personas no lo utilizarían para autoconsumo.

Figura 9: Comercialización de los Productos del Proyecto



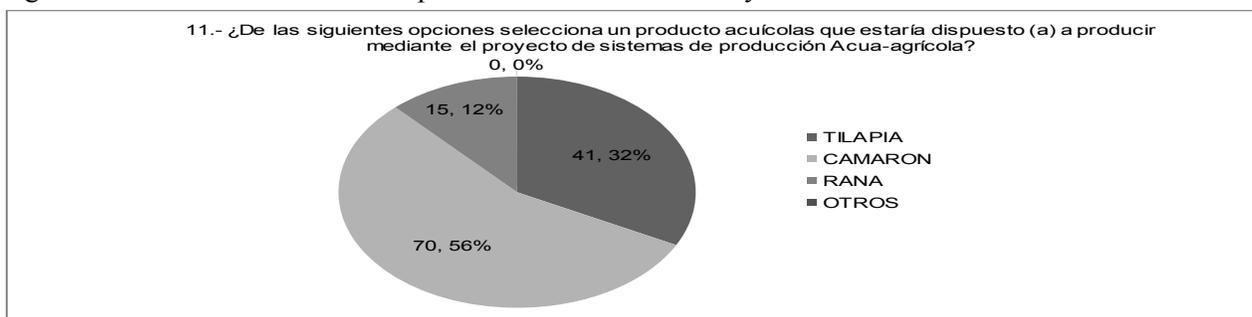
De un total de 126 personas encuestadas el 88% que representan un total de 111 personas si les gustaría comercializar los productos obtenidos en la producción como alternativa de un ingreso económico familiar extra, mientras que el 12% restante equivalente a 15 personas no les gustaría comercializar los productos.

Figura 10: Productos Agrícolas Dispuestos a Producir en el Proyecto



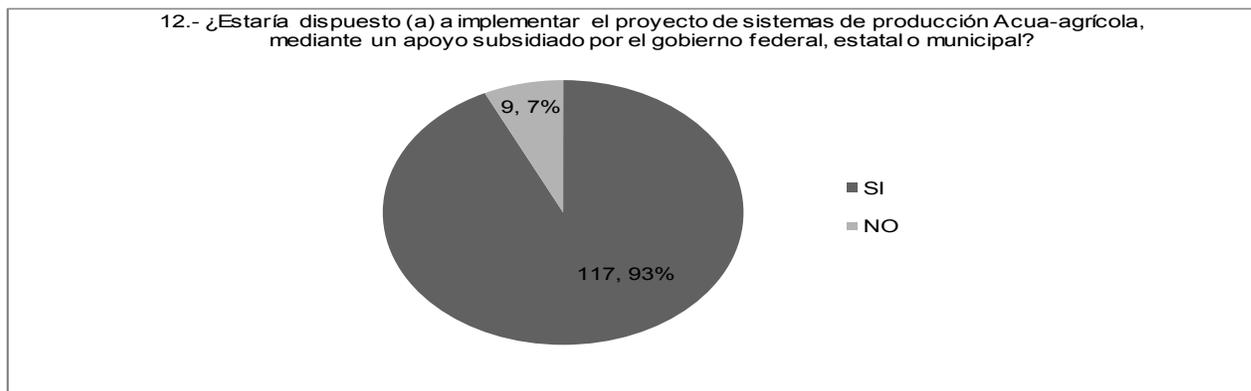
De un total de 126 personas encuestadas al 31% de las personas le gustaría que se produjera en el sistema de producción Acua-Agrícola pepino, el 30% le gustaría producir lechuga, al 26% le gustaría producir tomate, al 10% le gustaría producir acelgas, al 2% le gustaría producir espinacas y al 1% restantes le gustaría producir algún otro producto.

Figura 11: Productos Acuícolas Dispuestos a Producir en el Proyecto



De un total de 126 personas encuestadas al 70% equivalente a 70 personas le gustaría producir productos acuícolas como camarón, mientras que el 32% equivalente a 41 personas le gustaría producir tilapia y el 12% restante equivalente a 15 personas les interesa producir rana

Figura 12: Disposición de Implementar el Proyecto Por Medio de un Apoyo Gubernamental



De un total de 126 personas encuestadas el 93% que representan a un total de 117 personas si estarían dispuestos a implementar el proyecto de sistemas de producción Acua-Agrícola en el traspatio de su hogar, mientras que el 7% restante equivalente a 9 personas no estarían dispuestos a implementarlo.

## CONCLUSIONES

Al término de esta investigación de mercados se determinó la pertinencia de poner en marcha el sistema de producción Acua-agrícola en el traspatio de los hogares, así como también el impacto de los grandes beneficios que obtendrán del mismo. Con la implementación de las encuestas se obtuvo información relevante para saber si será aceptado el proyecto por las familias de la comunidad; aunque las encuestas arrojaron datos positivos acerca del proyecto, también, se tuvieron limitaciones como la falta de conocimiento en la sociedad acerca de los sistemas de producción Acua – Agrícola lo cual extendió el tiempo en la aplicación del cuestionario. Al término de la investigación de mercados y con la información obtenida, se llegó a la conclusión de que es un proyecto viable, ya que, las familias están dispuestas a implementar el sistema de producción Acua – Agrícola, por lo cual este proyecto les ayudara a mejorar su calidad de vida y obtener un ingreso extra mejorando su economía familiar y propiciar el consumo de productos orgánicos. Como recomendaciones surgen algunos puntos que a continuación se detallan: El proyecto debe implementarse, ya que la investigación arrojó resultados positivos, también al aplicar las encuestas las hortalizas más aceptadas son pepino y lechuga, los productos acuícolas con mayor grado de aceptación fueron el camarón y tilapia, la aceptación del proyecto fue en función de que el gobierno otorgara apoyo y por ultimo los encuestados a contribuir al cuidado del medio ambiente.

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# **LA ESTRATEGIA DE COOPERACIÓN EMPRESARIAL: UNA ALTERNATIVA PARA FORTALECER LA VENTAJA COMPETITIVA EN LA MIPYME-CASO INDUSTRIA METAL MECÁNICA DEL SURESTE DE COAHUILA**

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## **RESUMEN**

La planta productiva de México está constituida en su mayoría por MiPyMes y presentan una serie de ventajas que las posiciona como un sector fundamental en la economía; sin embargo, también padecen de factores internos y externos que limitan y debilitan su competitividad. En un entorno globalizado, está demostrado que las Mipymes, no pueden acceder de manera individual fácilmente en ese ambiente. Actualmente, por lo tanto, es insostenible el “modelo” de “trabajar cada quien por su lado”, de “manera independiente”. Hoy, se requiere asociarse para trabajar en conjunto, en forma común, integrada, es decir, con nuevas estrategias de cooperación empresarial (algunas de las cuales han dado resultados exitosos). El objetivo central de la investigación es conocer y analizar si los esquemas de cooperación pueden ser una opción para consolidar la posición competitiva de la industria metal-mecánica (una de las principales actividades, por el clúster automotriz) de la región sureste del Estado de Coahuila.

Para lograrlo, se diseñó un instrumento de medición (encuesta), con escalamiento Likert, diferencial semántico y preguntas dicotómicas, considerando tres variables: La competitividad, la cooperación empresarial o asociacionismo, y los esquemas mentales o paradigmas. La encuesta se aplicó a 69 propietarios de micros y pequeñas empresas. El diseño de la investigación fue exploratoria, descriptiva y no experimental y en cuanto a la temporalidad de la recolección de los datos el estudio es transeccional o transversal. La hipótesis principal que se plantea es que la ausencia de una mentalidad de apertura, de confianza, de colaboración, de cooperación empresarial, impide que se comprenda los beneficios que se podrían obtener en la ventaja competitiva. Los resultados muestran que las empresas tienen un gran arraigo en la región, así como bastante experiencia y una alta preparación profesional de los empresarios quienes tienen una edad madura que puede limitar su cambio de mentalidad, necesario para participar en colaboración empresarial. Se detectó el grado de posición tecnológica y los factores de competitividad existentes. La desconfianza y el desconocimiento, son los motivos para no asociarse; no obstante, se identificaron áreas de interés de los empresarios para participar en esquemas de cooperación empresarial, como son la tecnología, las compras de insumos, el financiamiento, la calidad, la comercialización y las actividades de exportación. Derivado del análisis de la información, se concluye que los esquemas de colaboración empresarial son una alternativa viable que debe ser considerada por los empresarios, para fortalecer la competitividad en el mercado interno e internacional.

**PALABRAS CLAVES:** Cooperación Empresarial, Mipymes, Competitividad, Paradigmas, Empresarios

## THE STRATEGY OF BUSINESS COOPERATION: AN ALTERNATIVE TO FORTIFY THE COMPETITIVE ADVANTAGE IN THE MIPYME- CASE METAL MECHANICAL INDUSTRY IN SOUTHEAST IF THE STATE OF COAHUILA

### ABSTRACT

*The productive plant of Mexico is constituted by MSMEs and present some advantages that place them as fundamental sector in the economy; however, despite those advantages, the MSMEs have to deal with some internal and external factors that limit the competitiveness. In a globalized world, has ben showed that the MSMEs, can not get into this environment easily. Now days is hard to keep the “model” of “working everyone by itself”, in “an independent way”. Today we have to associate with someone else to work as a conjunct, for a common target, with new strategies of business cooperation (some them have had successful results). The main target of this investigation is to know and analyze if the schemes of cooperation that can be an option to consolidate a competitive position un the metal – mechanical industry (one of the main activities of the automotive cluster) in the southeast region of the state of Coahuila. To achieve this goal a measure instrument was designed (quiz) using the Likert scale, semantic differential and dichotomic questions considering three variables: cooperation between the companies, competitiveness and the mental schemes or paradigms. The quiz was applied to 69 owners of micro and small business. The design of the investigation was exploratory, descriptive, and not experimental, about the temporality of the data collection study, is transactional or transversal. The principal hypothesis that is proposed, is that the lack of an open mentality, confidence, teamwork, cooperation between companies, impede the comprehension of the benefits that could be obtained in the competitive advantage. The results show that the business have a big hold in the region, and a lot of experience and the professional knowledge from the businessmen needed to participate in the business collaboration. We detected the grade of technological position and the factors of competitiveness that existed. The mistrustfulness and ignorance, are reasons used as an excuse not to associate, however we identify some areas that resulted in a common interest in the businessmen to participate in schemes of cooperation, like the technology, purchase of inputs, funding, quality, marketing and exportation activities. Derived of the analysis of the information, the conclusion is that the schemes of teamwork between companies are the alternative that has to be considerate for the businessmen to fortify the competitiveness en the internal an international market.*

**JEL:** D2 D21 D7 D71 L14 L15

**KEYWORDS:** Cooperation between Companies, MSMES, Competitiveness, Businessmen

### INTRODUCCIÓN

Las micros, pequeñas y medianas empresas, en adelante (MiPyMes), han jugado un papel muy importante en la economía del país, sin embargo, las exigencias que plantean la apertura de la economía y la globalización de los mercados, tienden a debilitar su poder competitivo. En este escenario, no debe perderse de vista que lo único que eleva el nivel de vida en un país, es la productividad de sus empresas y en una época de la economía del conocimiento, resulta insostenible el “modelo” en el que hasta hoy han venido actuando la mayoría de este tipo de

empresas. Es decir, ante los grandes retos en materia de productividad y competitividad se agotó el tiempo de trabajar “cada quien por su lado”, “por su cuenta”, de manera “independiente”. Para mejorar las posibilidades de competencia en los nuevos mercados, hoy se requiere trabajar en conjunto, unidos, en forma común, de manera integrada. Es impostergable la participación de los empresarios en las diferentes formas de asociación y de cooperación empresarial. Sin embargo, hablar de esquemas asociativos o colaborativos, representa un reto, tanto por su complejidad intrínseca, así como por las múltiples formas en que se le puede abordar. El objetivo central de esta investigación es la revelación al planteamiento: ¿Los esquemas de cooperación empresarial, puede ser una opción para fortalecer la competitividad de las MiPyMes, en la industria metal-mecánica de la región sureste de Coahuila, afiliadas a Canacintra? Algunos de los objetivos particulares pretendidos son las respuestas a las siguientes interrogantes:

- ¿Qué factores de competitividad son importantes para el éxito y desarrollo de una empresa, desde el punto de vista del empresario?
- ¿En qué grado de posición tecnológica ubican los empresarios a su organización?
- ¿Cómo se consideran los empresarios con respecto a su competencia?
- ¿Existe disposición entre los empresarios para asociarse y cooperar estratégicamente?
- ¿Cuáles son las ventajas que consideran obtener los empresarios al agruparse?
- ¿Qué motivos son considerados para no agruparse y colaborar?
- ¿Qué áreas de interés se pueden distinguir para resolver problemas comunes?
- ¿Es posible presentar algunas consideraciones para la promoción y operación del **asociacionismo** empresarial para el tipo de empresas, objeto de la investigación?

Este trabajo está estructurado como sigue: en la primera parte se presenta el marco teórico referencial que brinda el soporte conceptual al tema central y a las variables o eventos: la competitividad, la ventaja competitiva, los esquemas de cooperación empresarial y los modelos mentales o paradigmas. Posteriormente se define el planteamiento del problema y la formulación de las hipótesis. Después se describe el diseño de la investigación, el tamaño de la muestra y de la población, así como las técnicas e instrumentos de medición y de recolección de los datos. Finalmente, se presentan y analizan los datos recabados para terminar con las conclusiones y recomendaciones, entre las que se puede mencionar que: La cooperación empresarial es una alternativa viable (de la industria metal-mecánica en Saltillo, Coah.) para hacerle frente a las amenazas o para aprovechar las oportunidades que, a nivel individual, resultarían difíciles de aprovechar.

## REVISION DE LITERATURA

### El Concepto de Competitividad

El término de competitividad está relacionado con la posibilidad de las empresas para competir y al mismo tiempo para generar utilidades, para Benavides E. (2001), la competitividad es...“la capacidad de las empresas o industrias de competir y posicionarse en los mercados y contextos de manera sostenible y a largo plazo.” Es importante por lo tanto, considerar el factor de rentabilidad para la permanencia de las empresas en los mercados. Pero la competitividad comprende muchos factores que relacionados tienen que ver con aspectos de calidad, de diseño del producto, de comercialización, con aspectos tecnológicos, de capital humano, etc. es decir, para comprender el concepto de competitividad, se necesita adentrarse en las interrelaciones que se dan en las áreas funcionales de la empresa, pero desde un punto de vista holístico, sistémico, integral. Por eso, es necesario saber la dimensión que las autoridades consideran al término de competitividad.

Al respecto, el artículo 2, fracción IV de la Ley para el desarrollo de la competitividad de las MiPyMes, publicada en el Diario Oficial de la Federación el 30 de Diciembre de 2002, reformada el 06 de Junio de 2006; señala que, se entiende por .....“Competitividad: la calidad del ambiente económico e institucional para el desarrollo sostenible y sustentable de las actividades privadas y el aumento de la productividad; y a nivel empresa, la capacidad para mantener y fortalecer su rentabilidad y participación de las MiPyMes en los mercados, con base en ventajas asociadas a sus productos o servicios, así como a las condiciones en que los ofrecen”.... Es evidente que el término competitividad es relativamente “nuevo” en la legislación del país y esto es importante porque se está reconociendo que los modelos económicos anteriores promovieron el proteccionismo como una acción del Estado que no consideró ni dimensionó las consecuencias y las tendencias hacia la globalización de la economía mundial.

### La Ventaja Competitiva

Otro de los conceptos que se debe comprender es el que se refiere a la ventaja competitiva, es decir cuáles son las características que hacen diferente e identifican a las empresas y organizaciones de las demás. La ventaja competitiva de acuerdo a Benavides E. (2001) hace referencia a las características y las condiciones propias de la organización que a diferencia de las ventajas comparativas, tienen muy bajas posibilidades de plagio o adquisición por parte de la competencia al menos a mediano plazo. Las MiPyMes se enfrentan a grandes retos para integrarse en el proceso de globalización mundial, pero una de sus principales limitantes es que generan muy poco valor agregado. En este sentido, es importante considerar que de acuerdo con Porter (2005) la ventaja competitiva de una empresa se origina fundamentalmente del valor que ésta sea capaz de crear y entregar a su mercado. Por otra parte, Shillito y de Marle, Flores Dávila (1999), mencionan que el valor creado es función del desempeño, precio y costo del producto que las unidades económicas sean capaces de ofrecer a sus clientes.

El generar poco valor agregado provoca que las empresas encuentren resistencia y rigidez en la estructura de precios (es decir, no pueden posicionarse con altos márgenes de utilidad), lo cual incide a su vez en que no estén en posibilidades de capitalizarse ni mucho menos de invertir o reinvertir en procesos tecnológicos que le permitan a su vez, fortalecer la ventaja competitiva. Esta situación lamentablemente se convierte en un círculo vicioso. Por otra parte, los administradores que no se esfuerzan por aprender y adaptarse a los cambios del entorno mundial, reaccionan, en vez de innovar, sus organizaciones dejan de ser competitivas y fracasan; es necesario entonces aprovechar eficaz y eficientemente los recursos para establecer una ventaja competitiva. En concordancia con Jones & George (2006) una ventaja competitiva es la capacidad que posee una organización para superar a otras produciendo bienes o servicios deseados, con más eficacia y eficiencia que sus competidores. Los cuatro elementos de la ventaja competitiva propuestos por estos autores son la superioridad en 1) la eficiencia, 2) la calidad, 3) la velocidad, flexibilidad e innovación, y 4) la sensibilidad a los clientes.

En este sentido, es sumamente importante considerar lo que Michael Porter (2005) aportó al respecto. La ventaja competitiva, menciona, es el aspecto esencial del desempeño en los mercados competitivos, y agrega “las estrategias de muchas empresas fracasan por la incapacidad de traducir una ventaja competitiva general en las medidas concretas necesarias para conseguirla”. De acuerdo con Porter, la ventaja competitiva proviene fundamentalmente del valor que una empresa logra crear en sus clientes. Puede traducirse en precios más bajos que los de sus competidores por beneficios equivalentes o por ofrecer beneficios especiales que compensan con

creces un precio más elevado. Una herramienta que este autor llama o identifica como la cadena de valores.

### Hacia La Estrategia de Cooperación Empresarial o Asociacionismo.

Entrar en un esquema de cooperación empresarial o de asociacionismo, exige un cambio de mentalidad importante en los empresarios, acostumbrados a trabajar individualmente. Este cambio de mentalidad se dificulta aún más por el hecho de que una asociación los invita a colaborar con sus competidores, aquellos a los que consideran sus “enemigos”. Participar en un modelo de asociación requiere de una mentalidad de apertura y colaboración, pero sobre todo es necesario que los empresarios comprendan que trabajando juntos pueden fortalecerse y subsanar algunas de las debilidades que les impiden alcanzar un mayor nivel de competitividad. Es decir, entrar en el asociacionismo significa entrar a un nuevo “modelo mental”, a un nuevo paradigma.

### Paradigma y Cambio de Mentalidad

Peter Senge (1998), considera los “modelos mentales” como la tercera disciplina de las organizaciones inteligentes (aquellas que aprenden), y menciona que nuestros “modelos mentales” no solo determinan el modo de interpretar el mundo, sino el modo de actuar. Los modelos mentales, señala, pueden ser simples generalizaciones, como “las personas son indignas de confianza”, o teorías complejas, tales como mis supuestos acerca de por qué los miembros de mi familia se conducen de tal manera. Pero lo más importante es que los modelos mentales son activos, pues moldean nuestros actos.

Una asociación fortalecerá y complementará la actividad productiva de los empresarios, a la vez, les permitirá mantener su individualidad al interior de sus empresas. Sin embargo, es necesario que los empresarios desarrollen y mantengan una actitud de apertura de su organización hacia el resto de sus socios en la asociación. De esta manera, se apoyarán y asesorarán mutuamente, ya que la fuerza de la asociación en el futuro, va a depender de la fuerza individual de cada una de las empresas que la integran.

Por otra parte, y tal como menciona Senge, los modelos mentales de conducta empresarial también están profundamente arraigados. Muchas percepciones acerca de mercados nuevos o de prácticas organizacionales anticuadas no se llevan a la práctica porque entran en conflicto con poderosos y tácitos modelos mentales. Una de las condiciones de la asociación empresarial que será necesario cumplir, por lo tanto, es la identificación y la construcción de lo que Senge llama la cuarta disciplina de las organizaciones inteligentes: una “visión compartida”, a la que considera como la generación de un interés común y la conceptualiza de la siguiente manera:

Una visión compartida es la respuesta a la pregunta: ¿Qué deseamos crear? Así como las visiones personales son imágenes que la gente lleva en la cabeza y el corazón, las visiones compartidas son imágenes que lleva la gente de una organización. Crean una sensación de vínculo común que impregna la organización y brinda coherencia a las actividades dispares. Una visión compartida es vital para la organización inteligente porque brinda concentración y energías para el aprendizaje. Una visión compartida es el primer paso para permitir que gente que se profesaba mutua desconfianza, comience a trabajar en conjunto, crea una identidad común. El propósito, la visión y los valores compartidos de una organización establecen el lazo común más básico.

Adicionalmente, la nueva filosofía empresarial exige el trabajo en equipo, con resultados inmediatos en una productividad mejorada. Según Gibson, Ivancevich, Donelli y Konospake (2006) la razón más importante por la que se forman los equipos es para mejorar la productividad

de la organización. Las organizaciones de todo el mundo se han percatado de que el desempeño de los equipos lleva a niveles más altos de productividad de los que se lograrían con muchos individuos que trabajaran en forma individual. Esto se debe sobre todo al hecho de que los equipos reúnen habilidades complementarias que pueden caer en una de estas categorías: experiencia técnica o funcional, solución de problemas y habilidades para tomar decisiones y habilidades interpersonales. Este concepto aplica perfectamente para el caso de la asociación. Los empresarios que participen en un modelo de asociación empresarial, deben descubrir y comprender cabalmente el significado de términos que tradicionalmente les han sido ajenos como cooperación, confianza, colaboración, participación, integración y apertura.

### Definición de Modelo de Cooperación Empresarial o Asociacionismo

Los modelos de cooperación empresarial o asociacionismo son una estrategia para que las empresas enfrenten situaciones, retos o problemas cuyas características y dirección requiere de esfuerzos conjuntos que generen sinergias. No existe una definición académica o científica de “asociacionismo empresarial”, sin embargo, para los objetivos propuestos y con la finalidad de tener una idea clara de lo que se pretende con el término de asociacionismo empresarial, se considera la definición que alguna vez se utilizó en Nacional Financiera, S.N.C., refiriéndose a “un conjunto de acciones voluntarias realizadas por los empresarios para alcanzar uno o varios objetivos comunes, de incremento en la competitividad como una alternativa para sobrevivir, crecer y desarrollarse como organización”.

El asociacionismo empresarial se convierte en un proceso y no en una figura legal o económica, sin que esto implique que dichas acciones puedan llevar a dichas figuras. Este proceso se puede dividir en cinco etapas sucesivas: la identificación, la promoción, el plan de negocio, la formalización y la administración.

### Información Estadística

Con respecto a la importancia del sector manufacturero (secundario) en la economía mexicana, tanto municipal, estatal, así como nacional, la estructura de la población ocupada, según sector de actividad, para el año 2011, la información es la siguiente;

Tabla 1: Estructura de la Población Ocupada, Según Sector de Actividad. 2011

Sector de Actividad	Nacional	Estatal	Municipal
	México	Coahuila	Saltillo
Sector Primario	13.9 %	5.9 %	0.8 %
Sector Secundario	23.4 %	32.9 %	36.3 %
Sector Terciario	62.0 %	60.5 %	62.3 %
No Especifica	0.7 %	0.7 %	0.6 %
Totales	100 %	100 %	100 %

*Fuente:* INEGI Instituto Nacional de Estadística, Geografía e Informática. *Perspectiva Estadística, Coahuila de Zaragoza. Marzo de 2012.*

Como puede observarse, el sector industrial o secundario, absorbe la tercera parte de la población ocupada en el Estado de Coahuila y el 36% en el caso de Saltillo, Coah. en ambos casos, superior a la media nacional (23.4%); la muestra de la industria metal-mecánica que se estudió, corresponde precisamente al sector secundario.

### **METODOLOGÍA**

El diseño de la investigación fue no experimental, ya que no se manipularon variables. En cuanto a la temporalidad de la recolección de los datos, el estudio es transeccional o transversal. Fue descriptivo, ya que solamente se analizaron cómo son y cómo se manifestaron algunos fenómenos y sus componentes.

La hipótesis principal que se plantea es que la ausencia de una mentalidad de apertura, de confianza, de colaboración, de cooperación empresarial, impide que se comprenda los beneficios que se podrían obtener en la ventaja competitiva. En la investigación se utilizó un instrumento de medición (encuesta o cuestionario) que incluyó 37 reactivos, los cuales se dividieron en 6 bloques: I.- Datos Generales y de Identificación de la Empresa. II.- Dirección Empresarial. III.- Competitividad. IV.- Tecnología, Innovación y Calidad. V.- Competencia. VI.- La cooperación empresarial o asociacionismo.

Para diseñar el instrumento se utilizaron varias técnicas, como el escalamiento tipo Likert, diferencial semántico y preguntas dicotómicas. Las variables identificadas para el estudio son la competitividad, los esquemas de cooperación empresarial y los modelos mentales (paradigmas). Con relación al universo o tamaño de la población, se tomó como base el Directorio Empresarial de CANACINTRA (Cámara Nacional de la Industria de la Transformación) Delegación-Salttillo, la cual divide a sus socios en 21 secciones (giros) y totaliza a 212 socios. La muestra seleccionada (69 empresas) fue no probabilística, es decir fue mediante muestreo dirigido, que selecciona sujetos típicos, se eliminaron deliberadamente empresas grandes y aquellas que no tuvieran en principio como actividad principal la metal mecánica, sin embargo, se evidenció que no era posible llegar a cubrir la muestra, por lo que tomando en cuenta la cadena productiva, se decidió incluir las empresas de la industria automotriz, fundición y de plásticos.

Los cuestionarios se levantaron en los meses de Agosto, Septiembre y Octubre de 2011. En el 2012, se revisó, analizó y organizó la información.

En el procesamiento de la información se utilizó el paquete Excel y el software estadístico SPSS en su versión 16. Se aplicaron fundamentalmente dos tipos de criterios; uno relativo a los ponderados que se usaron para verificar los resultados y otro para conocer los hallazgos con relación a los objetivos.

## RESULTADOS

Cabe aclarar que los resultados que se muestran a continuación se refieren exclusivamente al análisis del apartado de asociacionismo o de colaboración empresarial, ya que los demás resultados encontrados se han presentado con anterioridad en el trabajo denominado: “La gestión de calidad como herramienta esencial para la competitividad de las empresas de la rama metal-mecánica del sureste del Estado de Coahuila”, artículo de los mismos autores Rodríguez V. Vásquez y Mejía (2013), publicada en la Revista Global de Negocios. Se visitaron 69 empresas y presentan la siguiente distribución en cuanto a tamaño:

Tabla 2: Distribución de las Empresas Encuestadas Por Tamaño

TAMAÑO de LAS EMPRESAS	No. de EMPRESAS ENCUESTADAS	% PORCENTAJE
Micros	28	40.58
Pequeñas	33	47.83
Medianas	8	11.59
<b>TOTAL</b>	<b>69</b>	<b>100.00</b>

*Fuente; Elaboración propia con datos de CANACINTRA-Salttillo. Rodríguez Baltazar, Vásquez y Mejía 2010.*

Los negocios fueron creados entre 1964 y 2010, es decir la empresa con más antigüedad tiene 46 años en el mercado y la más reciente se creó en el 2010. Al agrupar las empresas en rangos de 5 años se observa que el 21.74% (15 empresas) se sitúa en el rango de 06 a 10 años; el 17.40% (12 empresas) en el de 11 a 15 años y la gran mayoría: 31 negocios (48.9%) tienen más de 17 años, lo que demuestra un gran arraigo en la localidad. Respecto a los esquemas de cooperación empresarial, el primer ítem en la encuesta fue identificar si el empresario consideraba que asociarse con otras empresas le redituaria ventajas competitivas, los resultados obtenidos fueron que solamente 14 empresarios (20.29 %), están convencidos de que el asociarse les genera ventajas competitivas, mientras que 29 de los empresarios (42.03 %) señalaron que probablemente si les conviene; 26 empresarios (37.68%) indicaron estar indecisos, contestaron probablemente no e incluso 5 entrevistados dijeron que definitivamente no les conviene.

A la pregunta de ¿con quién cree usted que le convendría asociarse? Las respuestas obtenidas fueron;

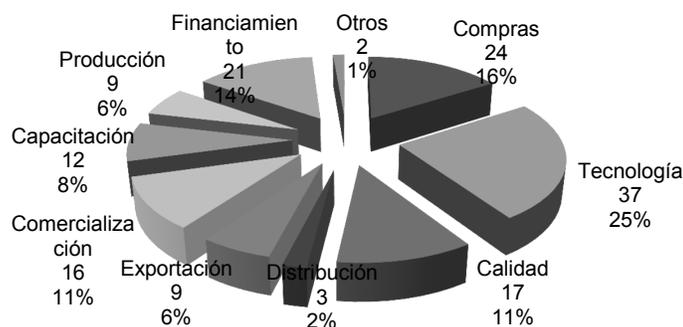
Tabla 3: Con Quien se Asociaría

¿Con quién se asociaría?	No. de Empresarios	%
Competidores	20	30.30
Proveedores	22	33.33
Clientes	19	28.80
Distribuidores	4	6.06
Otros	1	1.51
<b>TOTAL</b>	<b>69</b>	<b>100.00</b>

Fuente; Elaboración propia: Rodríguez Baltazar, Vásquez y Mejía 2010.

Con una ponderación relativamente similar los empresarios se asociarían el 33.33% con sus proveedores, el 30.30% con sus competidores, el 28.80% con sus clientes y el 6.06% con distribuidores. Otro de los puntos centrales de esta investigación es el referente a la detección de los objetivos (áreas de interés) para la posible participación en esquemas de asociación empresarial. Las respuestas a la pregunta ¿Cuál de los siguientes propósitos de asociación requiere usted? (Cabe mencionar que como se permitió más de una opción) fueron las siguientes:

Figura 1: Propósitos de la Asociación



Y finalmente, una de las preguntas fundamentales de esta investigación ¿porqué no se ha asociado con otras empresas? Cabe mencionar que aquí se exceptúan 7 empresarios que dijeron haber tenido asociaciones formales con otras empresas, por lo que la muestra se redujo a 62. Las respuestas

Tabla 4: Motivos Para No Asociarse

Motivos para no asociarse	No. de Empresarios	%
No Quiere	4	6.45
No le Interesa	16	25.80
No Confía	24	38.71
Desconoce	18	29.04
<b>TOTAL</b>	<b>62</b>	<b>100.00</b>

Es muy significativa la respuesta de “no confía”; el 38.71% de los empresarios 24 de 62 respondieron la desconfianza como un factor determinante para no asociarse; el 29.04% (18) porque desconocen los procedimientos, seguidos de un 25.8% (16) porque no les interesa y hubo 4 entrevistados que señalaron no querer asociarse, sino trabajar de manera solitaria.

## CONCLUSIONES

La edad promedio de las empresas es de 17.36 años, lo que demuestra un buen arraigo en la región. Se trata de empresarios “maduros” ya que el 67 % del total tienen más de 45 años. Esta condición resulta en una resistencia natural al cambio de mentalidad o de actitud (paradigma), necesario para participar en una asociación; sin embargo, tienen una gran experiencia y muestran una alta escolaridad. Se encontró una área de oportunidad para promover esquemas de asociación empresarial, ya que con respecto a la identificación de los factores de éxito, la respuesta de los empresarios fueron los siguientes: solo el 9 % contestaron como indispensable asociarse; el 17 % sumamente importante; el 33 % señaló que la asociación empresarial era de regular importancia y la gran mayoría, el 41 % indicaron como poco importante o no tomar en cuenta la asociación empresarial como factor de éxito. Los empresarios no consideran que el asociarse les genere ventajas competitivas, ya que solo el 20 % están convencidos, si bien es cierto que el 42 % de los empresarios señalaron que probablemente si les conviene, mientras que el 38 % indicaron estar indecisos, o contestaron probablemente no les conviene.

Uno de los principales hallazgos de la investigación, fue la revelación de los propósitos que tendrían los empresarios para asociarse. También se comprobó que la desconfianza es el principal factor para no asociarse, seguida del desconocimiento en los procedimientos. Se comprueba la hipótesis planteada en el sentido de que la ausencia de una mentalidad de apertura y de confianza, impide la comprensión de los beneficios que se podrían obtener con la estrategia de cooperación empresarial. Se detectó la coyuntura para que la Facultad de Ciencias de la Administración pueda participar en la identificación de las áreas de oportunidad, mediante diagnósticos integrales. No obstante todo lo anterior, cabe hacer las siguientes aclaraciones: La estrategia de cooperación empresarial o asociacionismo, no representa una solución válida para cualquier tipo de problema ni para todas las empresas y empresarios.

Detonar un esquema de asociacionismo implica enfrentarse a diferentes formas y manifestaciones de administrar, dirigir y liderar procesos productivos donde no resulta fácil conjugar los factores técnicos y humanos para alcanzar objetivos y metas comunes. Es un requisito indispensable que se induzca un cambio de mentalidad importante en los empresarios, acostumbrados a trabajar individualmente. Este cambio de mentalidad se dificulta aún más por el hecho de que la asociación los invita a colaborar con sus competidores, aquellos a los que consideran sus rivales o bien con sus clientes o proveedores. Por lo tanto, será necesario que los empresarios y sus organizaciones actúen de manera diferente, con una nueva mentalidad, que transiten hacia el desafío de un nuevo paradigma, que los unifique una visión compartida que posibilite el trabajo

en equipo. Por lo anterior se concluye que la estrategia de cooperación empresarial es una alternativa viable que debe ser considerada por la industria metal-mecánica en la región sureste de Coahuila, para consolidar y fortalecer su posición competitiva tanto en el mercado interno como en el internacional.

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# **SOCIAL MEDIA MARKETING COMO HERRAMIENTA DE POSICIONAMIENTO PARA UNIDADES DE PRODUCCION DE LACTEOS DEL MUNICIPIO DE AYAPANGO, ESTADO DE MEXICO**

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## **RESUMEN**

*En la actualidad vivimos en un mundo globalizado donde la tecnología juega un papel primordial para el desarrollo de las organizaciones, debido a que aquellas empresas que no ingresan al mundo tecnológico, se ven desplazadas por la competencia del mercado. Las unidades de producción de lácteos en México no son la excepción y particularmente las del Municipio de Ayapango estado de México, que tienen la necesidad de promocionar sus productos para posicionarse en los diferentes mercados locales, estatales, nacionales e internacionales, lo que va a permitir que sus productos sean conocidos y se posicionen en la mente del consumidor. El incremento de usuarios de internet demanda la atención de las empresas enfocando sus productos a este tipo de consumidores, para poder interactuar y comunicarse con ellos a través de la implementación de instrumentos que les permita una eficaz comunicación y estar presentes en su mente, por lo que hay herramientas tales como es el Social Media Marketing (SMM), que permite lograr dicho propósito. El SMM, combina los objetivos de marketing en internet con medios sociales como blogs, revistas, sitios de intercambio de contenidos, redes sociales y sitios de microblogging. Este tipo de marketing se centra en las comunicaciones, las marcas y la interacción social con los mercados objetivos. El posicionamiento en el mercado está enfocado en el lugar que ocupa el producto en la mente de los consumidores en relación de los productos de la competencia. El SMM tiene por objetivo primordial el escuchar, analizar, segmentar, conversar e involucrar a los clientes cautivos, proveedores y posibles clientes no cautivos para garantizar su preferencia y fidelidad de los productos y/o servicios que se ofrecen. Las unidades de producción de lácteos por medio de una buena estrategia de mercado que integre el uso del SMM les permitirá ampliar su cartera de clientes y tener información clave sobre la aceptación de los productos y de la empresa así como observar el comportamiento de los usuarios. El éxito de las empresas en el mundo digital dependerá de la publicación de contenido interesante, veraz e innovador. Es por ello que el objetivo que persigue la investigación es lograr mediante un diagnóstico formular estrategias basadas en el SMM, que le permitan a las unidades de producción de lácteos lograr su posicionamiento en los mercados locales, regionales, estatales, nacionales y hasta internacionales, detonando el territorio y buscando el mejorando la calidad de vida en la población.*

**PALABRAS CLAVES:** Social media marketing, Posicionamiento en el mercado, unidades de producción de lácteos

## SOCIAL MEDIA MARKETING AS A TOOL FOR POSITIONING THE MUNICIPALITY OF AYAPANGO, MEXICO STATE DAIRY PRODUCTION UNITS

### ABSTRACT

*Today we live in a globalized world where technology plays a key role in the development of organizations, because those companies that do not enter the world of technology, are displaced by market competition. The dairy production units in Mexico are no exception and particularly Ayapango Township Mexico state, which have the need to promote their products to position itself in the various local, state, national and international, which will allow that their products are known and are positioned in the consumer's mind. Increasing Internet users demand the attention of companies targeting products to these consumers in order to interact and communicate with them through the implementation of tools that allow effective communication and be present in your mind, so there are tools such as Social Media Marketing ( SMM ), which allows to achieve the purpose. The SMM combines the goals of internet marketing with social media such as blogs, magazines, content sharing site, social networks and microblogging sites . This type of marketing focuses on communications, branding and social interaction with the target markets. The market positioning focuses on the place of the product in the minds of consumers in relation to the competitive products. The primary aims SMM listening, analyzing, segmenting , converse and engage captive customers, suppliers and potential clients to ensure their non-captive preference and loyalty of the products and / or services offered . The dairy production units through a good marketing strategy that integrates the use of SMM them to expand their customer base and have key information about the acceptance of the products and the company and observe the behavior of users. Successful businesses depend on the digital world of publishing interesting content , accurate and innovative. That is why the objective pursued by the research is to formulate a diagnosis based on the SMM strategies that will enable dairy production units to achieve its position in local, regional, state, national and even international, detonating the territory and seeking to improve the quality of life in the population.*

**KEY WORDS:** Social Media Marketing, Marketing Position, Dairy Production Units

### INTRODUCCIÓN

En la actualidad el uso de las Tecnologías de Información y Comunicación (T.I.C) han cobrado gran importancia en el mundo de internet como es el uso de redes sociales como herramientas para interactuar y comunicarse con la sociedad y esto ha provocado el surgimiento de nuevas técnicas que implican el uso de internet para realizar actividades de marketing, tal es el caso del Social Media Marketing (SMM). El marketing es el proceso social y administrativo por el que los grupos e individuos satisfacen sus necesidades al crear e intercambiar bienes y servicios (Kotler, 2003). El SMM, combina los objetivos de marketing en internet con medios sociales como blogs, revistas, sitios de intercambio de contenidos, redes sociales y sitios de microblogging. Este tipo de marketing se centra en las comunicaciones, las marcas y la interacción social con los mercados objetivos. Ha sido tanto el impacto que han causado las redes sociales que se ha cambiado la forma de comunicación.

Afirma Oscar Rojas (2012) en su artículo que: en los próximos años veremos cambios significativos en las audiencias de redes sociales, lo cual va a representar retos importantes para los responsables de los programas de mercadotecnia y comunicación. México no se ha librado del impacto de internet y las redes sociales, pues han cobrado gran importancia con el paso del tiempo, en un estudio realizado por el Instituto Nacional de Estadística Geográfica e Informática (INEGI) sobre el aprovechamiento de las T.I.C en México plantea que el 32.2% de los hogares en México cuentan con una computadora y el 26% de los hogares cuenta con una conexión a internet, así mismo se plantea que la mayor parte de los usuarios de internet se concentran en jóvenes de 12 o 34 años de edad con una participación del 64%. INEGI (2012).

Facebook y Twitter son plataformas en internet gratuitas. Para poder acceder a estas es necesario la creación de una cuenta que incluye datos básicos sobre el usuario como: nombre, edad, sexo, ubicación e intereses, un usuario puede contar con una o más redes sociales dependiendo el fin que persiga, lo que provoca que la segmentación sea menos complicada. Facebook es un sitio de Internet que teje una amplia red de personas, instituciones, organizaciones sociales y escuelas, entre otras que quieren relacionarse, además de publicar fotos, eventos, enlaces, videos, comentarios y sugerencias, se puede mantener comunicación con compañeros de trabajo, amigos y familiares, cada día las 24 horas. La jornada (p.2011). Facebook se ha convertido en una de las redes sociales más populares en el país debido al tipo de contenido que se maneja, la accesibilidad y el hecho de que cada vez más personas se estén sumando a esta red. México ocupa el quinto sitio a nivel global por número de usuarios en Facebook, con 42 millones, Facebook es la plataforma, el puente que puede vincular exitosamente a las empresas con los consumidores" Facebook lanzó una plataforma para que las unidades productivas del país, sin importar su tamaño puedan conectarse al "social media con oportunidades enormes de negocio". (Alto Nivel 2013). Mientras que Twitter es una aplicación web gratuita que permite a sus usuarios estar en contacto en tiempo real con personas conocidas o afines en intereses a través de mensajes breves de texto. (Salinas 2012) Twitter cuenta con 500 millones de cuentas y México se encuentra en el top ten de los países que no sólo tienen más usuarios, sino también en cuanto a volumen de tweets. (El economista p2012) Con el incremento de usuarios en internet y en las redes sociales en México las empresas han empezado a preocuparse por introducirse al mundo del social media marketing para llegar a sus clientes a través de la creación de sus propios perfiles de usuarios en las redes de Facebook y Twitter. Particularmente las unidades de producción de lácteos del Municipio de Ayapango Estado de México, quienes tienen la necesidad de promocionar sus productos para posicionarse en los diferentes mercados tales como los locales, estatales, nacionales y hasta internacionales, lo que le van a permitir que sus productos sean conocidos y se posicionen en la mente del consumidor.

El municipio de Ayapango estado de México, se encuentra localizado en la zona oriente del Estado de México, entre las coordenadas, 19° 10' de latitud norte y 98° 45' de longitud oeste, se encuentra a una altura de 2,450 metros sobre el nivel medio del mar, el nombre de esta comunidad mexiquense, deriva del vocablo náhuatl ayáhuatl, que significa "lugar de neblinas en las alturas". Sus límites geográficos son: Al norte con Tlalmanalco, Amecameca y Tenango del Aire; al sur Juchitepec y Amecameca; al este Amecameca y al oeste Tenango del Aire y Juchitepec. Cuenta con una población de 8,864 de los cuales 4,511 son mujeres y 4,353 son hombres. Tiene una extensión superficial de 36.63 Km<sup>2</sup>. Su clima es subhúmedo con lluvias en verano, principalmente durante el mes de julio. (CODEMUN 2009). La industria más importante en el Municipio de Ayapango es la producción de los derivados de la leche.

De acuerdo con un estudio realizado por Social Center Selling, el 40% de los usuarios que utilizan el Social Media como herramienta de venta, aseguró que han cerrado entre dos y cinco

acuerdos gracias a las redes sociales; dejando a este medio como una de las principales herramientas para hacer y cerrar acuerdos comerciales. Gutiérrez (2013) El Posicionamiento es un principio fundamental del marketing que muestra su esencia y filosofía, ya que lo que se hace con el producto no es el fin, sino el medio por el cual se accede y trabaja con la mente del consumidor: se posiciona un producto en la mente del consumidor; así, lo que ocurre en el mercado es consecuencia de lo que ocurre en la subjetividad de cada individuo. (Arrubia 2013) El SMM tiene por objetivo escuchar, analizar, segmentar, conversar e involucrar a los clientes cautivos, proveedores y posibles clientes no cautivos para garantizar su preferencia y fidelidad de los productos y/o servicios que se ofrecen. Es por ello que se propone esta herramienta a los encargados las unidades de producción de lácteos, para poder posicionar sus productos dentro del mercado y satisfacer las necesidades de los consumidores a través el SMM

## METODOLOGÍA

La presente investigación es de tipo cualitativa ya que ha sido llevada a cabo mediante la recolección de datos que nos permiten conocer el significado y características primordiales del SMM, así como también el desarrollo y comportamiento que ha ido generando a lo largo del tiempo. Es descriptiva ya que el objetivo primordial es llegar a situaciones predominantes a través de la descripción del porque SMM puede ser considerada como una herramienta competitiva particularmente para las unidades de producción de lácteos del municipio de Ayapango Estado de México. La investigación también es de tipo no experimental ya que se basa fundamentalmente en la observación de hechos ya existente, su diseño es transversal ya que las observaciones y análisis del fenómeno se llevan a cabo en un momento determinado del tiempo El sector secundario o industrial del Municipio de Ayapango Estado de México está dedicado a la producción de derivados de la leche en la elaboración de quesos, mantequilla y requesón. De acuerdo con la información proporcionada por Darío Gabino Marcelo Silva Director Rural Agropecuario del Municipio actualmente se cuenta con 81 productores de lácteos los cuales carecen de una estrategia de marketing a través de redes sociales, es por ello que se propone al SMM como una herramienta para lograr posicionar sus productos a través de diversas plataformas en línea que les permitirán colocar sus productos y mantener su presencia en la mente del consumidor A través de SMM los productores tendrán la posibilidad de mantenerse en contacto con sus clientes, segmentar el mercado, brindarles información que les sea de utilidad acerca de sus productos y actividades que realizan. El éxito de las empresas en el SMM dependerá de la publicación de contenido interesante, veraz e innovador. Los usuarios generan gran cantidad de contenido relevante que se sitúa en un contexto determinado que lo lleva a establecer buenas conexiones entre gente afín y que conlleva a la creación de una comunidad alrededor que les permitirá a las unidades de producción de lácteos un acercamiento con la comunidad, obtener información valiosa de esta y así poder realizar acciones de acuerdo a sus perfiles y lograr su posicionamiento en la mente de los usuarios

social media marketing	
contenido conexión	contexto comunidad

*Fuente: elaboración propia*

Dichas unidades de producción, carecen de una estrategia a través de medios masivos de comunicación en línea, que les permita lograr una mejor imagen ante sus clientes, proveedores y

posibles clientes, es por ello que se propone brindar estas herramientas para realizar no solo el posicionamiento si no la permanencia en el mercado.

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# UN ACERCAMIENTO AL PROCESO DE CONSTRUCCIÓN, DECONSTRUCCIÓN Y RECONSTRUCCIÓN DEL PENSAMIENTO ADMINISTRATIVO

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## RESUMEN

*Este artículo es producto del proyecto de investigación denominado Enfoques Cognitivos y modelos teóricos de los procesos investigativos en el campo de las Ciencias Administrativas; hace un recorrido por el desarrollo histórico en los aportes teóricos y la práctica administrativa desde la contribución de la corriente pragmática, en un intento de demostrar la producción de saberes en las ciencias administrativas. Abordar este análisis histórico documental, da respuesta sobre la forma como ha avanzado la disciplina y los determinantes que actúan simultáneamente o en varias direcciones, en coherencia con la pedagogía crítica y la construcción dialógica que privilegian la búsqueda y generación de un nuevo conocimiento en este campo. Los resultados dan cuenta de un auge en las llamadas modas administrativas a partir de las década de los ochenta con una amplia diversidad conceptual respecto al ideal de la práctica administrativa enfrentando las posturas de quienes defienden el carácter científico de la teoría para legitimar la generación de nuevos conocimientos en las ciencias administrativas.*

**PALABRAS CLAVES:** Teoría Administrativa, Modas En Administración, Pensamiento Administrativo

## AN APPROACH TO THE PROCESS OF CONSTRUCTION, DECONSTRUCTION AND RECONSTRUCTION THE ADMINISTRATIVE THOUGHT

### ABSTRACT

*This article is a product of the research project called cognitive approaches and theoretical models of the investigative proceedings in the field of administrative sciences; makes a journey through the historical development in the theoretical contributions and administrative practice from the contribution of the pragmatic stream; so, in an attempt to demonstrate the production of knowledge in administrative sciences. Addressing this historical documental analysis answers on the form as it has advanced the discipline and determinants that act simultaneously in several directions, in consistency with the critical pedagogy and the dialogic construction that privilege the search and generation of new knowledge in this field. The results give an account of a boom in the so-called fads administrative from the decade of the eighties with a broad conceptual diversity with respect to the ideal of the administrative practice facing the positions of those who defend the scientific character of the theory to legitimize the generation of new knowledge in administrative sciences.*

**JEL:** M10

**KEY WORDS:** Administrative Theory, Management Trends, Administrative Thought

## INTRODUCCION

Dentro del amplio marco de las Ciencias Administrativas se ha dado lugar a desarrollos teóricos con diversos enfoques, los cuales dan una manera de analizar la realidad, en este sentido la investigación busca presentar un estudio a partir de la literatura más relevante, la cual ayudará a abordar el análisis histórico de enfoques y modelos teóricos, que en ocasiones pareciera convertirse en polisemia terminológica desarrollada en la disciplina administrativa. Este artículo presenta un enfoque intradisciplinar con el objeto de entender los determinantes que actúan simultáneamente o en varias direcciones dependiendo de cada una de las posturas propuestas por los diversos autores, dada la no unicidad de modelos mentales, paradigmas o metáforas disciplinares.

La presente investigación tiene como punto clave, la determinación de cuáles son las tendencias sobre las que descansan los llamados libros de moda en el área administrativa, cuáles son las bases teóricas referenciadas en los libros clásicos que sustentan la práctica docente. De modo que en este marco, la comprensión general está encuadrada en una brecha que inicia con una apropiada dimensión material, sintáctica y semántica que suele resultar exitosa, tanto en países desarrollados como en vía de desarrollo y cuyo efecto se puede inferir de forma práctica en el notable efecto que en algunos espacios académicos suele causar esta información pragmática, la cual pareciera dar una orden, mandato o instrucción de cómo deben hacerse las cosas en forma mágica, provocando desplazamiento de procesos, hábitos y formas de trabajo dentro de las organizaciones, en un afán de hacer contacto con esa prometedora oferta que garantiza a través de un conocimiento y experiencia dada en otro lugar del mundo, el contacto con un augurio de éxito empresarial.

La investigación plantea las siguientes preguntas que permiten tener un panorama más preciso del objeto de estudio: ¿Cuáles son las tendencias teóricas utilizadas en el campo de las ciencias administrativas? ¿Cuáles son las modas, concepciones y enfoques teóricos que direccionan los procesos formativos en el campo de las ciencias administrativas? ¿Se está agotando la teoría administrativa? ¿Existe diversidad conceptual en el campo disciplinar? ¿Cuáles son los hitos históricos de las modas administrativas? ¿La moda administrativa aparece como resultado de un enfoque pragmático en la gerencia?

## METODOLOGÍA

En respuesta a los objetivos de la investigación, se utiliza la investigación cualitativa, con un enfoque en investigación documental, de tipo histórico hermenéutico a fin de favorecer la comprensión de textos, reconociendo las intencionalidades de los autores, desde una perspectiva crítica como opción epistemológica. El enfoque hermenéutico - crítico no se limita a la descripción, sino que asume las condiciones del contexto determinadas por factores sociales, culturales, económicos. La investigación considera importante identificar las escuelas de pensamiento que reflejan la identidad del *management*, en medio de una gran producción bibliográfica de modas administrativas. El proceso de construcción, deconstrucción y reconstrucción del pensamiento administrativo requiere reflexión sobre corrientes

epistemológicas subyacentes que permitan demostrar la relevancia de los modelos teóricos y el valor de los diversos enfoques conceptuales.

A fin de orientar la atención sobre el tema de estudio, se realiza una revisión bibliográfica, desde una perspectiva holística, a través de la indagación exhaustiva, sistemática y rigurosa, en el propósito de ampliar y profundizar el conocimiento sobre la evolución teórica de temas gerenciales, apoyados en el análisis de fuentes bibliográficas y documentales guiado por los enfoques, criterios, conceptualizaciones y comprensión subjetiva de las investigadoras, procurando el análisis inductivo, interactivo y estructural. Inevitablemente la investigación plantea un desafío, dado que se encuentra mediada por preconcepciones teóricas y visiones subjetivas del mundo, a través de las cuales se perciben los hechos y datos; encontrados y definidos en la aproximación al teorizar, desde una construcción epistemológica, basada en un enfoque positivista, cuya naturaleza legitima los supuestos y genera conocimiento científico; entendida en unas ocasiones como tradicionalmente un asunto positivista; en otras con un enfoque normativo que enfatiza en las experiencias, valores y percepciones. La recolección de información se realizó a través de fichas temáticas y matriz de síntesis en un proceso de interpretación y análisis de contenido. Al estudiar la información, se analizan los intereses teóricos dominantes de los autores en relación directa con la frecuencia de aparición en el corpus que se estudia.

## RESULTADOS

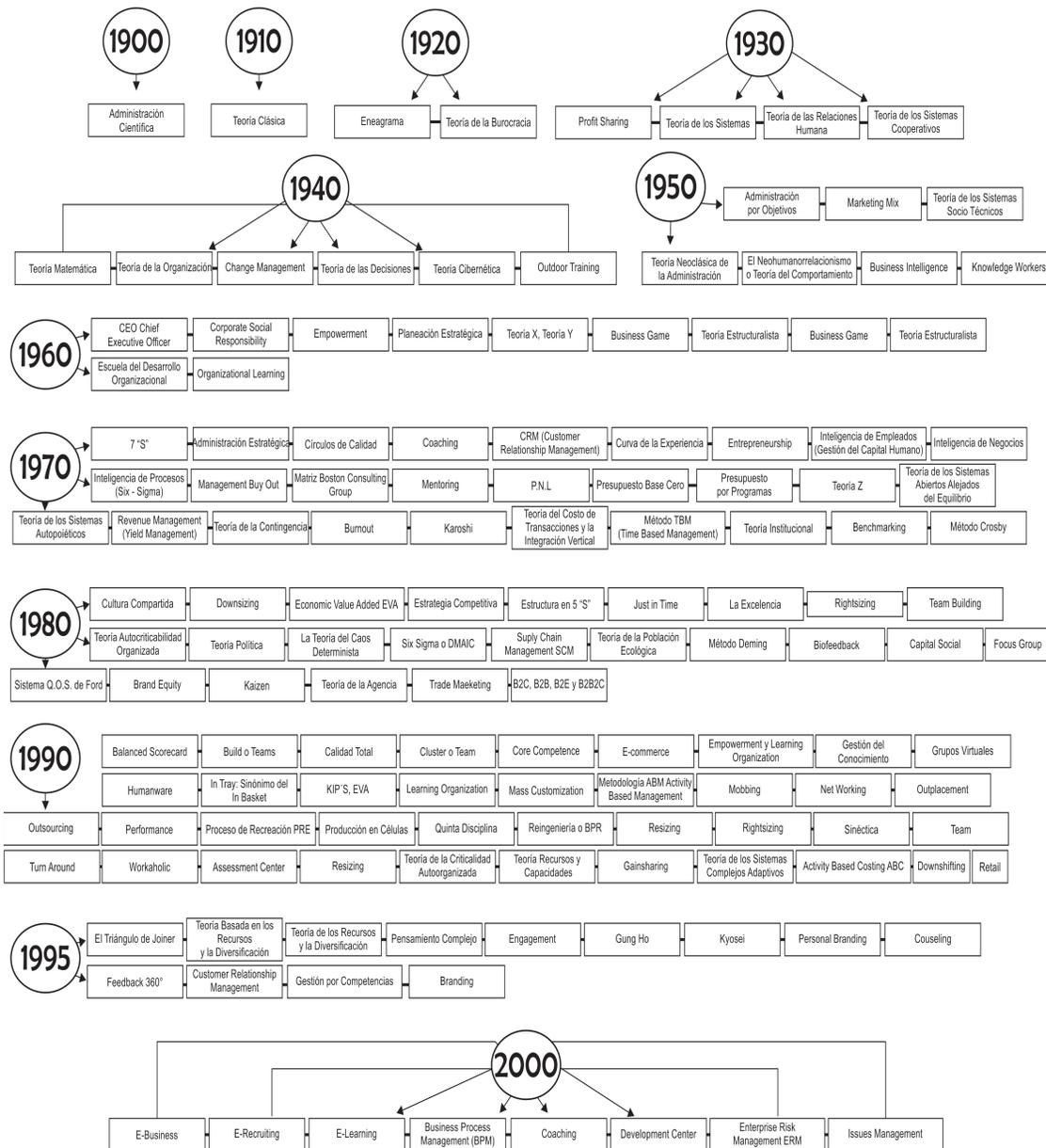
En tiempos modernos se reconoce que la enseñanza de la Administración incorpora contenidos relacionados con los componentes de formación que constituyen el foco orientador de las áreas de la organización, donde invariablemente articulan las posturas teóricas que defienden los antecedentes del quehacer de la disciplina. Consecuentemente, en ese marco de acción se estructura el devenir histórico del pensamiento administrativo, por ello una revisión de los textos expone desde los inicios, su construcción en la necesidad de dar respuesta a problemas de producción en las organizaciones, este enfoque se presenta en un periodo donde la revolución industrial marca un hito socioeconómico para los países que nos han heredado las diferentes concepciones que se defienden desde la rigurosidad científica y la práctica administrativa. La validación como corroboración del todo, en un enfoque holístico como mecanismo para derivar representaciones de constructos, bajo criterios de validez convergente, dada por las referencias de los conceptos, métodos, enfoques y modas encontradas en la investigación.

Otra consideración, evidencia la estrategia hemisférica para abordar el desarrollo del mapa de teorías, enfoques, conceptos, métodos y modas hacia un diseño orientado a la administración y organización empresarial que posibilita la búsqueda por encontrar lo mejor, combinando, mezclando y complementando en la finalidad de enriquecer el trabajo empresarial. Sin embargo, de manera individualizada, se ha profundizado en las fortalezas y debilidades, de tal manera que cada una –en ocasiones- solamente permite optimizar un uso adecuado y pertinente bajo un único modelo, en un área específica –talento humano, producción, mercadeo, etc. Finalmente, el tiempo de desarrollo de la disciplina administrativa no constituye una limitación sino un excelente espacio –aunque sin esperar demasiado, pues en ocasiones el pragmatismo empresarial no permite discurrir por la vía de la teoría del conocimiento- en la intención de ser una preocupación de investigadores y estudiosos por el desarrollo de teoría administrativa.

Como se indicó con anterioridad, las tendencias teóricas utilizadas en el campo de las ciencias administrativas, direccionan los procesos formativos al conceptualizar, contrastar y criticar desde

la estructura científica las premisas, que con el paso del tiempo se convierten en el discurso expandido para la comprensión de la realidad empresarial. Sin embargo, en la presente investigación se omitió el paradigma positivista según el cual las teorías nunca pueden mostrarse como verdaderas en tanto que no importa cuántas observaciones positivas son obtenidas en apoyo a la teoría, por ello, se consideró más útil

Figura 1: Devenir Histórico del Discurso Administrativo



*Escapando del debate realismo-antrealismo, en la Figura 1 se encuentra un recorrido histórico, desde una posición que sostiene que no hay ningún objeto espacio-temporal que no esté ligado a una red de relaciones causales con otros objetos y que da lugar a explicaciones, puesto que ninguna proposición es hecha verdadera por nada y puesto que ningún enunciado representa nada, todo los términos candidatos a la verdad están a la par con respecto a su relación en una realidad independiente, de modo que al estudiar el contenido denominado devenir histórico del discurso administrativo para un caso de arbitraje éste tiene meramente como propósito presentar cuestiones, términos, paradigmas, modas, enfoques y teorías disciplinares. Fuente: elaboración propia*

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# RELACIÓN ENTRE EL PERFIL DE LAS MUJERES EMPRENDEDORAS Y EL ACCESO A LOS MICROCRÉDITOS: UN ANÁLISIS EN MICRO EMPRESAS DE SALTILLO, COAHUILA

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## RESUMEN

*El enfoque de género referido al empoderamiento económico resulta de gran interés a nivel regional. Por ello, la investigación tiene como objetivo hacer un análisis de la relación entre el perfil de las mujeres emprendedoras y el acceso al microcrédito, en el Estado Coahuila, México. La indagación empírica abarcó una muestra de 52 micro y pequeñas empresas en Saltillo, Coahuila, con la aplicación de una encuesta que mide la percepción de las empresarias en los sectores de industria, comercio y servicios. Como resultados se evidencia un predominio de la conjunción de motivos como la necesidad y oportunidad para emprender un negocio, mayor concentración en los sectores de comercio y servicios y que más del 75 % de las mujeres tiene dependientes económicos. No existe discriminación para el acceso al microcrédito, pero no se utilizan todas las posibilidades u ofertas existentes, lo cual está vinculado a los diferentes perfiles y sectores empresariales.*

**PALABRAS CLAVES:** Emprendedurismo Femenino, Empoderamiento Económico, Microcrédito

## RELATIONSHIP AMONG THE ENTREPRENEUR WOMEN'S PROFILE AND THE ACCESS TO MICROCREDITS: AN ANALYSIS IN MICRO CORPORATIONS OF SALTILLO, COAHUILA

### ABSTRACT

*The gender focus referred to the economic empowerment results of huge interest in a regional level. Therefore, the investigation has its objective to make an analysis of the relationship among the entrepreneur women's profile and the access to microcredit in the state of Coahuila, Mexico. The empiric question reached a sample of 50 micro and small corporations in Saltillo, Coahuila with the application of a survey that measures the perception of a business woman in the sectors of industry, commerce and services. As a result there is an evidence of the predominance of the conjunction of motifs just as the necessity and opportunity to start a business, major concentration in commerce and services sectors, and that more than 75% of women have economic dependents. There is no discrimination to the access to microcredit, however not all the possibilities or offers that exist are used, which is related to the different profiles and business sectors.*

**JEL:** E44, J16

**KEYWORDS:** Entrepreneur Women's, Economic Empowerment, Microcredit

## INTRODUCCIÓN

El incremento de la participación de la mujer en las actividades productivas, además de significar una ruptura con el paradigma social tradicional de la mujer relegada solamente a las tareas domésticas y al cuidado de la familia, ha impactado también en la economía nacional. Sin embargo su desarrollo laboral como empleada o como empresaria independiente continúa limitándose en función de estereotipos y comportamientos enquistados desde tiempo atrás. La mujer actual tiene que enfrentar diversos obstáculos en su participación laboral, a menudo encubiertos, y tratar de posicionarse al emprender un negocio, para poder acceder a las diferentes esferas del mundo empresarial. El emprendimiento requiere de una capacidad económica que en muchas ocasiones la mujer no tiene, y es así como en muchas ocasiones se requiere de obtener financiamiento por diversas vías.

Con la finalidad de propiciar el empoderamiento y las oportunidades económicas para mujeres y niñas en México, los gobiernos fortalecerán y apoyarán redes de empresarias y alianzas público-privadas que faciliten el intercambio de información, capacitación y mejores prácticas a fin de empoderar a las mujeres y que éstas se beneficien de las oportunidades en el ámbito económico; promoverán el acceso a la capacitación, a los mercados y a los mecanismos de financiamiento para mujeres empresarias, particularmente en la pequeña y mediana industria; desarrollarán acciones bilaterales para facilitar la vinculación económica de las mujeres, como un elemento central de las estrategias para incrementar la competitividad económica mutua; y alentarán la creación de oportunidades para las mujeres en todos los niveles del sector laboral formal, a fin de que puedan beneficiarse de la capacitación, de las oportunidades de desarrollo y de los programas de compensación y otorgamiento de beneficios. (INMUJERES, 2013)

En particular, en los últimos años se ha potenciado el incremento de las oportunidades para obtener créditos de diversas maneras, incluso dirigidos específicamente a mujeres, bien sea por las instituciones bancarias como por ejemplo la línea de MUJER-MUJER, o por otras instituciones sociales o gubernamentales que gestionan programas de microcréditos, que surgieron con defensores y detractores, como una forma de reducir la pobreza y dar esa facilidad a ciertos grupos que generalmente no son sujetos de crédito en instituciones bancarias. Estos programas han sido impulsados en México por varios organismos, y aunque no se sabe con precisión el número de entidades de ahorro y crédito popular que existen en México, se identifican como las redes más importantes a la Asociación Nacional de Microfinancieras y Fondos y Pro Desarrollo Finanzas y Microempresas.

La problemática del financiamiento de las MIPYME mexicanas está identificado como uno de sus problemas fundamentales en diversos estudios en la región (Molina Morejón, Armenteros Acosta, Elizondo, Barquero Cabrero, & Espinoza Arellano, 2011); FAEDPYME, 2011). Por ello en el informe MIPYME de México para el 2012 se plantea la necesidad de desarrollar e implementar mecanismos, procedimiento y políticas crediticias más adecuadas a las características estructurales de la MIPYME (Martínez Serna, et al, 2013). El financiamiento a las MIPYME puede provenir por parte de alguna institución bancaria o por algún apoyo de fondo gubernamental, este último además ofrece asesoría y capacitación para el acceso a las diversas fuentes de financiamiento, incluyendo los orientados a promover la innovación por parte del

CONACYT; en las cuales no se presentan rasgos de discriminación de género. Una de las formas de crecimiento de un negocio es a través del financiamiento, por lo que muchos negocios han podido incrementar sus ventas a través de las ayudas financieras bancarias y/o gubernamentales (Treviño Ayala, M. E.; Villalpando Cadena, P.; Lozano Treviño, D.F.; Treviño Ayala, R.; Barragán Codina, J. N.; Flores Estrada, M.A. (2012). Pero según el Banco Interamericano de Desarrollo en México y la Comisión Económica para América Latina y el Caribe ECLAC (2000-2011), existe la percepción de que el financiamiento es el principal obstáculo para el desarrollo de las empresas, pues cerca de las dos terceras partes de ellas enfrentan importantes restricciones para encontrar financiamiento. Derivado de lo anterior el objetivo del presente trabajo reside en analizar el acceso al microcrédito por las microempresas dirigidas por mujeres, y su relación con el perfil de las mujeres emprendedoras. La estructura del trabajo se presenta con una primera sección dedicada a la revisión de literatura especializada dónde se comienza por mencionar el avance que ha tenido la mujer en la armonización de roles, se analizan posibles fuentes de financiamiento, el origen, concepto, y papel de los microcréditos con diferentes ejemplos y resultados de estudios previos. Posteriormente se explica la metodología empleada para cumplir el objetivo propuesto. En Resultados y Discusión se analiza el perfil de las mujeres emprendedoras, el nivel de satisfacción con el acceso al microcrédito y la importancia que le conceden al crédito o apoyo financiero. Finalmente se ofrecen Conclusiones y Referencias Bibliográficas.

## REVISION DE LITERATURA

La mujer actualmente ha aprendido a armonizar sus roles de su actividad de madre, esposa y empresaria lo que le ha ido dando oportunidad de crecimiento en sus negocios los que pueden crecer con apoyos financieros gubernamentales que impulsan el emprendimiento femenino, sin embargo, a pesar de que en los últimos años se ha registrado un incremento constante de la participación de las mujeres en las actividades económicas, el acceso que ellas tienen para ser propietarias de una empresa es todavía mucho menor que el acceso con el que los hombres cuentan (INMUJERES, 2010)

En general, los estudios afirman que el financiamiento ha llegado a darse de diferentes formas: los propietarios han recurrido a sus ahorros personales con el fin de invertir en la empresa y mantenerla de pie y también se ha utilizado el financiamiento de personas que son consideradas cercanas al propietario (Arteaga & Lasio, 2009) o una combinación entre ahorros personales, préstamos de familiares y préstamos bancarios (Pushpakumar & Athula Wijewickrama, 2008, citado por Treviño Ayala, et al, 2012). Existen autores que establecen la deuda más común, y también la más cara, suele ser la que proveen las instituciones bancarias y la otorgada por compañías de préstamo comercial. Así mismo la tasa de interés y la burocracia en trámites y garantías que exige la banca; además del requisito de aval con solvencia económica son los obstáculos principales para la obtención de financiamiento bancario. (Martínez, A. G., de Lema, D. G., & Hernández, S. M. (2009).

Como una solución a las barreras existentes para la obtención de financiamiento bancario surgen los microcréditos como fuente de financiamiento para pequeños negocios, lo que ha tomado un gran auge en las últimas décadas. Uno de los primeros impulsores de este sistema fue el Grammen Bank o Banco de Aldea, en Bangladesh, fundado por el profesor Muhammad Yunus; y desde el principio, las mujeres fueron un componente esencial de su visión; en una sociedad dónde las mujeres son consideradas inferiores. (Fernández, 2010), (León, 2012) No existe un consenso en el esclarecimiento del concepto de microcrédito. La Conferencia Internacional sobre Microcrédito desarrollada en Washington DC en 1997, lo define de la siguiente manera: “Los

microcréditos son programas de concesión de pequeños créditos a los más necesitados de entre los pobres para que estos puedan poner en marcha pequeños negocios que generen ingresos con los que mejorar su nivel de vida y el de sus familias”. Desde ese mismo momento se hizo especial referencia a los microcréditos destinados a las mujeres porque se parte del supuesto que entre los más pobres en muchos casos están las mujeres. La definición sugerida por la Cumbre del Microcrédito establece que, además de que se trata de programas que proporcionan pequeños préstamos a personas muy pobres para proyectos de autoempleo generadores de renta, se puede encontrar una doble vertiente en el microcrédito: como un determinado instrumento financiero y como instituciones, que pueden adoptar formas jurídicas y organizativas muy distintas, que emplean mayoritariamente este instrumento. (Nieto, 2005) El estudio que se pretende desarrollar se enfoca en el microcrédito como instrumento financiero y su uso por las mujeres emprendedoras.

En México los microcréditos surgieron como apoyos para personas que perdieron sus negocios con el terremoto en 1985, aunque se reconoce que hay una tradición mexicana en este sentido que se remonta a los años 30 con las cajas de ahorro; y como política pública se reconocen en el 2000 y el 2001. (Díaz Amador, 2001) El Programa Nacional de Financiamiento al Microempresario (FINAFIN) en el período comprendido desde inicios del 2001 a julio del 2006 otorgó 1,187,412 microcréditos, el 53 % de ellos a mujeres. (Betancourt, 2008) En la actualidad, los mecanismos tradicionales implementados desde los gobiernos centrales para impulsar la economía ya no son suficientes para solucionar los crecientes problemas de los países en vía de desarrollo. Las expectativas para lograr economías con crecimiento en dichos países se han puesto sobre su capacidad para fomentar el empresariado y tienen, como una de sus principales herramientas, la posibilidad de acceso al microcrédito por parte de los sectores que demuestran más altos índices de desempleo, las mujeres cabeza de familia y los jóvenes que por primera vez intentan ingresar al mercado laboral. (Patiño Castro, 2010). Para la microempresa como cualquier negocio, el microcrédito es una puerta de acceso al financiamiento externo alternativo al sistema financiero tradicional. El estudio previo publicado por este equipo de investigación dos ciudades de Coahuila, México; arroja que son muy similares las características de las emprendedoras en las ciudades de Saltillo y Torreón, atendiendo a las dimensiones y variables analizadas.

A continuación se retoman las principales coincidencias y diferencias. El promedio de edad es menor en Saltillo (40) con respecto a Torreón (47); hay mayor porcentaje de mujeres emprendedoras en Torreón, con nivel universitario (68%), que en Saltillo (48%); en ambas ciudades predomina la conjunción de motivos para emprender (pero en Saltillo prevalece la necesidad y en Torreón, la oportunidad); el comportamiento en los sectores es similar, mayormente en comercio y servicios, y más de 75 % en ambos estudios tienen hijos menores o dependientes económicos. (Guerrero Ramos, L; Gomez Gutierrez, E; Armenteros Acosta; M.C (2013). En esta investigación se parte del supuesto de que el perfil de la mujer emprendedora determina el desarrollo del negocio que emprende y favorece el acercamiento de las diferentes instancias; públicas y privadas para acceder a los microcréditos que son una fuente importante de financiamiento para desarrollar y consolidar su empresa.

## **METODOLOGÍA**

La presente investigación es de carácter exploratoria y descriptiva acerca del acceso y resultados del microcrédito obtenido en las empresas creadas por mujeres emprendedoras. Para ello se aplicó un cuestionario que combina el instrumento sobre el perfil de las mujeres emprendedoras (Valencia Silva, 2010) validada por ESADE, España y en dos estudios previos en las ciudades de Saltillo y Torreón (Guerrero Ramos, et al, 2014) y el instrumento sobre el microcrédito en las

MIPYME (Patiño Castro, 2010) validada en Bogotá. Se combinaron ambos instrumentos dado el objetivo de presente trabajo de analizar la relación entre el perfil de mujeres y el acceso y resultados de los microcréditos. La fiabilidad del instrumento se comprobó a través del “ $\alpha$ ” Alpha de Cronbach de 0.926609192 aceptable. En la tabla No. 1 se muestran las variables del cuestionario que serán objeto de estudio en este trabajo así como Alpha de Cronbach de cada grupo de ítems. El estudio empírico se realizó con 52 mujeres en el periodo de septiembre-octubre del 2013 mediante entrevistas individuales a empresarias de micro empresas, de los sectores de comercio e industria, en su mayoría pertenecientes a la Confederación Nacional de la República Mexicana (COPARMEX Coahuila, Sureste). Para el procesamiento de los datos se utilizaron técnicas estadísticas descriptivas y se realizó contrastación correlacional mediante la prueba no paramétrica Kruskal Wallis teniendo en cuenta el tamaño de la empresa.

Tabla 1: Operacionalización de Variables Del Estudio

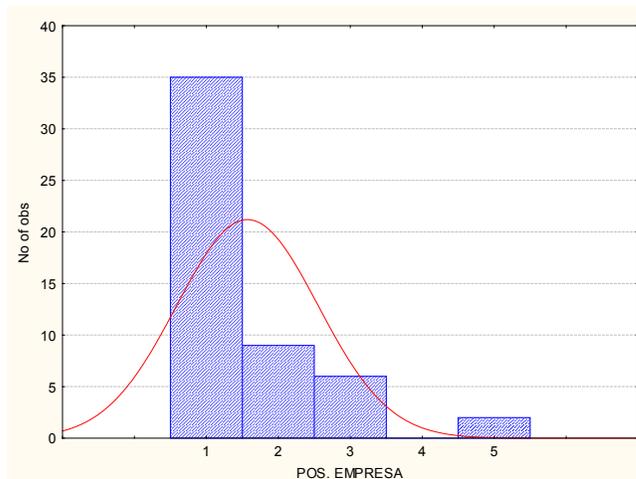
Variable	Definición operacional	Número de ítems	Alfa de Cronbach
Perfil de mujer emprendedora	Datos sociodemográficos de la mujer emprendedora.	5 ítems	Variables control
Colaboración familiar	El nivel de implicación y apoyo de los familiares desde creación y desarrollo de la empresa	5 ítems	.875
Resultados de innovación	Modalidades de innovación introducidas: Productos y servicios; Procesos y Sistema de gestión y sus diferentes tipos.	7 ítems	.907
Desempeño de la empresa	Indicadores para medir resultados tangibles e intangibles.	5 ítems	.860
Objetivos personales	Percepción del cumplimiento de objetivos tales como la conciliación de trabajo y vida personal, grado de satisfacción, autoestima, calidad de vida y relaciones con la familia	5 ítems	.842
Comportamiento del microcrédito	Valoración del comportamiento real de las características principales del microcrédito recibido.	12 ítems	.938
Impacto del microcrédito	Resultados reales del microcrédito en cuanto al desempeño económico y financieros.	6 ítems.	No aplica.

## RESULTADOS

### Perfil de Mujeres Emprendedoras.

Para la determinación del perfil de la mujer emprendedora se contempló la posición en la empresa, nivel de estudio, estado civil, No. de dependientes económicos y motivación en la creación de empresas, cuyos resultados presentamos a continuación.

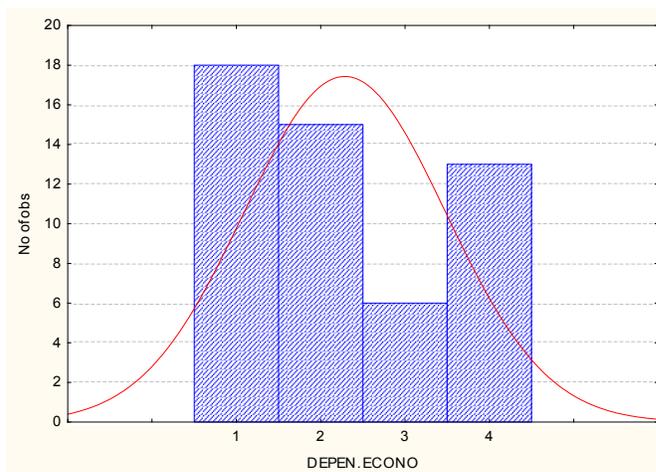
Figura No. 1: Posición en la Empresa



En la figura No.1 se marca una posición de la emprendedora como propietaria en un 67.31%, lo que determina el grado de compromiso de la misma en el desarrollo de la empresa a través de financiamiento como posibilidad.

El 75% de las mujeres emprendedoras de la muestra son casadas (2) y solo el 11.5% (1) y 13,5 % (3) son solteras y divorciadas respectivamente, lo que significa que en su mayoría existe una conciliación entre la vida familiar y empresarial. En cuanto al nivel de estudios de las mujeres empresarias que accedieron a apoyos financieros para su empresa; el 55.77% tiene estudios universitarios, el 25% estudios medios, 9.62% estudios elementales, 5.77% estudios de posgrado y 3.85% sin estudios. Lo que significa que el nivel de estudios de licenciatura tiene una relación directa con el acceso a apoyos financieros, lo que habla de la seguridad y decisiones que se requieren para el acercamiento a los órganos que lo otorgan

Figura No. 2: Dependientes Económicos



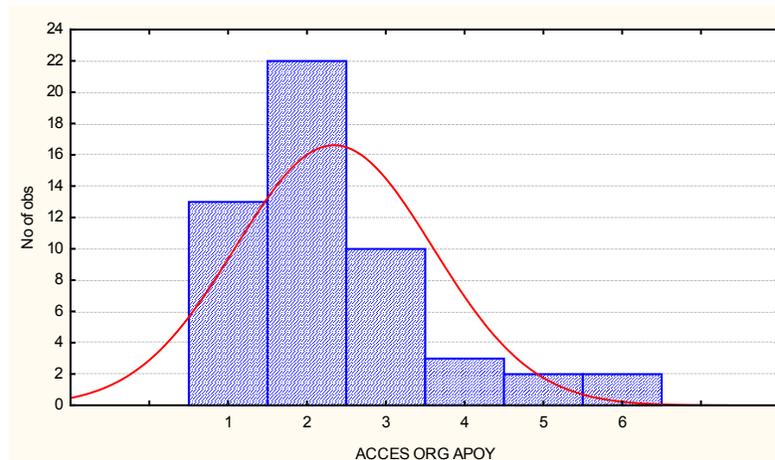
Se refleja que el 34.62% tienen dependientes hijos menores de 18 años, el 28.84% tienen dependientes hijos mayores de 18 años, el 11.54% son dependientes familiares mayores que en la mayoría son sus padres.

### Análisis Del Microcrédito Para Mujeres Emprendedoras

Dentro del estudio del microcrédito se analizó por una parte la importancia asignada a las características principales del microcrédito, como el acceso, uso y aplicación, el tiempo de

trámites, la seguridad en la gestión y la confianza en los organismos financieros, entre otros, lo cual se muestra en la Figura No.5.

Figura No. 3 Nivel de Satisfacción con el Acceso Al Microcrédito



En cuanto al acceso a los créditos y financiamiento; como puede observarse la gráfica muestra el 25% muy satisfactorio, el 42.30% satisfactorio, 19.23 indeciso y en el extremo contrario muestra solo un 3.84 extremadamente insatisfactorio.

El 48,07% de las mujeres emprendedoras han recibido microcréditos durante los últimos tres años, y su valoración tanto del comportamiento de las características como de sus resultados y cumplimiento de sus expectativas, se tiene una marcada tendencia que muestra un 40.38% de muy satisfecho, y un 40.38% satisfecha, un 13.47 indeciso, 1.92 insatisfecho y 3.85 extremadamente insatisfecho. Sobre el impacto en el acceso a las microcréditos recibidos podemos resaltar los siguientes aspectos: En general las mujeres empresarias que tuvieron acceso a los créditos muestran una mejoría en sus negocios en cuanto a ventas y utilidades de un 25.09%, lo que permitió establecer mayores relaciones comerciales, se abre la posibilidad de generar mayores empleos y aprendieron a manejar mejor su empresa.

Tabla No. 2: Importancia Del Crédito o Apoyo Financiero

	Media de la escala si se elimina el elemento	Varianza de la escala si se elimina el elemento	Correlación elemento-total corregida	Alfa de Cronbach si se elimina el elemento
importancia información	41.84	155.295	-.230	.949
importancia uso financiamiento	39.75	128.474	.878	.928
importancia acceso	39.94	122.616	.908	.926
importancia tiempo a tramites	40.00	126.640	.810	.930
importancia información apoyos	40.04	122.358	.880	.927
importancia accesibilidad instancias	40.18	121.868	.810	.930
importancia libertad decisión	40.18	121.788	.836	.929
importancia empeño gestión	39.80	132.801	.574	.939
importancia confianza organismos	39.47	132.134	.671	.935
importancia planeación estrategias	39.33	137.147	.551	.939
importancia canalización apoyos	39.71	130.572	.666	.935
importancia apoyo asociaciones	39.88	121.266	.913	.925

En la tabla No. 2 se muestra la relación positiva en cuanto a los apoyos financieros y se observa un Alfa de cronbach con un alto grado de confiabilidad; los resultados positivos en este bloque son los siguientes: el 51.92% consideran el acceso a la información para apoyos financieros muy satisfactorios, en cuanto al monto otorgado el 40.38% lo consideran muy satisfactorio, el acceso a los órganos de apoyo 42.31% satisfactorios, en cuanto al tiempo dedicado 42.31% muy satisfactorio, flexibilidad en el trato 46.15

*satisfactorio, requisitos y monto otorgado 38.46% satisfactorio, en cuanto a barreras y limitaciones 40.38% satisfactorio, seguridad en la gestión 36.54% muy satisfactorio, grado de confianza 40.38% satisfactorio. Cumplimiento de expectativas 40.38% muy satisfactorio, y retroalimentación de clientes y proveedores 51.92% muy satisfactorio.*

## CONCLUSIONES

En México y en otros países no se encuentran estudios sobre la relación que existe del perfil de las mujeres en el acceso al microcrédito. Se tienen estudios por separado sobre el perfil de las mujeres emprendedoras y sobre los microcréditos para MIPYME. El presente estudio empírico contribuye a establecer una relación y su importancia del perfil de las mujeres y su acceso al microcrédito, cuan determinante es su posición, educación, estado civil y número de dependientes en la participación y acercamiento a las distintas instancias que otorgan apoyos financieros a las micro y pequeñas empresas.

La posición de la emprendedora como propietaria en un 67.31%, determina el grado de compromiso en el desarrollo de la empresa, existe una conciliación entre la vida familiar y empresarial ya que un 75% son casadas y viven en pareja, mostrando un nivel de estudios universitarios en su mayoría y con dependientes económicos en línea ascendente y descendente, lo que incrementa el apoyo moral de la familia en su rol de empresaria. El 48,07% de las mujeres emprendedoras han recibido microcréditos durante los últimos tres años, y su valoración tanto del comportamiento de las características como de sus resultados y cumplimiento de sus expectativas, se tiene una marcada tendencia que muestra un 40.38% de muy satisfecho, y un 40.38% satisfecha, un 13.47 indeciso, 1.92 insatisfecho y 3.85 extremadamente insatisfecho. Los microcréditos recibidos según las mujeres encuestadas incidieron en el incremento de las ventas y las utilidades de sus negocios posibilitándoles mejores relaciones comerciales e impulsar el desarrollo de sus empresas.

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# **ESTUDIO SOCIO ANTROPOLÓGICO DE LAS CONCEPCIONES, VALORES, PRÁCTICAS Y ACTITUDES SOBRE SEXUALIDAD Y GÉNERO DE LOS PRESTADORES DE SERVICIOS TURÍSTICOS DEL ESTADO DE SONORA PARA LA ATENCIÓN A CLIENTES DISIDENTES DE SEXO Y GÉNERO**

Laura Elena Woolfolk Gallego, Universidad Estatal de Sonora

## **RESUMEN**

*El turismo es un fenómeno social en constante transformación, siguiendo la dinámica de la sociedad. A partir de ahí surgen diferentes alternativas del turismo en las que se incluye el turismo gay, LGBTTTI (lesbiana, gay bisexual, transexual, transgénero, travesti e intersexual) o disidente de sexo y género, es decir, el turista con identidad sexual y de género distinta a las identidades sexo genéricas dominantes.*

*El presente trabajo refleja la revisión bibliográfica que será guía para realizar la investigación que pretende conocer si las reglamentaciones hegemónicas, es decir, las reglamentaciones heteronormativas, regulan las concepciones, valores, actitudes y prácticas de los prestadores de servicios del sector turismo del Estado de Sonora para la atención a clientes disidentes de sexo y género, obstaculizando la oferta de un servicio sin discriminación. En el marco de una investigación cualitativa se estudian las prácticas del servicio, protocolos institucionales, competencias laborales, concepciones y valores organizacionales, actitudes y percepciones del prestador del servicio de las empresas turísticas; partiendo de una revisión documental y utilizando etnografía (entrevista a profundidad y observación) como herramientas de investigación.*

**PALABRAS CLAVES:** Turismo, Turismo Lgbttti, Turismo Gay, Turismo Rosa

## **SOCIO-ANTHROPOLOGICAL STUDY OF CONCEPTS, VALUE PRACTICES AND ATTITUDES ABOUT SEXUALITY AND GENDER OF THE STATE OF SONORA TOUR FOR THE CUSTOMER SERVICE AND GENDER SEX DISSIDENT**

### **ABSTRACT**

*Tourism is a social phenomenon in constant transformation, following the dynamics of society. From there arise different tourism alternatives which include gay tourism , LGBTTTI ( lesbian, gay bisexual, transsexual , transgender , transvestite and intersex ) or dissident of sex and gender , ie the tourist with sexual identity and different gender identities generic dominant sex . This paper reflects the literature review which will guide you through the research that aims to determine whether the regulations hegemonic , ie hetero-normative regulations , regulate conceptions, values , attitudes and practices of service providers in the tourism sector in the State of Sonora customer service for sex and gender dissidents , blocking the supply of a service without discrimination. As part of a qualitative research explores the practices of the service, institutional protocols , job skills , concepts and organizational values , attitudes and perceptions*

*of the service of tourism enterprises , based on a literature review and using ethnography ( depth interview and observation) as research tools*

**JEL:** M10, M100

**KEYS WORDS:** Tourism, Lgbt Tourism, Gay Tourism, Pink Tourism

## **INTRODUCCIÓN**

El turismo es un fenómeno económico-social en constante transformación. Una modalidad del turismo es el LGBTTTI (lesbiana, gay bisexual, transexual, transgénero, travesti e intersexual) o disidente de sexo y género, esto es, el turista con identidad sexual y de género distinta a la heterosexual. Este trabajo presenta el planteamiento de una la investigación que determinará la influencia de las reglamentaciones hegemónicas heteronormativas, en las concepciones, valores, actitudes y prácticas de los prestadores de servicios turísticos del Estado de Sonora en la atención a clientes disidentes de sexo y género. Y está estructurado de la siguiente manera: Primero se muestra la revisión literaria, en este caso revisión bibliográfica que dará pie a iniciar la investigación que nos ocupa. Se han considerado los siguientes ejes temáticos. El turismo y su impacto social y económico la modalidad del turismo LGBTTTI como respuesta a una dinámica social que se transforma. La sexualidad como construcción social, el campo sexual de Hermosillo y la historia del discurso de discriminación y heterosexista en el estado de Sonora.

Después se muestra el planteamiento del problema, la hipótesis y los objetivos tanto generales como específicos del proyecto de investigación. Para concluir con una serie de afirmaciones que se sostienen a partir de la revisión bibliográficas y sustentará estudio socio antropológico de las concepciones, valores, prácticas y actitudes sobre sexualidad y género de los prestadores de servicios turísticos del estado de Sonora para la atención a clientes disidentes de sexo y género

## **REVISION LITERARIA**

El turismo es un fenómeno cuyo desarrollo debe ser prioritario en todas las naciones, principalmente por generar ingresos y empleos, entre otros factores que impactarán la economía de un país; su relevancia estriba en el peso económico que este sector aporta a la dinámica pública y privada. Así mismo, es una actividad que en los últimos años ha representado una gran oportunidad de crecimiento y desarrollo, lo que permite elevar la calidad y el nivel de vida de los habitantes de las zonas turísticas por lo señalado anteriormente: generación de empleos, desarrollo e ingresos para la sociedad, las empresas, sus miembros y en general para el país.

No obstante, dada la importancia económica del turismo, ha obligado a instituciones e investigadores a direccionar su estudio desde una perspectiva unidireccional: el turismo como una actividad económica. El Dr. Albert Blasco Peris, coordinador de los estudios de turismo y del congreso de ocio y turismo OCITUR 2012, (Peris, 2012) señala que es necesario exponer los impactos macroeconómicos para evitar que el ciudadano crea que del turismo sólo se benefician unos cuantos; infiere que deben determinarse y cuantificar los puestos de trabajo directo, indirecto e inducido que representan esta actividad. Así mismo, debe informarse cómo los ingresos por turismo han ayudado y continúan haciéndolo año tras año, a reducir el déficit de la balanza de pagos de nuestro país, una balanza estructuralmente deficitaria; y debe explicarse también, entre otros puntos, el elevado efecto multiplicador que tiene para nuestra economía. En definitiva, tenemos que la actividad turística y los turistas que nos visitan han influido, en gran manera, a que hoy seamos un país desarrollado y que disfrutemos de la sociedad del bienestar.

Sin embargo, es importante no solo considerar al turismo como un fenómeno con repercusiones económicas relevantes; es imprescindible resaltar la otra serie de beneficios y/o consecuencias que conlleva el desarrollo de la actividad turística; como consecuencia del turismo se estrechan los lazos de amistad y/o desacuerdos entre pueblos y personas de distintas regiones del planeta, tejidos culturales que se entrelazan; también se modifican la producción y la naturaleza del arte y artesanía local. Por lo que es importante, como señala Miguel Matute Peña, el hecho de que se haga necesario estudiar profundamente su impacto a niveles macrosocial y comunitario, debido a que el turismo puede provocar y causa determinados perjuicios y molestias a nivel comunitario, que pueden llegar a repercutir a nivel macrosocial y además existen posibilidades de potenciar la acción comunitaria en aras de aumentar la calidad de la oferta turística. (Matute Peña, Aguilar Macias , & Asanza Rubio , 2013)

Siendo el turismo un modelo para la promoción del desarrollo regional en países como México y por consiguiente en cada una de sus entidades federativas, tal es el caso del estado de Sonora; es indudable que su auge ha sido posible porque ha coincidido con la aparición de profundos cambios en la composición de la demanda turística, lo cual ha influido en cambios de políticas públicas y privadas en su práctica. La época de los 80's trajo consigo grandes cambios en la industria del turismo, las políticas neoliberales en México fijadas en el sexenio de Carlos Salinas de Gortari, trajeron grandes cambios en donde se enfatizaba la búsqueda por la inserción en el mercado mundial a través del apoyo a las políticas de turismo (Molina, 2012). De acuerdo a ese modelo de promoción del desarrollo regional de un país o una entidad federativa, el fenómeno del turismo ha adoptado diferentes vertientes o modalidades, según los estilos de vida y preferencia de los individuos que lo practican. En la época de los 80's el turismo de sol arena y playa seguía siendo la noción general del turismo; sin embargo, diversas modalidades empezaron a surgir, tales como el ecoturismo, los turismos de aventura, étnico, cultural, de salud, el sexual, entre otros (Molina, 2012).

Estas nuevas modalidades del turismo, en donde la evolución en los estilos de vida fueron provocados por el fenómeno de la modernidad, han creado nuevos patrones de consumo y éstos, nuevas formas de producción; podemos agregar que los estilos de vida evolucionan tras la incesante búsqueda de nuevas sensaciones, de objetos que producen satisfacción, de obtener lo anhelado, lo inalcanzable, de sentir el poder, de los aspectos provocados por la transformación misma, de cambios sociales que han motivado entre otras cosas, a una transformación de las relaciones de pareja y que cada vez sea mayor el número de personas que se identifican entre la diversidad, su identidad sexual y de género; por consiguiente, se define y establece un segmento de mercado significativo, esto llega a ser especialmente evidente en el mundo de los viajes y el turismo, por lo que surge el *Turismo Rosa*, también denominado *Turismo Gay*, *Turismo LGBT* o *Turismo LGBTTTI* ( El termino LGBTTTI es un acrónimo cuyo significado es el siguiente: lesbiana, es la personas gustan por tener parejas afectivas y sexuales del mismo sexo (mujer); gay, persona que gusta por tener parejas afectivas y sexuales del mismo sexo (hombre); bisexual, Hombre y mujer que tiene relaciones sexuales y afectivas con personas ambos sexos (mujer y hombre); transexual, persona con deseo de modificar rasgos sexuales primarios; transgénero personas que además de involucrar la imagen a través de la vestimenta implica la modificación de los rasgos sexuales secundarios; travesti, persona que manifiesta transgresión social, en la vestimenta y en los complementos de la misma, del género esperado socialmente en virtud a su sexo biológico; Intersexual , persona que nace con características sexuales cromosómicas, gonadales, genitales u hormonales que no coinciden con las categorías sexuales binarias de macho y hembra humano) (Núñez Noriega, 2011); en esta noción de turismo se busca satisfacer las necesidades de clientes cuya identidad sexual, forma de vivir y gozar su sexualidad disienten

del modelo hegemónico de la heterosexualidad construidas bajo el influjo del patrón binario (hombre-mujer).

Por lo que es factible suponer que el turismo LGBTTTI es una modalidad que no encaja dentro de las categorías de las normas sociales aceptables, todo esto se debe a que nuestras actuales instituciones sociales y políticas, fuertemente influenciadas por lo religioso, nos han enseñado a no reconocer y aceptar a las personas que se salen del patrón binario mencionado; dicho lo anterior, el turismo LGBTTTI hasta cierto punto ha sido sujeto de luchas constantes en la búsqueda de una igualdad política y social para el pleno goce de sus derechos humanos y reproductivos; por lo que se les define como *Turistas Disidentes de Sexo y Género*. Se estima que entre el 10 y 11% de la población nacional se identifica como LGBTTTI (Anodis, 2012) lo que significa que de cada 100 personas 11 se encuentran en alguna de las representaciones LGBTTTI; esto no significa que hoy en día las lesbianas, los homosexuales, los bisexuales, los transexuales, los transgénero, los travestis y los intersexuales se hayan multiplicado, simplemente se puede apreciar una interrelación social en donde las representaciones hegemónicas tienden a transformarse y dan paso a una interrelación social de respeto y apertura, esto conlleva si no a poner fin, por lo menos a minimizar la exclusión social histórica sufrida por hombres y mujeres en relación a su identidad sexual, su identidad de género y su orientación sexual.

En este sentido sería conveniente explorar si las transformaciones de esa interrelación social en donde las representaciones hegemónicas y los esquemas de comportamientos hetero-normativos se fracturan, son suficientemente sólidas para dar soporte a una sociedad que conciba a la sexualidad desde un enfoque basado en los derechos para el desarrollo, en lugar de reforzar las normas sociales que atenten contra los derechos humanos esenciales, que es la capacidad de decidir sobre su propia vida y cuerpo.

Se puede señalar que la cultura sonorenses ha mostrado eventos de rechazo a lo largo de la historia; usando como eje temático la negación del “otro” por el poder. En esta parte del estudio, los “otros” son los sujetos sociales proscritos en su momento por el estado político en Sonora tales como: jesuitas, españoles, filibusteros, yaquis, sacerdotes y chinos. Sujetos que por acciones deliberadas del estado y sus agencias, fueron materia de exclusión y escarmiento por considerarlos amenazantes a lo que los grupos de poder consideraban una sociedad ideal. (Grajeda Bustamante, 2003)

En Sonora, aun podemos observar y presenciar una ola de rechazo y repudio hacia las personas que disfrutan su sexualidad en formas distintas a la heteronormatividad. Cotidianamente escuchamos expresiones “no te vistas de rosita, te vas hacer puto”, “no llores, no seas marica”, “Ay florecita”, “no te pongas pantalón pareces machorra”, “primero muerto que puñal”. En algunos ocasiones podemos escuchar frases como la siguiente: A mi no me importa tu vida privada, ¡Ah, pero si te gusta la “chingadera” que yo no te vea!” Las expresiones anteriores pudieran reflejar el sentimiento que prevalece en nuestra sociedad en donde el problema es “el otro”; el otro que es el portador de los males, él inexistente. Esa división entre “nosotros” y ellos” está en la base de todos los actos de discriminación que seguimos presenciando en el día a día con las minorías sociales. La intención de plasmar estos antecedentes es la de asentar el maltrato y el abatimiento a la dignidad humana en las formas Estatales de operación, aunque también se muestran las resistencias de las actitudes del trato con el “otro”, de las experiencias de comprensión del “yo”; condicionadas a la comprensión de los demás como seres distintos, como minorías sin derechos civiles, y lo que es peor, sin derechos humanos.

Derechos humanos que se pueden ver violentados por el hecho de pertenecer a una minoría, a la minoría de las personas con identidad sexual distinta a la heteronormativas, dado que Guillermo Núñez Noriega en su obra *Sexo entre Varones Poder y Resistencia en el Campo Sexual* (1999); trabajo etnográfico realizado en Hermosillo Sonora, en donde significa los proyectos de la modernidad y posmodernidad que terminan construyendo identidades del otro sobre la cultura sexual, las prácticas homoeróticas y las relaciones de poder y resistencia que se tejen alrededor de la sexualidad; de igual forma, reconoce al conjunto de prácticas culturales elaboradas por individuos que participan en contactos eróticos con varones y se considera su importancia como elementos de resistencia en el medio cultural adverso. Así mismo, se reconoce la manera de representar la existencia sexual en las posiciones privilegiadas por los discursos hegemónicos, las heterosexuales y las formas de vivir la sexualidad de los grupos disidentes de sexo y género. Sin embargo, es importante mencionar que dicha investigación se realizó en un periodo comprendido de 1993 a 1999 y desde entonces no se han hecho estudios al respecto. Es un hecho que se han logrado cambios de repercusión social y política en el campo sexual de Hermosillo y sus representaciones hegemónicas pero por lo pronto es un estudio que constituye un referente importante para tomar en cuenta en este proyecto de investigación Estudio socio antropológico de las concepciones, valores, prácticas y actitudes sobre sexualidad y género de los prestadores de servicios turísticos del estado de Sonora para la atención a clientes disidentes de sexo y género.

De la misma forma, es importante examinar si los prestadores de servicios del turismo visualizan esta coyuntura de respeto y apertura, y a través de sus prácticas empresariales intentan emplear sus recursos administrativos para la generación y satisfacción de necesidades para el consumidor envueltos en actitudes hedónicas resultante de un proceso de modernización; de tal manera se implica que las personas LGBTTTI empiezan a obtener el reconocimiento de las organizaciones que regulan la práctica turística.

Tal como lo expone la Organización Mundial del Turismo (OMT), la cual durante los últimos tres años ha emitido “El reporte global del turismo LGBT”, y en el volumen 3 Javier Blanco, director del documento y miembro de la OMT sostiene:

*“Como los artículos de nuestros colaboradores demuestran en los últimos años muchos se han logrado avances en la legislación de todo el mundo para otorgar igualdad de derechos a las personas LGBT, lo que resulta en beneficios económicos a una gama de sectores, no menos importante al turismo. En efecto, el Código Mundial de la OMT para el turismo deja claro el turismo es un factor insustituible de auto educación, tolerancia mutua y aprendizaje sobre los diferencias legítimas entre los pueblos, las culturas y su diversidad. Sin embargo, no olvidemos que muchas más personas LGBT en todo el mundo siguen siendo víctimas de la represión y la homofobia.” (World Tourism Organization, 2012)*

Es esta última frase de Javier Blanco “Sin embargo, no olvidemos que muchas más personas LGBT en todo el mundo siguen siendo víctimas de la represión y la homofobia.” una de las razones principales de la presente investigación, porque la homofobia, la represión y la opresión que sufren las personas diversas en sexo y género son elementos que influyen en el campo sexual de los individuos; estos a su vez, pueden influenciar en las concepciones, valores y actitudes implantadas por los prestadores de los servicios turísticos del estado de Sonora.

El turismo ha sido considerado como un fenómeno estrechamente vinculado a un proceso de Desarrollo Regional, es decir, al crecimiento de una región, de una localidad o de una comunidad,

debido a su aporte en los indicadores económicos, políticos y sociales que se desarrollan dentro de la actividad turística, los cuales se ven reflejados en el progreso permanente y cambio social sostenido de cada individuo que reside en ella; razón por la cual es importante dar paso a una interrelación social de respeto, apertura y solidaridad a la diversidad sexual, lo que repercutirá en la disminución de la exclusión social histórica sufrida por hombres y mujeres en relación a su identidad sexual y de género, así como su orientación sexual, ya que sin este respeto y apertura es una quimera lograr el desarrollo de una región.

En lo anterior radica la relevancia de reconocer si la evolución, los cambios sociales y el propio desarrollo social han sido detonantes para un cambio progresivo en las prácticas administrativas del prestador de servicios de la industria turística del estado de Sonora o si las concepciones, valores y actitudes sobre sexualidad y género de los mismos, están diseñadas por las hegemonías de la heteronormatividad y el integrismo de género. En la actualidad, los empresarios están en constante evolución de sus prácticas administrativas en cuanto a la apertura de nuevos mercados o modificaciones de uso de un mercado existente, sin embargo, no hay investigación científica que señale específicamente cual es la influencia del discurso hegemónico del campo sexual, entendido esto la heteronormatividad y el integrismo de género, en la implantación de concepciones, valores, actitudes y prácticas las cuales organizan las prácticas de atención al cliente disidente en sexo y género.

Una narrativa histórica que da cuenta del maltrato y la quiebra a la dignidad humana del “otro”, en relación al “yo” ideal; hechos que aseguran que los sonorenses han sido testigos y partícipes en la historia de esta exclusión social de las minorías en el estado de Sonora; un fenómeno económico y social, denominado Turismo, inexplorado en la academia cuando se trata de las concepciones, valores, actitudes y prácticas empresariales del prestador de servicios turísticos en el estado de Sonora ante la atención del turista LGBTTTI, el conocimiento de cómo se desarrolla el campo sexual en Sonora, entre otras cosas, que señala que la forma única de representar la existencia sexual es la heterosexual, cuyo fin único es la reproducción. Son algunas de las razones principales para explorar esta temática en la búsqueda de soluciones ante sufrimientos innecesarios

De lo expuesto se derivan una serie de interrogantes que serán igualmente exploradas en el proceso de investigación, tales como: a) ¿Cuáles son los discursos o ideologías sexuales y de género presentes en los prestadores de servicios turísticos?; b) ¿Permiten estos discursos e ideologías la atención adecuada de sus clientes disidentes de sexo y género, sin discriminación?; c) ¿Qué experiencias de turismo de clientes disidentes en sexo y género han existido en el estado de Sonora?

#### Planteamiento del Problema

*Enunciado del problema:* El tema del *Estudio socio antropológico de las concepciones, valores, prácticas y actitudes sobre sexualidad y género de los prestadores de servicios turísticos del estado de Sonora para la atención a clientes disidentes de sexo y género* (Para fines de este trabajo se utilizará el término “disidente de sexo y género” para referir a las personas que precisan una lucha constante en la búsqueda de un plano de igualdad social y legal en oposición de la respuesta cultural social y política dentro del campo sexual concebido dentro del binarismo sexual de género y erotismo) se abordará desde los siguientes ejes temáticos: a) La discriminación por razones de disidencia sexo-genérica a nivel estatal; b) Las concepciones, valores y actitudes presentes en los empresarios que les permiten a los responsables de las instituciones

gubernamentales, generar políticas públicas adecuadas para la atención sin discriminación a los clientes disidentes de sexo y género .

### Preguntas de Investigación

*Las preguntas de investigación que acompañarán el presente estudio son:* ¿Cuáles son las concepciones, valores y actitudes de los prestadores de servicios turísticos hacia la sexualidad y el género y la disidencia sexo-genérica? ¿Las concepciones, valores y actitudes de los prestadores de servicios turísticos hacia la sexualidad y el género y la disidencia sexo-genérica organizan las prácticas de atención al cliente disidente en sexo y género? ¿Cuál es la influencia que tiene el discurso hegemónico del campo sexual, entendido como esto la heteronormatividad (Heteronormatividad: es un concepto de Michael Warner según lo cita Valeria Flores y hace referencia “al conjunto de las relaciones de poder por medio del cual la sociedad se normaliza y se reglamenta en nuestra cultura y las relaciones heterosexuales idealizadas se institucionalizan y se equiparan con el significado de ser humano y comprende ...”aquellas instituciones, estructuras de comprensión y orientaciones prácticas que hacen no solo que la heterosexualidad parezca coherente –es decir, organizada como sexualidad– sino también que sea privilegiada. Su coherencia es siempre provisional y su privilegio puede adoptar varias formas(que a veces son contradictorias):pasa desapercibida como lenguaje básico sobre aspectos sociales y personales; se la percibe como un estado natural; también se proyecta como un logro ideal o moral. No consiste tanto en normas que podrían resumirse en un corpus doctrinal como en una sensación de corrección tacita e invisible– que se crea con manifestaciones contradictorias –a menudo inconscientes–, pero inmanentes en las prácticas y en las instituciones” (Flores, 2008)) y el integrismo de género, en la implantación de esas concepciones, valores y actitudes? ¿El discurso hegemónico actual del campo sexual permite a los prestadores de servicios turísticos emplear los recursos empresariales en la generación y satisfacción de necesidades para el turista disidente de sexo y género?

### Hipótesis de Investigación

El estudio se desarrollará desde una perspectiva antropológica, lo que permitirá tener una visión completa de las ideologías y pensamientos de los sujetos dedicados a la industria turística; por lo que intentará sustentar el supuesto de Investigación: Las concepciones, valores, actitudes y prácticas sobre sexualidad y género de los prestadores de servicios turísticos reproducen los discursos hegemónicos del campo sexual, esto es la heteronormatividad y el integrismo de género. Esto les impide atender de manera adecuada a los turistas con una identidad sexual o de género disidente.

### Objetivos

*Objetivo general:* Analizar la influencia que tiene el discurso hegemónico del campo sexual en la implantación de las concepciones, valores y actitudes sobre sexualidad y género que rigen las prácticas de los prestadores de servicios turísticos para la atención al cliente disidente en sexo y género en el estado de Sonora.

*Objetivos Específicos:* Describir las concepciones, valores y actitudes de los prestadores de servicios turísticos hacia la sexualidad y el género y la disidencia sexo-genérica. Describir experiencias concretas existentes en el estado de Sonora del turista disidente en sexo y género. Identificar la influencia que tiene el discurso hegemónico del campo sexual en la implantación de las concepciones, valores y actitudes sobre sexualidad y género que rigen las prácticas de los

prestadores de servicios turísticos para la atención al cliente disidente en sexo y género en el estado de Sonora Analizar los elementos del discurso hegemónico del campo sexual que puede influenciar en las concepciones, valores y actitudes implantadas en los prestadores de servicios turísticos.

*Los resultados de este estudio permitirían:* Precisar las competencias necesarias de los empresarios del sector turismo para la atención y servicio al turismo disidente en sexo y género. Desarrollar protocolos estandarizados para la atención y servicio cubriendo las expectativas de un turismo disidente sexo-genérica; además de diseñar estrategias administrativas adecuadas para su práctica, los cuales darán oportunidad en colocar al estado de Sonora como un estado abierto a los nuevos circuitos de la dinámica del turismo. Sentar las bases para diseñar políticas públicas que permitan un crecimiento óptimo a la industria del turismo, así como el diseño de leyes que favorezcan al individuo en el reconocimiento de un ente social digno sin importar su diversidad sexual y cultural.

## **METODOLOGÍA**

Tal como se señaló en el planteamiento en el apartado anterior, el objetivo de este trabajo, considerado bajo el paradigma de la investigación cualitativa, es analizar la influencia que tiene el discurso hegemónico del campo sexual en la implantación de las concepciones, valores y actitudes sobre sexualidad y género que rigen las prácticas de los prestadores de servicios turísticos para la atención al cliente disidente en sexo y género en el Estado de Sonora y para conseguirlo se realizará investigación cualitativa, utilizando la etnografía como método de investigación y como técnicas se utilizará observación, observación participante y entrevista semiestructurada. Las Unidades de estudio serán las practicas del servicio administrativo, protocolos institucionales, concepciones valores, actitudes, percepciones del prestador de servicio de las empresas turísticas.

La población a considerar son prestadores del ramo hotelero-restauranero, bares y discotecas de los siguientes municipios, Hermosillo, Guaymas y Puerto Peñasco. Una vez delimitando nuestro campo de acción es importante señalar que se realizará la investigación en las siguientes unidades de análisis: las empresas de los prestadores de servicios del sector turismo del estado de Sonora. Se tomará como base el 5% de hoteles y equipamientos turísticos ( como restaurantes, discotecas/bares y agencias de viajes). Es importante aclarar que ese porcentaje de muestra podrá variar (disminuir o aumentar) hasta lograr el punto de saturación, es decir, cuando a partir de una cantidad determinada de unidades y sujetos de estudio los nuevos casos tiendan a repetir –saturar- el contenido del conocimiento anterior. Los sujetos de estudio de los hoteles son: meseros, recepcionistas, camaristas jefe de reservaciones, gerentes de hoteles; de los restaurantes: hostess meseros, gerentes; de discotecas y bares: meseros, gerentes, personal de seguridad y los Turistas LGBTTI. El análisis se hará a través de un análisis manual de los reportes de notas descriptivas, y notas analíticas

## **CONCLUSIONES**

De la revisión bibliográfica que se realizó para construir el Estado del Arte del proyecto de investigación y dar inicio a la misma se puede concluir lo siguiente: El turismo es un fenómeno social y económico con relevante importancia para la economía de una región así como para la dinámica de las relaciones interpersonales que influye a los procesos de aculturación tanto como para el visitante como para la comunidad receptora. Así mismo, el turismo es un fenómeno en constante transformación, siguiendo la dinámica de la sociedad. Como resultado de estos cambios

surgen diferentes alternativas del turismo en las que se incluye el turismo LGBTTTI (lesbiana, gay bisexual, transexual, transgénero, travesti e intersexual) o disidente de sexo y género, esto es, el turista con identidad sexual y de género distinta a la heterosexual. El turismo LGBTTTI es una modalidad de turismo con relevante derrama económica para la entidad receptora. Un eje esencial para el análisis del turismo homosexual es: la sexualidad la cual es una construcción social y tiene una importancia fundamental que esta intrínseca en la vida de todos los seres humanos; es mucho más que el acto sexual, se trata de una constelación de significados y prácticas que son parte de nuestra experiencia cotidiana del mundo la sexualidad; no es algo fijo o igual para todas las personas es inherentemente social en forma de muchos factores, que incluyen las creencias religiosas, las leyes, los contextos históricos, culturales, económicos y sociales en que las personas viven sus vida.

En Hermosillo municipio del estado de Sonora existe un discurso hegemónico construido por discursos ortodoxos de tintes médicos-religiosos en el campo sexual, al cual se le oponen algunos otros discursos heterodoxos procedentes de las vanguardias artísticas o de organizaciones sociales que enarbolan una noción de derechos sexuales. El amor y el enamoramiento tienen un carácter exclusivamente heterosexual en las representaciones hegemónicas; el único fin válido para satisfacer el deseo sexual es la reproducción y la heterosexualidad es la única relación normal para ello. El estado de Sonora es un región en donde aún se puede observar y presenciar una ola de rechazo y repudio hacia las personas que disfrutan su sexualidad en formas distintas a la heteronormatividad debido a que existe una división entre “nosotros” y ellos” está en la base de todos los actos de discriminación que seguimos presenciando en el día a día con las minorías sociales. Con los hallazgos encontrados en la revisión bibliográfica nos permite adentrarnos a esta investigación y determinar si las concepciones, valores, actitudes y prácticas sobre sexualidad y género de los prestadores de servicios turísticos reproducen los discursos hegemónicos del campo sexual, esto es la heteronormatividad y el integrismo de género. Esto les impide atender de manera adecuada a los turistas con una identidad sexual o de género disidente.

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# RELACIÓN DEL CLIMA ORGANIZACIONAL Y LA SATISFACCIÓN LABORAL EN UNA PEQUEÑA EMPRESA FAMILIAR

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## RESUMEN

*El presente trabajo de investigación se llevó a cabo con la finalidad de conocer la relación que existe entre el clima organizacional y la satisfacción laboral de los trabajadores administrativos y operativos de una Pequeña Empresa Familiar de la industrial metal-mecánica ubicada en Monclova, Coahuila, a fin de proporcionar al directivo de la empresa, sugerencias de cambio, de reforzamiento y/o de mejora.*

*Para la realización de este estudio se determinó que la Muestra fuese por consenso, formada por 20 trabajadores a quienes se les aplicó un cuestionario estructurado, tipo escala de Likert, para diagnosticar el clima organizacional se utilizó el Modelo Organizacional de Seis Casillas de Weisbord (1976), compuesto por 35 ítems correspondiente a 7 variables, y para medir la satisfacción laboral se rediseño el instrumento de JSS de Spector (1985), que consta de 40 reactivos considerándose 10 variables. El análisis de fiabilidad de los cuestionarios arroja un coeficiente de alpha de Cronbach para la escala de satisfacción laboral y de clima organizacional de 0.89 y 0.851 respectivamente.*

*Una vez tabulados los datos, el tratamiento estadístico consistió en calcular Frecuencias, Medias, Coeficientes de Contingencia y Niveles de Significancia, usando el programa SSPS (versión 17.0).*

**PALABRAS CLAVE:** Satisfacción, Satisfacción Laboral, Motivación, Clima Organizacional

## RELATIONSHIP OF ORGANIZATIONAL CLIMATE AND JOB SATISFACTION IN A SMALL FAMILY BUSINESS

### ABSTRACT

*The present research work was carried out in order to know the relationship between organizational climate and job satisfaction of administrative and operational workers a Small Family Business of the metalworking industry located in Monclova, Coahuila, in order to provide the company's management, suggestions for change, strengthening and / or improvement. For this study the sample was determined by consensus was formed by 20 workers who were administered a structured questionnaire, Likert-type scale to diagnose organizational climate Organizational Model was used Weisbord Six Casillas (1976), consisting of 35 items corresponding to 7 variables, and to measure job satisfaction JSS redesign the instrument Spector (1985), consisting of 40 reagents considered 10 variables. Reliability analysis of questionnaires yielding a Cronbach's alpha coefficient for the scale of job satisfaction and organizational climate of 0.89 and 0.851 respectively. Once tabulated data, statistical treatment consisted of calculating frequencies Stockings Contingency Coefficients and Significance Levels using the SSPS software (version 17.0).*

**KEYWORDS:** Satisfaction, Job Satisfaction, Motivation, Organizational Climate

## INTRODUCCIÓN

El clima organizacional en la actualidad es de interés para casi todas las empresas familiares, por su influencia en los procesos organizacionales y psicológicos como la comunicación, la toma de decisiones, la solución de problemas, el aprendizaje, la motivación y, por ende, su influencia en la eficiencia de la organización y en la satisfacción de sus miembros. Por ello, es necesario que éstas se encuentren en óptimas condiciones desde el interior de las mismas, en donde exista satisfacción de su personal, y que impacte en la productividad. Chiang et al (2010) refiere que el clima organizacional y la satisfacción laboral son variables que se relacionan con el bienestar de las personas en su trabajo, su calidad de vida laboral y que, en consecuencia afectan su desempeño. Algunas investigaciones han señalado que es más probable obtener mejores resultados laborales en alto desempeño, compromiso o cooperación, cuando las personas se sienten parte de un grupo de trabajo con un clima organizacional satisfactorio, y perciben que tienen las competencias adecuadas para desarrollar su trabajo y cuando son recompensadas y reconocidas como agentes significativos de los resultados organizacionales.

El realizar un diagnóstico de Clima Organizacional, permite generar conocimientos de utilidad en la implementación de cambios planificados que impacten en las actitudes y conductas de los integrantes, como en la estructura organizacional. Ya que el Clima organizacional influye en la actuación de los integrantes de la empresa, a través de la perspicacia que tienen de múltiples factores de la realidad laboral, como pueden ser los niveles de autoridad, comunicación, colaboración, condiciones de trabajo, entre otros. El tema de esta investigación está centrado en conocer la relación del clima organizacional y la satisfacción laboral de los trabajadores administrativos y operativos de una Pequeña Empresa Familiar de la industrial metal-mecánica ubicada en Monclova, Coahuila.

## REVISIÓN LITERARIA

La pequeña empresa en estudio, es de origen familiar la cual fue fundada en el año de 1998, y a la fecha está conformada por 20 trabajadores; 4 de ellos es personal administrativo y 16 operativos; a nivel gerencial existe un Director (fundador y dueño de la empresa), el cual se apoya de su hijo quien es soporte en las actividades claves de la organización. Navarrete (2008) expresa que en una empresa familiar es “la propiedad que está en manos de uno o más miembros de un grupo familiar y en consecuencia, su dirección y la sucesión estarán influenciadas por dicha familia”. Ramírez y Fonseca (2010) la describen como una organización donde la familia posee todas las partes, los miembros familiares ocupan posiciones gerenciales y donde miembros de varias generaciones se encuentran involucrados en el negocio. La investigación del clima organizacional ha adquirido gran importancia en nuestros tiempos, nos permite examinar situaciones para lograr el máximo beneficio para la empresa y el trabajador. En este sentido, en las empresas familiares debe prevalecer un clima organizacional en el que el ambiente de trabajo permita a los trabajadores sentirse satisfechos por su labor en la empresa; así, estos establecen un compromiso más fuerte hacia la organización.

### Clima Organizacional

Salgado, et al (1996) exponen que en los últimos treinta años ha sido publicada una considerable cantidad de investigaciones sobre el Clima Organizacional y la Satisfacción Laboral (ver Locke, 1976, 1984; Brunet, 1983) y que tal volumen de estudios se justifica, entre otras razones, por la relación entre el Clima Organizacional y la Satisfacción Laboral de los empleados con la

productividad. La teoría de Litwin y Stringer (1968) intenta explicar importantes aspectos de la conducta de los individuos que trabajan en una organización utilizando los conceptos como motivación y clima. Los autores tratan de describir los determinantes situacionales y ambientales que más influyen sobre la conducta y percepción del individuo. El clima organizacional para García (2003) representa las percepciones que el individuo tiene de la organización para la cual trabaja y la opinión que se ha formado de ella en términos de variables o factores como autonomía, estructura, recompensas, consideración, cordialidad, apoyo, apertura, entre otras.

### Satisfacción Laboral

Peiró (2000) citado por Cuadra y Veloso (2007) menciona que la satisfacción laboral es la actitud ante el trabajo que más atención ha recibido por parte de la investigación y aunque el estudio de su naturaleza y sus causas comienzan en 1935 con Hoppock. Así, el estudio de la satisfacción laboral se enmarca en la concepción de las actitudes hacia el trabajo junto con el compromiso organizacional y la implicación laboral, aseguran Peiró, González R., Bravo y Zurriaga (1995) quienes la definen como una actitud o conjunto de actitudes desarrolladas por la persona hacia su situación de trabajo Chiang y Ortega (2011).

La motivación es anterior a la satisfacción al ser previa al trabajo, pero una vez que este se realiza, el grado de satisfacción que reporte influirá en la dinámica interactiva de la motivación; a su vez, ésta, como orientadora de la acción, incide en la satisfacción laboral en tanto se relaciona las expectativas con los resultados de la conducta laboral y se evalúe su grado como suficiente y satisfactorio. Ramírez, et al (2008).

### Modelos de Diagnostico Organizacional

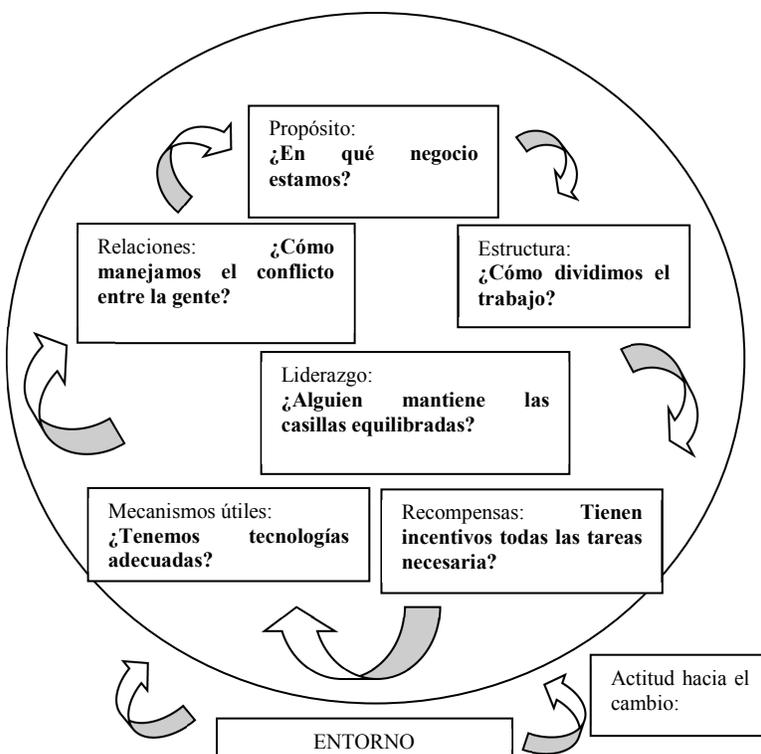
Chagala (2011) señala que los modelos de diagnóstico buscan estructurar el estudio de la organización. El modelo tiene el propósito de explicar el funcionamiento de la organización, de sus elementos centrales y de las formas de relación entre estos elementos. “Un modelo se encuentra formado por un conjunto de variables y conceptos interrelacionados de tal forma que permite dar una explicación coherente del funcionamiento organizacional” Rodríguez, (2001) citado por Chagala (2011). Para fines de estudio solo se tomaran en cuenta los modelos que están orientados al comportamiento humano. “Esos modelos tienen como misión comprender lo que los empleados hacen o dejan de hacer, no lo que realizan otros recursos como las máquinas” (Burke, 1988). Los modelos orientados al comportamiento humano: Modelo de seis casillas de Marvin Weisbord, Modelos de Congruencia de David Nadler y Michael Tushman, Modelo pragmático emergente de Harvey A. Hornstein y Noel M. Tichy, Modelo de contingencia de Paul Lawrence y Jay Lorsch, Modelo de desempeño organizacional de David Hanna y Modelo de las 7 S. Para efectos de esta investigación y debido a las necesidades de la organización se selecciona el Modelo de Weisbord porque facilita el diagnóstico de Clima Organizacional. El Modelo de las seis casillas de Marvin Weisbord se describe “como una pantalla de radar, señales luminosas que nos hablan de los puntos sobresalientes de la organización y de sus aspectos buenos y malos y sobre todo nos ayuda a visualizar la realidad”. (Burke, 1988).

### Teorías de Motivación

La motivación laboral ha sido objeto de estudio constante desde unos años antes que la satisfacción laboral; en los años cincuenta surgen teorías sobre la motivación hoy fuertemente consolidadas, mientras que hasta los años sesenta no hay un desarrollo significativo del estudio sobre la satisfacción laboral SATW (1984) citado por Ramírez, et al (2008). Unas de las teorías

motivacionales que nos ayuda a interpretar la satisfacción laboral del personal de la empresa objeto de estudio, es la teoría de Motivación e Higiene de Herzberg. Salgado, et al. (1996) realizaron una investigación sobre la satisfacción laboral y el clima organizacional de una pequeña empresa española, los resultados encontrados sugieren que, los estudios de diagnóstico del clima organizacional se investiguen y analicen separadamente clima y satisfacción ya que podrían tener efectos diferenciales sobre la productividad laboral (rendimiento, abstención, rotación, accidentes, etc.). Juárez-Adauta (2012) realizó una investigación en determinar la relación entre el clima organizacional y la satisfacción laboral en el personal de una institución de salud, se encontró que ambos índices presentaron alta correlación positiva entre la satisfacción laboral y mejor clima organizacional. Es decir, que un clima organizacional favorable va a condicionar una mayor calidad en la vida de los integrantes de la institución de salud y por ende, una mejora sustancial en la prestación de servicios al derechohabiente.

Figura 1: Modelo de las Seis Casillas de Marvin Weisbord



En esta figura se muestra el Modelo de las Seis Casillas de Marvin Weisbord donde se citan las seis variables que se miden: Propósitos, Estructura, Relaciones, Recompensas, Liderazgo y Mecanismos auxiliares; y incluyendo una variable adicional llamada Actitud hacia el cambio, formula preguntas clave de diagnóstico para cada una de las variables.

## METODOLOGÍA

El diseño metodológico corresponde a una investigación de campo, transversal, mixta (cuantitativa y cualitativa) y de tipo descriptivo. La Muestra se determinó por consenso ya que incluye a la población total de los trabajadores de una pequeña empresa familiar de la industria metal - mecánica objeto de estudio: un total de 20 sujetos (4 del personal administrativo y 16 del personal operativo). Para realizar el diagnóstico de clima organizacional el instrumento que se usó es el Modelo de Weisbord (1976) compuesto por 35 ítems correspondiente a 7 variables. A continuación se presenta en la tabla 1 la operacionalización de las variables.

Tabla 1: Operacionalización de Variables del Clima Organizacional

Variable	Indicadores	Preguntas
Propósito	Claridad de la meta y si los trabajadores apoyan el propósito de la organización.	1, 8, 15, 22, 29
Estructura	Es la disposición y orden de las partes dentro de un todo.	2, 9, 16, 23, 30
Liderazgo	Aceptación del jefe, reconocimiento de ser competente, trato justo, atención en sentimientos de sus subordinados.	3, 10, 17, 24, 31
Relaciones	Relaciones cordiales, vínculos amistosos, reconocimiento y respeto de la personalidad humana.	4, 11, 18, 25, 32
Recompensas	La recompensa es a través de incentivos o en su caso un castigo.	5, 12, 19, 26, 33
Mecanismos Útiles	Planeación, control, presupuestos y los demás sistemas de información, como las Tic's.	6, 13, 20, 27, 34
Actitud hacia el Cambio	Organizaciones que son capaces de cambiar en un futuro, implementar un sistema de administración, mejoramiento de la calidad.	7, 14, 21, 28, 35

En esta tabla se muestra la Operacionalización de variables consideradas en el instrumento de medición del clima organizacional

Para medir la satisfacción laboral se aplicó como instrumento de medición una escala que se rediseñó en base al JSS, Job Satisfaction Survey de Spector (1985) que consta de 36 ítems, 4 de cada una de 9 variables, a la que se le agregó una variable denominada *Condiciones del área de trabajo* que contiene 4 reactivos, ya que el cuestionario de Spector no incluye este factor, considerado importante. Así pues, el instrumento modificado y elaborado, es estructurado, tipo escala de Likert, que consta de 40 reactivos correspondientes a 10 variables. La operacionalización de las variables se presenta en la tabla 2.

Para determinar la confiabilidad de los instrumentos los resultados fueron sometidos a la prueba Alfa de Cronbach, obteniéndose el 0.851 y 0.89, para el clima organizacional y la satisfacción laboral respectivamente. El objetivo de la presente es conocer la relación que existe entre el clima organizacional y la satisfacción laboral de los trabajadores administrativos y operativos de una Pequeña Empresa Familiar de la industrial metal-mecánica ubicada en Monclova, Coahuila. Una vez tabulados los datos, el tratamiento estadístico consistió en calcular Frecuencias, Medias, Coeficientes de Contingencia y Niveles de Significancia, usando el programa SSPS (versión 17.0).

## RESULTADOS

En respuesta a los reactivos de las características demográficas se procedió, en primera instancia, a establecer los rangos de edad, de antigüedad y de nivel de estudios, calculando las frecuencias; observándose que el 50% de los trabajadores se encuentran en el rango de 31 a 50 años; mientras que el 35% con una antigüedad de 3 a menos de 5 años de servicio; y con respecto al nivel de estudios, se encontró que el 40% de los trabajadores han cursado la carrera Técnica seguidos por 30% de trabajadores cuenta con estudios de Secundaria.

Tabla 2: Operacionalización de Variables de la Satisfacción Laboral

Variable	Indicadores	Preguntas
Sueldos / Salario	Pago otorgado por el trabajo realizado, que sea justo y congruente con la valorización del mismo, oportunidad de aumento salarial.	1, 11, 21, 31
Promoción	Oportunidades y frecuencia de ascenso y de progreso.	2, 12, 22, 36
Supervisión	Aceptación del jefe, reconocimiento de ser competente, trato justo, atención en sentimientos de sus subordinados.	3, 13, 23, 33
Beneficios	Otorgamiento equitativo de bonos de despensa, premios de asistencia y puntualidad, prestaciones y otros.	4, 14, 24, 32

Recompensas Contingentes	Aprecio, reconocimiento y recompensas por el buen trabajo.	5, 15, 25, 35 6, 16, 26, 34
Políticas y Procedimientos operativos	Políticas, reglas y procedimientos operativos.	
Compañeros de trabajo	Relación con las personas con quienes trabaja.	7, 17, 27, 37
El trabajo en sí	Significado, gusto y orgullo por el trabajo que se realiza.	8, 18, 29, 38
Comunicación	Formas de Comunicación establecidas dentro de la organización, con directivos, jefes y compañeros.	9, 19, 28, 39
Condiciones en el área de trabajo	Condiciones de seguridad, de equipo, herramientas, instalaciones eléctricas, iluminación y ventilación.	10, 20, 30, 40

*En esta tabla se muestra la Definición y Operacionalización de variables consideradas en el instrumento de medición*

Facilitar el análisis de los resultados de este estudio, se dispuso determinar rangos a las 6 opciones de respuesta (1 y 2- Desacuerdo; 3 y 4-Levemente De Acuerdo; 5 y 6-De Acuerdo), para el clima organizacional y la satisfacción laboral. Como se puede observar, las Medias globales de las siete Variables comprendidas en el cuestionario de Weisbord para diagnosticar el clima organizacional aplicado a los 20 sujetos que conforman la Muestra de la pequeña empresa objeto de estudio, se presentan en la Tabla 3, es decir que el promedio de respuestas dadas por el personal de la pequeña empresa, fue estar *Levemente de acuerdo*. Las Medias más altas corresponden a las variables de *Relaciones, Estructura y Liderazgo*, mientras la variable con la Media más baja es la de *Actitud hacia el Cambio*. Así pues, las Medias de la mayoría de los factores se ubican en la categoría de *mediana satisfacción*, ya que la variable *El trabajo en sí* seguida por la de *Promoción* son las que más influyen en el nivel de satisfacción y se encuentra en los factores motivadores. Y en cuanto a los factores higiénicos la variable que más influye es la de *Sueldos/Salarios* seguida por la de *Supervisión*.

En cuanto los coeficientes de contingencia indican que existe una relación significativa entre la variable de *Estructuras* y la variable *Recompensas Contingentes*, lo cual muestra el trabajador conformidad respecto a las prestaciones otorgadas voluntariamente por el patrón y está conforme con la división del trabajo. Por otro lado, se aprecia que hay una asociación entre la variable *Recompensas* y las variables de *Promoción* y *Compañeros de Trabajo*, lo cual revela que el trabajador está satisfecho con las oportunidades de ascenso y percibiendo adecuadas relaciones con las personas con quienes convive en el trabajo. Por último se observa que existe una relación significativa entre la *Actitud hacia el Cambio* y la variable *Comunicación*, esto es indicativo de que el trabajador considera favorable las formas de comunicación utilizadas en la relación con directivos, jefes y compañeros; por lo cual esto motiva a aceptar los cambios que se presenten en la empresa

## CONCLUSIONES

Los resultados obtenidos en la presente investigación reportan que los trabajadores administrativos y operativos de la empresa objeto de estudio, presentan, en general, perciben el clima organizacional, en el cual reportan que cuentan con la herramienta, maquinaria y equipo necesarios para hacer las tareas que les corresponden y que comprenden la distribución de actividades, responsabilidades y funciones entre todos los niveles del personal, así como están de acuerdo con las formas de ejercer la autoridad. En cuanto a la satisfacción, se puede apreciar que los trabajadores manifiestan estar a gusto y orgullosos por el trabajo que realizan y que éste es importante, que los sueldos que perciben son los adecuados y que el reconocimiento que reciben por su desempeño proviene tanto de parte de los compañeros como del jefe. Tienen más

posibilidades y oportunidades de obtener un ascenso (probablemente debido a que el personal operativo tiene experiencia en las tareas a desempeñar y que no son muy específicas).

A su vez, reportan que la está bien definida la distribución de las tareas, responsabilidades y funciones a llevar a cabo cada trabajador en todos los niveles; los beneficios que reciben (paquete de gratificaciones y los sistemas de incentivos) son de acuerdo a los niveles de cada uno de los trabajadores, así como las oportunidades de obtener un ascenso; y la comunicación con los compañeros son adecuadas y que el reconocimiento que reciben por su desempeño proviene tanto de parte de los compañeros como del jefe. Por último proporcionar retroalimentación a los directivos de la empresa objeto de estudio, se entregará un informe con los resultados obtenidos de acuerdo a las respuestas otorgadas por los trabajadores. Se incluirá, además, una propuesta con estrategias de mejora, de reforzamiento y/o de cambio, aprovechando las áreas de oportunidad.

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# ESTUDIO DE FACTIBILIDAD FINANCIERA EN UNA EMPRESA MAQUILADORA DE PLÁNTULAS DE SANDÍA EN EL VALLE DEL YAQUI

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## RESUMEN

*En la actualidad para la implementación de cualquier negocio es necesario llevar a cabo algunos análisis de tipo cuantitativos que sirven para determinar su rentabilidad y en base a ello, tomar una decisión de aceptar o rechazar un proyecto para su inversión. La presente investigación se realizó en una empresa productora de plántulas de sandía en el Valle del Yaqui para conocer la viabilidad, técnica, económica y financiera de un proyecto de inversión y al mismo tiempo contribuir a solventar las necesidades de material vegetativo a los productores de estas hortalizas para llevar a cabo sus siembras con oportunidad. Con el propósito de incursionar en el mercado de la producción de plántulas de sandía, así como la de contar con los elementos suficientes para conocer la factibilidad técnica, económica y financiera y competir con éxito en el mercado de las hortalizas, surge la siguiente interrogante: ¿Cuál es la viabilidad técnica, económica y financiera para un proyecto de producción de plántulas de sandía en el valle del yaqui?. Para dar respuesta a la pregunta se realizó un análisis hacia el exterior, donde se detectaron las necesidades de un mercado potencial insatisfecho en la adquisición de plántulas de sandía, y un análisis al interior de la empresa para determinar los costos de producción, ingresos por ventas y precio por unidad para elaborar un plan financiero dando como resultado indicadores positivos que determinaron la viabilidad técnica, económica y financiera del presente proyecto.*

**PALABRAS CLAVES:** Factibilidad Económica y Financiera, Valor Presente Neto, Tasa Interna de Retorno, Índice de Rentabilidad, Valle del Yaqui

## FINANCIAL FEASIBILITY STUDY ON A FACTORY-WORK COMPANY OF WATERMELON SEEDLING IN THE YAQUI VALLEY

### ABSTRACT

*Nowadays, for the implementation of any business is necessary to execute some quantitative type analysis used to determine its profitability, based on that make a decision to accept or reject a project for investment. This research was conducted in a company which produces watermelon seedlings in the Yaqui Valley for the feasibility, technical, economic and financial management of an investment project, at the same time contribute to solve the needs of vegetative material to the producers of these vegetables to carry out their sowings with opportunity. With the purpose of inroad the market of the production of watermelon seedlings, as well having the enough elements to know the technical, economic and financial feasibility, and also compete successfully into the vegetables market, the following questions arises: ¿ Which is the technical, economic and financial feasibility for a production project of watermelon seedlings in the Yaqui Valley?. In response to this question, an outwards analysis was performed, where the unfulfilled needs of a*

*potential market were detected of the watermelon seedlings acquisition, and an inward analysis at the company to determine production costs, sales revenue and unit per price to elaborate a financial plan giving as a result positive indicators which defines the technical, economic and financial feasibility of this project.*

**JEL:** Q14, R11

**KEYWORD:** Financial Economic Feasibility, Net Present Value, Internal Rate of Return, Profitability Index and Yaqui Valley

## **INTRODUCCIÓN**

En la actualidad existen varias herramientas que nos ofrece la tecnología para hacer negocios y en cualquier lugar donde se encuentre uno, siempre hay a la mano una serie de productos o servicios proporcionados por el hombre. Todos y cada uno de estos productos y servicios antes de ser comercializados, tienen que ser evaluados desde varios puntos de vista, con un objetivo final, la de satisfacer una necesidad humana. Después de ello, alguien tiene que realizar una inversión económica para producirlo en masa, por lo tanto, siempre que exista una necesidad humana de un bien o servicio habrá necesidad de llevar a cabo algunos análisis exhaustivos para determinar si es rentable económica y así poder tomar la decisión de realizar o no una inversión.

Las buenas oportunidades para los Agronegocios en México se encuentran en cultivos que generan mayor valor y rendimiento por hectárea, ya que los tradicionales, como el trigo, maíz, cártamo, tienen bajos rendimientos y requieren de grandes extensiones agrícolas además, que tanto las frutas y hortalizas son las que representan buenas oportunidades de negocios debido a que se pueden obtener excelentes rendimientos en pequeñas parcelas y son intensivas en la generación de mano de obra, aspecto positivo para cualquier país. (Agro Sonorense revista. 2009). El cultivo de la sandía son las opciones representativas de siembras en el valle del yaqui, valle del mayo y Guaymas-Empalme siendo éste último donde se concentra el mayor número de hectáreas por ciclo agrícola en el estado de Sonora. La comercialización se realiza al mercado de consumo nacional e internacional.

## **REVISIÓN DE LITERATURA**

La sandía es originaria del Este de África (Valle del Nilo), donde es muy valorada y utilizada como fuente de líquido en estaciones secas cuando hay poca disponibilidad de agua, se cultiva en todos los países del mundo que poseen climas cálidos y pocos lluviosos, siendo los principales países productores la República Popular China, Honduras, Costa Rica, Guatemala, Brasil, España, Egipto, Irán, Israel y Marruecos. (FAO, 2012). Menciona además que el nombre científico es: *Citrillus lanatus*, *Citrillus vulgaris*, pertenece a la familia de las Cucurbitáceas, dicotiledónea, planta anual, monoica cubierta de vello de tallo herbáceo tendido, hojas esparcidas, ásperas, lobadas u oblonga de 10 a 12 centímetros de longitud. Sus flores son axilares color amarillo y tamaño mediano, solitario y unisexual en la misma planta, sus frutos grandes de 10.5 a 20 kgs. Color verde brillante, alargados o redondos, su pulpa roja o amarilla olorosa y acuosa con semillas de color negro, blancas abundantes.

En la actualidad toda empresa moderna tiene propósitos fundamentales que se enmarcan en los sectores económicos y sociales dentro de los cuales se puede mencionar la maximización de los beneficios y minimización del riesgo, preservar su situación y crecer a través del uso de sus

propios beneficios, servir a la sociedad, es decir satisfacer necesidades de sus clientes con trato justo con sus proveedores, pagar impuestos al estado para contribuir al desarrollo del mismo y el más importante que es la Rentabilidad. (Gitman,2007). Los gerentes de empresas tienen la responsabilidad primordial de generar recursos así como la de dirigir proyectos que maximicen el valor de la organización por lo que ellos echan mano de la administración financiera la cual constituye un desafío con diversas oportunidades profesionales en los campos de la administración financiera corporativa, la banca de inversión, el análisis y manejo de inversiones y el manejo de cartera y que el éxito o fracaso de un negocio dependen en gran medida de la calidad de sus decisiones financieras. ( Moyer *et al*, 2005).

Presupuesto de capital es el término con el que se conoce a la función financiera relacionada con la toma de decisiones de una propuesta de inversión. Según Ochoa (2009), una vez que se tiene la información se puede evaluar el atractivo de las diferentes alternativas. La decisión de inversión será simplemente aceptar o rechazar la propuesta y agrega que para la toma de decisiones se aplican diferentes métodos que facilitan la toma de decisiones, algunos de ellos son:

Valor presente neto (VPN)

Tasa interna de retorno (TIR)

Índice de rentabilidad (I.R)

Periodo de recuperación de la inversión (PRI)

El valor presente neto (VPN), es la suma algebraica del valor presente de los flujos de una inversión, descontada con una tasa de rendimiento mínima aceptable o TREMA. Por este método se descuentan todos los flujos de efectivo a valor presente, utilizando como tasa de descuento la tasa de rendimiento mínima aceptable (TREMA) que se determina a partir del rendimiento requerido por los accionistas y los acreedores de recursos con costo, como el banco que cobra intereses a la empresa por los recursos que le otorga en préstamo. (Ochoa, 2009).

$$VPN = \sum_{T=0} \frac{A_t}{(1+r)^T}$$

r = tasa de rendimiento requerida

A<sub>t</sub> = Cada uno de los flujos de efectivo del proyecto

T = período en el que se obtiene cada flujo

Además, refiere que el criterio de decisión para rechazar o aceptar aquellos proyectos en los que el Valor Presente Neto de los flujos de efectivo es por lo menos igual al valor presente de los flujos negativos, en otras palabras, un proyecto es aceptable si su VPN= 0, si el VPN= Positivo, el proyecto está dando un valor agregado a los inversionistas, más allá de sus requerimientos mínimos. Para Van Horne y Wachowicz (2010), el Valor presente neto (VPN) de una inversión es el valor presente de los flujos de efectivo netos de un proyecto de inversión menos su flujo de salida inicial de esa propuesta y lo expresa con la siguiente fórmula:

$$VPN = \frac{FE_1}{(1+K)^1} + \frac{FE_2}{(1+K)^2} + \frac{FE_3}{(1+K)^3} + \dots + \frac{FE_n}{(1+K)^n} - FSI$$

La tasa interna de rendimiento o de retorno (TIR), según Van Horne y Wachowicz (2010), es la tasa de descuento que iguala el valor presente neto de los flujos de efectivo netos (FE) futuros de un proyecto de inversión con el flujo de salida inicial (FSI), del proyecto, y lo representa con la fórmula:

$$FSI = \frac{FE_1}{(1+r)^1} + \frac{FE_2}{(1+r)^2} + \dots + \frac{FE_n}{(1+r)^n}$$

$$(1+TIR)^1 \quad (1+TIR)^2 \quad (1+TIR)^n$$

Para Ochoa (2009), el periodo de recuperación de un proyecto indica cuánto tiempo es necesario para recuperar la inversión y se calcula por medio de los flujos de efectivo o entradas, los recursos invertidos al inicio del proyecto, es decir, la inversión inicial. Si los flujos de efectivo son iguales a cada año, el periodo de recuperación se calcula dividiendo el desembolso inicial entre los flujos anuales, si son diferentes, se suman hasta acumular el desembolso inicial su fórmula es:

$$\text{Período de recuperación} = \frac{\text{Desembolso inicial}}{\text{Flujos anuales}}$$

El periodo de recuperación es un indicador que se utiliza para evaluar las inversiones propuestas en un tiempo requerido para que la empresa u organización recupere la inversión inicial en un proyecto, calculado a partir de las entradas de efectivo y se considera una técnica rudimentaria porque no se considera explícitamente el valor del dinero en el tiempo. (Gitman y Chad. 2012).

## PLANTEAMIENTO DEL PROBLEMA

En los Valle del Yaqui - Mayo, Guaymas y Empalme, se localiza un segmento de mercado que corresponde a pequeños productores de sandía cuyas siembras las realizan a cielo abierto y que no es atendido al cien por ciento en cuanto a las necesidades de plántulas que se les presenta al momento de sembrar, representando una considerable superficie de aproximadamente entre 2,500 a 3,000 hectáreas potenciales para este mercado de un total de 7,000 hectáreas que se siembran en el sur de Sonora. Con el fin de incursionar en el mercado de producción de plántulas de sandía, así como a contribuir a solventar las necesidades de material vegetativo que se les presenta a los productores al momento de realizar sus siembras, la empresa busca contar con los elementos necesarios y suficientes que le permita conocer la rentabilidad financiera para competir con éxito en el mercado, por tal motivo nace la siguiente interrogante: ¿Es viable económicamente un proyecto productivo para la producción y venta de plántulas de sandía en el Valle del Yaqui?

## JUSTIFICACIÓN

Actualmente los esfuerzos de la investigación están orientados a mejorar la calidad y uniformidad del producto en función de la adquisición de semillas mejoradas o en la adquisición de plántulas de buena calidad para evitar así, pérdidas en la producción. Los productores han rebasado la etapa de conocer los factores que determinan la producción vegetal; ahora están aprendiendo a manejar las nuevas herramientas que ofrece la tecnología para modificar dichos factores para así obtener plantas de alta calidad y con las especificaciones deseadas. La importancia de poner a disposición los servicios de maquila de plántulas a los productores, es la de ofrecer mayor certidumbre en el proceso de siembra de melón y sandía posicionándolo en la etapa de crecimiento de una plántula generada con la mejor calidad, sanidad y experiencia, garantizándole mejores resultados al momento de la cosecha reflejándose en una mejor producción con una relación beneficio/costo representativa para los productores.

Eventualmente la siembra de hortaliza puede volverse no redituable si no se toman las medidas pertinentes para la optimización del proceso de producción. La producción de la plántula es un proceso muy especializado, delicado e importantes para tener éxito en la al momento de la cosecha. En caso de no contar con un proveedor de plántula que ofrezca sus servicios de calidad, higiene y disponibilidad de plántulas en tiempo y forma, los productores se verán en desventaja para realizar sus siembras a tiempo, reflejándose en la producción con pérdidas económicas

considerable, por otro lado, la empresa se verá favorecida al contar con un mercado disponible y potencial para satisfacer sus necesidades, así como contar con los recursos suficientes para seguir creciendo y contribuir al desarrollo de la región con la generación de mano de obra e impactando en un mejor nivel de vida de los habitantes de la comunidad.

### objetivo

Analizar la factibilidad económica mediante indicadores financieros, para determinar la rentabilidad en una empresa productora y comercializadora de plántulas de sandía en el valle del yaqui.

### **DELIMITACIONES**

La empresa donde se pretende llevar a cabo el presente proyecto se localiza en el nuevo Centro de Población Ejidal “Lic. Miguel de la Madrid hurtado y sus Anexos” en la fracción Sureste del Lote 36 y la Fracción Suroeste del Lote 37 de la Manzana 1528 del Fraccionamiento Richardson del Valle del Yaqui en los paralelos 27°14'40.85” Latitud Norte y 109°44'11.37” Longitud Oeste y a 56 m.s.n.m.

### **MÉTODOLOGIA**

#### Sujeto

El presente trabajo de investigación se realizó en una empresa Productora y Comercializadora de plántulas de sandía bajo invernadero denominada “Sociedad Cooperativa de Responsabilidad Limitada Graft & Plant”, Ubicada en el Valle del Yaqui, Sonora la cual factura un promedio de 31,500 Charolas equivalente a 6'300,000 plántulas en un ciclo operativo de nueve meses.

#### Materiales

Para la realización del análisis de factibilidad económica de la empresa Graft & Plant, se tomó en cuenta un documento elaborado en Excel denominado “Plan Financiero”, conformado a su vez con apartados en hojas de cálculo con sus respectivas fórmulas siendo estos los siguientes: conceptos de inversión, mezcla de financiamiento, tabla de amortización, presupuesto de operación, flujo de efectivo, balance general y razones financieras, permitiendo con esto trasladar en forma sistematizada y automatizada la información e impactar en los formatos subsecuentes elaborados como herramientas que sirvieron para determinar la situación financiera y la viabilidad de la inversión para de la empresa motivo de estudio.

#### Procedimiento

Primeramente se determinaron los costos de producción considerando la materia prima y el volumen de producción de plántulas, ingresos por ventas de plántulas, y el precio de venta. Los resultados obtenidos se llevaron a un registro de control como fueron la materia prima utilizada (composta, fungicidas, vermiculita, mano de obra), que intervino en la producción con el fin de conocer el costo por unidad (Plántula o charola). Seguidamente se realizó un análisis para conocer las necesidades reales de inversión determinándose los conceptos a solicitar vía crédito como inversión para lo cual se obtuvieron los precios unitarios a través de cotizaciones elaborada por las casas comerciales de la localidad correspondientes para este fin. Una vez obtenidos los

datos, se trasladaron a un programa elaborado en Excel denominado Plan Financiero donde se vació a un formato en hojas de cálculo denominado estructura de Inversiones con los montos de cada uno de los conceptos a financiar.

Posteriormente, se alimentaron los formatos conceptos de inversión, mezcla de financiamiento con los datos del monto del crédito a solicitar, tabla de amortización, presupuesto de operación y al realizar la corrida con toda la información antes mencionada se generaron automáticamente: Los flujos de efectivo, el balance general, el estado de resultados (proyectados a 5 años), y el formato de las razones financieras.

Se analizaron varias alternativas de fuentes de financiamiento para el proyecto, siendo la más viable para la empresa la Del Instituto Nacional para la Economía Social ( INAES), siendo la aportación de los recursos financiados a fondo perdido, y amortización, únicamente del capital sin considerar el costo del financiamiento. bSeguidamente para la obtención de los indicadores financieros considerados para este trabajo de investigación, se alimentaron los formatos en Excel: Mezcla de financiamiento y presupuesto de operación, generándose automáticamente el formato de evaluación financiera el cual contempla los flujos de operación actualizados dando origen al valor presente neto ( VPN ), tasa interna de rentabilidad ( TIR ), y al índice de rentabilidad ( I.R.).

Paso seguido, se aplicaron fórmulas matemáticas en forma manual para determinar el punto de equilibrio para ventas y número de unidades, y por último, se hizo una corrida en hojas de cálculo para determinar el periodo de recuperación de la inversión y el análisis de sensibilidad para conocer cuánto afecta a la TIR ante cambios de variables para evaluar el riesgo del proyecto.

## RESULTADOS

Tabla 1: Ingresos Por Ventas de Plántulas

Conceptos	No. De Unidades	Cavidades	Total de plántulas	Precio unitario/plántula	Ingreso total
Charolas	31,500	200	6'300,000	\$ .35	2'205,000
<b>Total:</b>					<b>\$2'205,000</b>

*Aquí se describen los resultados del volumen de producción anual de charolas y plántulas de hortalizas donde se obtuvieron los ingresos totales por ventas*

Tabla 2: costos de producción

Costos fijos	Costos variables	Costos totales
\$290,230.00	\$1'260,000	\$ 1'550,230.00

*Aquí los costos totales se desglosan en dos rubros que son: costos fijos correspondientes al pago de (un administrador, un contador, combustibles, lubricantes y los costos variables a siembra, sustratos, vermiculita, perlita, costo de agua y mano de obra.*

Tabla 3: Proyección de los Ingresos y Egresos

Año	Ingresos	Egresos
1	2'205,000	1'550,230
2	2'205,000	1'550,230
3	2'205,000	1'550,230
4	2'205,000	1'550,230
5	2'205,000	1'550,230

*Flujos de efectivo proyectados a cinco años.*

Tabla 4: Mezcla de Financiamiento

Conceptos:	Monto	Financiamiento	Crédito
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Inventarios	1'220,000	0	0
Inversión fija	700,000	100%	700,000
Inversión total	1'920,000	100%	700,000

*Derivado de un análisis hacia el interior de la empresa se determinó las necesidades reales de los conceptos de inversión y la mezcla de recursos a solicitar vía crédito como inversión..*

Una vez que se alimentaron los formatos con los datos requeridos, se generaron automáticamente la corrida financiera dando como resultados los valores del valor presente (VPN), la Tasa interna de retorno (TIR), índice de rentabilidad (R.I) y el punto de equilibrio (P.E) como se demuestran en la tabla 5 y 6 respectivamente.

Según los resultados obtenidos en la evaluación financiera, los datos de los indicadores económicos del valor presente neto (VPN), la tasa interna de retorno (TIR), el índice de rentabilidad (IR), se presentan en la tabla 5.

Tabla 5: Indicadores económicos

indicadores financieros	valores obtenidos
vpn	\$459,467
tir	25.74%
índice de rentabilidad	1.239
costo de capital	15.89%

*Valores obtenidos de los indicadores financieros mediante la aplicación del programa plan financiero Excel*

Con el fin de conocer la sensibilidad del proyecto, se llevó a cabo una corrida financiera donde se manipularon cada una de las variables que intervinieron en el análisis, obteniéndose los resultados como se presentan en la tabla 6.

Tabla 6: Análisis de Sensibilidad de Costos e Ingresos

incremento del 11% de los costos		disminución del 6.0% de los ingresos	
indicadores	valores	indicadores	valores
v p n	\$4,434	v p n	\$49,701
tir	15.98%	tir	16.99%
costo de capital	15.89%	costo de capital	16.99%
i.r.	1.002	i.r.	1.026

*Valores obtenidos de las variables con la aplicación de un aumento en los costos manteniéndose constante los ingresos y una disminución de los ingresos permaneciendo constante los costos.*

Para determinar el periodo de recuperación de la inversión del presente proyecto, se tomó en cuenta los datos obtenidos del formato en Excel denominado presupuesto de operación obteniéndose los resultados que se presentan en la tabla No. 7

Tabla 7: Presupuesto de Operación

concepto	periodo 0	periodo 1	periodo 2	periodo 3	periodo 4	periodo 5
(+) resultado ejercicio		495,995	495,995	495,995	495,995	495,995
(+) depreciación		60,000	60,000	60,000	60,000	60,000
(-) inv. inicial	1'920,000					
flujo neto	1'920,000	555,995	555,995	555,995	555,995	555,995

*Valores obtenidos con la aplicación el plan financiero*

$$\text{FORMULA P R I} = \frac{\text{INVERSIÓN INICIAL}}{\text{PROMEDIO FLUJO EFECTIVO}} = \frac{1'920,000}{724,770} = 2.64$$

Tabla 9: Periodo de Recuperación de la Inversión

AÑOS	MESES	DIAS
2	12 X.64	
2	1	30 X.36
2	1	11

*De acuerdo a los resultados en la presente tabla se obtiene que la recuperación exacta de la inversión es: 2 años, 1 mes y 11 días*

## CONCLUSIONES

En base a los resultados obtenidos de los indicadores económicos del proyecto, éste revela que es rentable debido a que se obtuvieron los siguientes indicadores: Valor Presente Neto (VPN) es Positivo, lo cual indica que durante la vida útil del proyecto, a una tasa de actualización del 15.89%, se obtiene una utilidad de \$4,434.00 que en términos absolutos representan en pesos y centavos a los accionistas cumpliéndose la condición que sustentan los autores mencionados en este proyecto de que el valor presente neto debe ser mayor o igual a cero por lo que se acepta la inversión.

La Tasa Interna de Retorno (TIR) es positiva, lo que indica que durante la vida útil del proyecto a cinco años, se recupera la inversión total y se obtiene una rentabilidad del 25.74% siendo esta mayor que la tasa de rentabilidad mínima aceptable (TREMA) 15.89% por lo que el proyecto bajo estas condiciones se acepta. Índice de Rentabilidad (I.R.), expresa que durante la vida útil del proyecto a una tasa de actualización del 15.89%, por cada peso invertido se obtienen de \$.239 pesos de beneficios cumpliendo con la condicionante que el índice de rentabilidad es mayor o igual a uno.

Durante la vida útil del proyecto se obtuvieron en promedio anuales de una producción de 6'300,000 plántulas de sandía y un punto de equilibrio de 1'935,000 plántulas, lo cual genera una ganancia en producción de plántulas de sandía, después del punto de equilibrio de 4'365,000 plántulas, que traducidos en pesos equivalen a \$1, 527,750 de utilidad bruta aproximadamente y un punto de equilibrio en pesos de \$677,000.00 aproximadamente, cantidad que iguala a los costos totales. El análisis de sensibilidad una vez que se hicieron las corridas financieras, arrojó que a pesar de un incremento del 11.0 % en los costos totales de producción, manteniéndose constantes los ingresos, o una disminución del 6.0% en los ingresos totales, manteniéndose constantes los costos totales, el proyecto sigue siendo redituable como lo demuestran los indicadores financieros. Una vez analizado cada uno de los indicadores de rentabilidad financiera, así como la capacidad que tiene la empresa para generar utilidades y cumplir con los compromisos contractuales, de manera general, se concluye que el presente proyecto es viable técnica y económicamente, ya que sus indicadores cumplen con sus condicionantes y además cuenta con el personal técnico especializado, infraestructura y mano de obra especializada para este fin.

## RECOMENDACIONES

Con el propósito de lograr atender a un mayor número de pequeños productores que se dedican a la siembra del cultivo de sandía, así como la de mantener la sostenibilidad de la empresa, se recomienda a la Sociedad Cooperativa "GRAFT & PLANT", lo siguiente:

- 1) Se recomienda a la empresa que realice las acciones pertinentes relacionado con en el Plan de las Proyecciones Financieras.

- 2) Que las utilidades netas que se obtienen año con año se reinviertan en activos fijos para crecer e incrementar su capacidad instalada y así ampliar el mercado potencial que se presenta en Sonora.
- 3) Por último, consolidar la estructura organizacional mediante la incorporación de personal capacitado con el fin de llevar a cabo campañas de promoción para dar a conocer el tipo de producto que se está ofertando en el mercado de plántulas.

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# INVESTIGACIÓN COMERCIAL: POSICIONAMIENTO DEL GRUPO SUPERMERCADOS EROSKI

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## RESUMEN

*En el presente trabajo presentamos los conceptos y herramientas que se utilizan en el campo de la Investigación Comercial dentro del ámbito del Marketing empresarial. Como experiencia práctica hemos analizado la imagen de la Red de Supermercados EROSKI en el País Vasco (Norte de España) para conocer los niveles de satisfacción de sus clientes actuales y potenciales y tratar de alcanzar unas conclusiones que nos permitan formular una serie de recomendaciones que puedan servir de guía y estímulo a la dirección del Grupo con el objetivo último de mejorar su imagen y posicionamiento en el mercado. El estudio se ha realizado durante los meses de mayo y Junio de 2012.*

**PALABRAS CLAVES:** Investigación comercial, Posicionamiento, Supermercado

## COMERCIAL RESEARCH: SUPERMARKETS GROUP POSITION EROSKI

### ABSTRACT

*In this paper we present the concepts and tools used in the field of Commercial Research in the field of business marketing. As practical experience we have analyzed the image of Eroski Supermarket Network in the "Vasco Country" (northern Spain) for satisfaction levels of their customers and prospects and reach conclusions that allow us to formulate a set of recommendations that can provide guidance and encouragement to the direction of the Group with the ultimate goal of improving its image and market positioning. The study was conducted during the months of May and June 2012.*

**JEL:** M31

**KEYWORDS:** Business Research, Positioning, Supermarket

### INTRODUCCION

Para apoyar la tarea de gestión en un entorno complejo y cambiante, no basta con proveer a los decisores con información de forma esporádica. Es necesario garantizar un flujo constante de información conveniente y hacerla llegar a aquellos que la necesiten en el momento preciso. Las profundas transformaciones ocurridas en el entorno desde finales de los sesenta abren un nuevo panorama para las empresas que la hacen requerir cada vez más de nuevos métodos para la obtención de información y formas para procesarla y analizarla. En este marco la investigación

comercial ha ido ganando en importancia en la empresa y ensanchando su campo de aplicaciones. En principio se centró en la eficacia de las actividades de comunicación, esencialmente publicidad, pero ya en la actualidad la Universidad y la Empresa la integran formalmente en sus áreas de actividad, se crean departamentos e institutos de investigación comercial, y se estudian actitudes, creencias, comportamientos y motivaciones que permitan a las empresas mejorar su posicionamiento en el mercado y su mezcla de mercadotecnia. ([Esteban & Fernández, 2009](#)) La dirección, por tanto, ha de configurar un método que le permita reunir y analizar el enorme volumen de información que se relaciona con la organización. El Sistema de Información de Marketing (SIM) constituye una estructura cuya finalidad es generar, registrar, clasificar, analizar, valorar y distribuir a tiempo la información demandada para orientar las actividades estratégicas de marketing y facilitar la toma de decisiones inherente a toda política comercial. (Bello, Vázquez, & Trespacios, 1996)

El SIM ha sido objeto de numerosas definiciones de la que destacamos la siguiente: “es el conjunto de personas, equipos y procedimientos capaces de recoger, clasificar, analizar, evaluar y distribuir la información oportuna y precisa que necesitan los responsables de marketing para la toma de decisiones”. (Kotler, 1999) El SIM es mucho más que una base de datos. Es todo un conjunto de recursos, datos y personas debidamente organizados para satisfacer las necesidades de información propias de la gestión comercial. Los distintos elementos o subsistemas que componen el S.I.M. son, según Kotler, los siguientes Sistema de datos internos, Sistema de Inteligencia de Marketing, Sistema de Apoyo a las Decisiones de Marketing, Sistema de Investigación de Marketing. Este trabajo se enfoca en la contextualización, herramientas y una aplicación de la Investigación Comercial que es vital para cualquier Empresa como elemento que rige el Sistema de Información de Marketing. (Kotler, 2002) Para ello se presenta en primera instancia una breve revisión de literatura sobre la investigación comercial, se muestra la metodología aplicada en una investigación comercial realizada en el Grupo Supermercados Eroski, se ofrecen los principales resultados y recomendaciones obtenidos; y se finaliza con la Bibliografía utilizada.

## REVISIÓN DE LITERATURA

La información es un elemento básico para la toma de cualquier decisión. En el caso de una organización (pública, privada o sin ánimo de lucro) orientada al mercado necesita información acerca del mismo con el fin de dirigir acertadamente sus acciones en ese mercado. ([Maqueda Lafuente, 2010](#)) Un factor clave en el éxito de muchas organizaciones es ofrecer al mercado lo que éste demanda, siendo la satisfacción de las necesidades de los clientes un objetivo prioritario. Uno de los propósitos de la investigación de mercados es obtener información sobre los problemas y necesidades de los clientes, lo que ayuda a las organizaciones alcanzar dicho objetivo así como implantar una Orientación al mercado. Los motivos que han hecho imprescindible realizar investigaciones de marketing en las organizaciones son, entre otras las siguientes:

La situación de madurez y el aumento de la competencia en muchos mercados, que hace necesario disponer instantáneamente de información sobre los cambios introducidos por los competidores.

El crecimiento de las organizaciones y el acceso a mercados más extensos y diversos, lo cual implica mayores problemas para conocer a su público objetivo, si no se recurre a la investigación.

Los costes de llevar a cabo acciones de marketing, ya sea de lanzamiento de un producto, diseño de sistemas de distribución o políticas de comunicación, exigen tomar medidas para garantizar el éxito y actuar con mayor seguridad. Dado que toda empresa dispone de recursos escasos, tomar decisiones comerciales incorrectas puede atentar contra su existencia.

La necesidad de conocer, e incluso prever los cambios que continuamente se producen en el entorno.

La preocupación reinante por la calidad en el consumo de bienes y la prestación de servicios, que se concreta en un control y seguimiento de las acciones de las instituciones públicas, organizaciones de consumidores y demás grupos del público general.

La información existente, por un lado no suele satisfacer las necesidades de las organizaciones por no ajustarse a lo que precisan. Por otra parte, cada vez resulta más necesario sistematizar, ordenar y sacar provecho de la gran cantidad de información que se genera. (Luque, 1997)

Todas estas razones adquieren mayor importancia cuanto mayor sea la dimensión de la empresa. La división de tareas entre muchas personas, el aumento de clientes, del surtido y de los mercados, segmentos, etc., obligan cada vez más a sistematizar la recogida y el análisis de la información del entorno. Por tanto, cualquier tipo de organización que esté buscando tomar una buena decisión deberá acudir a la Investigación Comercial. Son numerosas las definiciones que se han dado sobre investigación comercial de entre todas ellas destacamos por su brevedad y concreción la propuesta por (Green, Tull, & Albaum, 1988) para quienes la Investigación Comercial es: “la búsqueda y análisis sistemático y objetivo de la información relevante para la identificación y solución de cualquier problema en el campo del marketing”. De esta definición podemos destacar las siguientes características: Búsqueda y análisis: no solamente los va a recoger o buscar, también se van a analizar.

Sistemático y objetivo: existen una serie de pasos a seguir de forma ordenada, procurando dejar poco sitio a la improvisación y a las subjetividades. Es decir debe ser neutral, sin sesgos personales ni prejuicios.

Información relevante: La información que se analiza debe ser de interés y pertinente para cada investigación.

Identificación y solución de problemas de marketing: problemas que no tienen que tener siempre una connotación negativa.

Finalmente hay que destacar el carácter puntual de las investigaciones comerciales, como se ha explicado en el apartado anterior. Este aspecto permite hablar, más que de una investigación genérica, de proyectos de investigación comercial que se realizan en una organización. La esencia u objetivo básico de la Investigación Comercial es la obtención de información para poder adoptar decisiones comerciales correctas logrando reducir la incertidumbre. Es decir, la IC sólo puede reducir el riesgo y no eliminarlo totalmente por cuatro razones:

Porque el sujeto de análisis es siempre un “ser humano”, una “persona”, y ésta es complicada de estudiar: porque es cambiante y, si bien puede ser analizada en cuanto a opinión, imagen, actitud y comportamiento... no es posible estudiar sus predicciones con certeza absoluta.

Porque el modelo económico es cambiante. Hoy tenemos una situación del mercado totalmente explorada y conocida, pero entre hoy y el momento en que se va a tomar una decisión va a transcurrir un tiempo y durante este intervalo las propias circunstancias pueden haber cambiado: la competencia puede alterar el marco de la oferta, o las propias circunstancias coyunturales que pueden incidir en este lapso de tiempo que pueden haber alterado este cuadro de opiniones y expectativas de nuestro mercado. Todo esto podría ser evitado si el estudio se hiciera en el momento instantáneo “t”, si en este mismo momento se tomara la decisión y si en este mismo momento se produjeran los efectos de la decisión.

Porque los instrumentos también tienen sus limitaciones: los métodos utilizados son imperfectos, ya que el elemento básico recolector de la información es el cuestionario y se utilizan generalmente métodos de muestreo que en sí comportan sus propios errores estadísticos, al margen de que, en ocasiones, la propia falta de información sobre el universo impide diseñar muestras probabilísticas, que es la única forma de poder obtener datos fidedignos y representativos.

Porque independientemente de lo dicho, el decisor, con su problemática, sus condicionantes y su propia cultura, infiere y condiciona esta toma de decisiones, pudiendo hacerla incluso errónea o, por lo menos, no la más indicada. (Ferré, 1997)

No obstante, a pesar de lo anterior, el investigador cuenta con suficientes instrumentos para medir el tamaño de los errores que se cometen en la investigación y garantizar la exactitud de los resultados de la misma. Un segundo objetivo, que es a la vez una condición, es que la IC sea susceptible de influir en la decisión. De nada sirve una información si sólo tiene posibilidades de confirmar, pero no modificar una decisión ya tomada, con independencia de los resultados de la investigación.

En tercer lugar, todo trabajo de IC deberá justificar su coste: El valor o rentabilidad que proporcione la información ha de ser siempre superior al coste (en tiempo y dinero) que suponga su realización. Es decir la IC debe ser eficiente. Respecto al alcance de la IC como herramienta útil para el Marketing, ésta se puede aplicar en múltiples campos o áreas. Sin ánimo de ser exhaustivos, recogemos a continuación las áreas de aplicación más significativas:

a) Investigación sobre el comportamiento del consumidor:

- *Motivaciones de compra:* → ¿Por qué se compra? Habrá que identificar los motivos por los que se adquiere un producto concreto: necesidad, apariencia, buena relación calidad/precio, diseño del envase, influencia del color, etc.

*Personas que influyen y deciden en la compra:* → ¿Quién compra? Para esto habrá que delimitar claramente las distintas actitudes hacia el proceso de decisión que pueden ser tomadas: iniciador, influyente, decisor, comprador, consumidor o usuario y pagador. Estos son datos importantes a la hora de diseñar, por ejemplo, una campaña publicitaria.

*Hábitos de compra:* → ¿Cuándo, cómo y dónde se compra?

*Estilos de vida:* El estilo de vida lo determina las formas en que se emplea el tiempo, la jerarquía de valores, y las opiniones que los individuos tengan sobre sí mismos y sobre el mundo que les rodea.

*Segmentación y tipología de los consumidores:* → Grupos homogéneos.

Hay que recordar que el marketing no crea necesidades; las supone como dadas y lo que sí crea son formas para satisfacerlas. De allí la importancia que tiene conocer bien las necesidades, así como también el comportamiento de compra, los usos, etc.

b) Investigación sobre la demanda y las ventas:

- Demanda total del mercado de un producto.
- Demanda total del mercado de un grupo de productos afines o de un sector.
- Participación de las marcas en el mercado (cuotas de mercado).
- Determinación de la demanda por zonas geográficas y tipos de consumidores.
- Determinación de los índices de capacidad de compra.
- Previsiones de ventas.

c) Investigación sobre productos:

- Creación, modificación o eliminación de productos. Investigaciones encaminadas a ayudar en decisiones para el mantenimiento de la gama de la empresa.
- Test de concepto.
- Test de producto.
- Test de mercado.
- Test de nombre.
- Estudios sobre imagen y posicionamiento de marcas:

d) Investigación sobre las actividades de comunicación:

- Influencia de la publicidad en el comportamiento de los consumidores: Se intentarán medir aspectos tales como la modificación de actitudes.
- Determinación de la audiencia de los medios y soportes: Análisis cuantitativo (número de personas) y análisis cualitativo (perfil de esas personas). Estos dos aspectos serán importantes para insertar nuestra publicidad.
- Medida de la eficacia publicitaria: Realización de los pretests y postests.
- Relación entre inversión publicitaria y ventas.
- Actitud de los consumidores ante las promociones
- Evaluación de los incentivos y los programas promocionales.
- Control de los resultados de las promociones.

e) Investigación sobre la distribución:

Elección de los canales de distribución.

- Determinar la amplitud de productos y marcas trabajadas.
- Actitudes y motivaciones de los intermediarios hacia las actuaciones de los fabricantes.
- Análisis de la influencia de los intermediarios en la elección de las marcas por los consumidores.

f) Investigación sobre el entorno económico, jurídico y tecnológico:

- Previsiones a largo plazo.
- Posición presente y futura de la competencia.
- Influencia de la tecnología en el mercado.
- Repercusiones legales o de acuerdos internacionales, etc.

El Proceso De Investigación Comercial Todo trabajo de Investigación comercial puede describirse en líneas generales en las siguientes etapas:

- 1º.- Análisis de la situación inicial.
- 2º.- Determinación de los objetivos del trabajo.
- 3º.- Recogida de información.
- 4º.- Análisis cualitativo.
- 5º.- Preparación y realización del trabajo de campo.
- 6º.- Depuración, codificación y tabulación.
- 7º.- Análisis de la información y conclusiones.

*1º.- Análisis de la situación:* El proceso de investigación se inicia reconociendo algún problema u oportunidad comercial. La definición del problema de la investigación es la parte más importante del proceso, hasta el punto de que sólo cuando se haya hecho correctamente, se podrá diseñar y desarrollar ésta. De otra forma, continuar con las etapas siguientes supondría derrochar recursos y tiempo. Precisamente, corresponde a los decisores describir exhaustivamente los problemas a los que desean encontrar respuesta. En esta primera etapa, se producen los primeros contactos y reflexiones entre el investigador y el directivo que servirán para precisar el contenido de la investigación.

El análisis de la situación de partida da lugar en muchos casos a un *estudio exploratorio*, cuyo único objetivo es profundizar en la comprensión de la situación o problema del trabajo. Por ello, se suelen hacer trabajos exploratorios cuando sea necesario definir el problema de manera más precisa, identificar los cursos de acción relevantes o conocer otros aspectos del problema antes de definir los objetivos del trabajo. Estudios exploratorios que se pueden concretar en la obtención de datos secundarios, conversaciones con las personas que toman las decisiones o que puedan aportar ideas, investigaciones cualitativas (entrevistas con expertos y conocedores del tema en cuestión) o analizando casos de situaciones similares. No importa que la información del estudio exploratorio no sea precisa. Incluso, el proceso seguido no tiene por qué tener una estructuración elaborada.

*2º.- Determinación de los objetivos del trabajo:* Una vez analizada la situación y definido claramente el problema, éste deberá traducirse en objetivos específicos de la investigación. En esto existen diferencias entre la forma de entender el problema por parte de la Dirección comercial, y los investigadores. *Así, los problemas de la dirección están orientados a las acciones posibles a realizar, como por ejemplo: ¿debería realizarse la segmentación de una nueva forma? ¿Debería incrementarse el presupuesto para hacer promociones? ¿Deberían rebajarse los precios en el nuevo producto?*

*3º.- Recogida de información secundaria disponible:* En la primera etapa ya se ha recogido cierta información. No obstante una vez determinados los objetivos del estudio, los encargados de realizarlo comenzarán por recoger toda información que pueda servir para la obtención de los mismos. Ello implica recopilar toda información útil disponible en ese momento. A toda información que ya existe en el momento de iniciar un trabajo de investigación se le conoce como *información secundaria*.

*4º.- Análisis cualitativo:* En las etapas iniciales del trabajo de investigación, al mismo tiempo que se va recogiendo información secundaria útil, se irán formulando las primeras hipótesis (proposiciones o suposiciones aún no probadas) o respuestas de los problemas planteados. Precisamente, esta labor se puede facilitar mucho con técnicas de recogida y análisis de información cualitativa, que veremos más adelante. Por otro lado estas técnicas, ayudan a delimitar y a orientar el proceso de recogida de la información cuantitativa necesaria.

5º.- *Preparación y realización del trabajo de campo:* Normalmente la información secundaria disponible resulta insuficiente y poco adaptable para hallar las respuestas del trabajo de investigación. En tal caso, deberá diseñarse e implementarse un proceso de recogida de *información primaria*. Se entiende por ésta toda aquella información no disponible al inicio del trabajo de investigación, que resulta necesaria para alcanzar los objetivos marcados y que requerirá de un *trabajo de campo* para su recogida.

La preparación y realización del trabajo de campo consiste en una sucesión de tareas encaminadas a recoger aquella información primaria que la investigación requiera para llegar a las conclusiones. Las distintas sub-tareas de esta etapa varían dependiendo del tipo de información requerida y del tipo de público, si bien, normalmente son las siguientes: Definición de la población objeto de estudio y selección de la muestra, elaboración del soporte a emplear para la recogida de los datos (cuestionario, normalmente), recogida de datos propiamente dicha o *trabajo de campo*.

6º.- *Depuración, codificación y tabulación:* Una vez cumplimentados los cuestionarios se procede a controlar que no haya errores y que la información recogida sea veraz. Se corrigen defectos u omisiones en las respuestas. En algunos casos, no habrá más remedio que eliminar entrevistas que tengan errores no subsanables. En otros casos, únicamente se elimina la variable con error y se toma por válido el resto. Seguidamente, la información recogida pasa a ser codificada y dispuesta en tablas con el objeto de poder ser analizada mediante las técnicas que se elijan. Existen distintas modalidades de tablas dependiendo de cuál sea la técnica a emplear.

7º.- *Análisis de la información y conclusiones:* Se emplean aquí técnicas numéricas o estadísticas que intentan básicamente resumir la información para llegar a conclusiones objetivas. Asimismo, en esta fase el investigador también deberá ocuparse de elaborar y presentar el informe de todo el trabajo realizado.

## **METODOLOGÍA**

Se realizó este trabajo de Investigación Comercial sobre el Grupo Eroski para conocer la satisfacción del cliente. Es decir, hemos tratado de averiguar las motivaciones de compra del cliente. Para ello construimos un cuestionario de 36 preguntas enfocadas tanto a la relación calidad-precio de los productos como a la amplia variedad de productos y servicios.

Este trabajo se realiza como parte de una red interorganizacional que desarrolla este tipo de investigaciones para varias empresas como se muestra en un reciente estudio publicado. (Maqueda Lafuente & Barquero Cabrero, 2013) El cuestionario fue aplicado en tres áreas de Bizkaia, las cuales son Getxo, Txorierra y Mungialdea. De esta manera podemos observar la valoración del cliente de Eroski en cada zona. Por otra parte, también hemos tratado de coger una muestra representativa de toda la población realizando cuestionarios a personas de distintas edades. El objetivo de este trabajo no es solo conocer la satisfacción del cliente de Eroski sino que mediante las respuestas de los ciudadanos podemos conocer los aspectos a mejorar o nuevas oportunidades del Grupo. Se realizó la Investigación Comercial de Eroski a una muestra de 380 personas y se analizaron los datos obtenidos. Se muestra en el Anexo 1 el Modelo de cuestionario utilizado.

## **RESULTADOS**

La investigación comercial se realizó tomando como Caso Práctico El Grupo Eroski, que nace en 1969 por una iniciativa, cuando diez cooperativas de consumo formadas por consumidores y trabajadores deciden unirse. En 1978 Eroski lanzó sus primeros productos marca Eroski que hoy en día alcanzan los 10.000. Este mismo año Eroski decidió dirigirse a los clientes en su misma lengua y para ello introdujo la información de los productos en cuatro lenguas. En 1981 se abrió el primer hipermercado en Vitoria para ofrecer el mejor precio al mayor número de clientes. En 1996 Eroski integra el programa Travel Club para ofrecer a sus clientes canjear puntos por diferentes premios. En el año 2000 nace el supermercado Eroski online. Tres años después Eroski lanza la tarjeta de pago de Eroski Red. El año pasado (2011) llegó a recaudar 8427 millones de euros. Más allá de su historia, Eroski no es solo una empresa de distribución alimentaria, Eroski da importancia a sus productos blancos y para ello ha creado un laboratorio propio para garantizar dicha calidad. Por ello, es la única empresa de distribución española que ofrece doble garantía. Siguiendo con el lema de la calidad colabora con fabricantes que poseen certificados que los acreditan. Eroski contribuye con el desarrollo social y por esta razón ofrece productos de comercio justo y se responsabiliza del medio ambiente (empresa pionera en retirar sprays de CFC, bolsas reutilizables...). Actualmente, Eroski invierte el 10% de sus beneficios en actividades sociales, ayuda a la comunidad y al consumidor. Una vez aplicado el cuestionario se muestran a continuación los resultados fundamentales obtenidos:

La mayoría de los encuestados coinciden en que la razón de comprar en Eroski es la cercanía del establecimiento. Estos son clientes habituales y suelen realizar sus compras una o más veces por semana en centros Eroski Center, Centros Comerciales y Aliprox. También le dan importancia a que el grupo Eroski sea del País Vasco. Aunque más de la mitad de los encuestados están contentos con la calidad-precio que ofrece Eroski, las secciones peor valoradas son la pescadería, la frutería y la gama textil. La variedad es otro aspecto negativo a destacar puesto que el cliente exige un estándar de calidad alto en los productos frescos. Como último punto del análisis interno, cabe mencionar que todos los clientes están totalmente satisfechos respecto al trato y colaboración del personal. Para finalizar, analizaremos algunos de los servicios adicionales que ofrece Eroski.

El servicio de compra por Internet no es muy conocido y además no es de uso habitual, únicamente una de las personas encuestadas ha utilizado este servicio. Muchas de las actividades de Eroski son desconocidas para el público en general, tales como: la Fundación Eroski, Inmobiliaria, Seguros y la tarjeta Eroski Red. Otras, en cambio, son conocidas y muy valoradas, entre ellas se encuentra la tarjeta Travel Club que es de uso habitual ya que muchos clientes se benefician de su programa por puntos. Por todo ello, destacamos que aunque el Grupo tiene clientes fieles, en caso de no poder realizar la compra en Eroski, la mayoría de los encuestados escogerían el Supermercado BM (muy diferenciado), seguido de Simply y Carrefour.

## CONCLUSIONES

Una vez analizados los resultados y las conclusiones de las 380 encuestas realizadas se podrían hacer las siguientes recomendaciones:

Labor de comunicación y promoción porque tiene notoriedad por la alimentación y no por otros productos.

Dar a conocer y publicitar la tarjeta Eroski Red y sus ventajas.

Dar a conocer su fundación para que los clientes perciban que se trata de RSE (Responsabilidad Social Empresarial).

Incentivar o motivar el uso de las compras por Internet (no cobrar gastos de envío...).

Formar más adecuadamente a su personal en la atención a los clientes.

Realizar campañas de comunicación más agresivas que les diferencien de su competencia.

Facilitar y simplificar los envíos de pedidos a domicilio.

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# MULTIMEDIA EDUCATIVA COMO MEDIO DE INSTRUCCIÓN EN LA ENSEÑANZA DEL DISEÑO GRÁFICO

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## RESUMEN

*Este artículo estudia la problemática de la incorporación de multimedia educativa, desde el desarrollo de tecnologías, en procesos de instrucción y específicamente dirigidos a la enseñanza del diseño gráfico.*

*La formación académica dirigida a partir del desarrollo de tecnología, sugiere la búsqueda de consensos sobre lo adecuado a los modelos de enseñanza – aprendizaje en que pueden verse inmersos el desarrollo de los contenidos. En este caso se plantean las recomendaciones para el profesor de diseño gráfico de tal manera que permita la propuesta de un instrumento de carácter audiovisual como una herramienta para la instrucción del tema Elementos básicos del diseño.*

**PALABRAS CLAVE:** Educación, Desarrollo de Tecnologías, Herramientas de Instrucción

## EDUCATIONAL MULTIMEDIA INSTRUCTION AS A TEACHING GRAPHIC DESIGN

### ABSTRACT

*This article studies the problem of incorporating educational media, from the development of technologies, and instructional processes specifically aimed at graphic design education. The academic training directed from technology development suggests the search for consensus on the appropriateness of the models of teaching - learning that can be immersed in the content development. In this case raises the recommendations for graphic design teacher so as to allow the proposal of a visual character instrument as a tool for the instruction of Basic Elements of design topic.*

**JEL:** A2, I2, I21, Y20, Y90, Z00

**KEYWORDS:** Education, Technology Development, Instructional Tools

### INTRODUCCIÓN

El desarrollo de nuevas tecnologías, al formar parte de la vida cotidiana desde la primera infancia, impactan las formas de aprendizaje y privilegian, ante todo, la percepción visual a través de la presentación de imágenes y texto. Esto implica que diversos efectos se desplieguen a gran velocidad asociados al uso de Internet o a las alternativas de comunicación satelital, vía los teléfonos celulares y discos versátiles digitales (DVD), entre otras formas de acceso a los recursos disponibles en las sociedades de información y del conocimiento. “Los jóvenes desarrollan costumbres como cambiar los canales de televisión con el control remoto, observando sólo fragmentos breves e inconexos; visitar páginas de Internet y brincar de una a otra, hasta encontrar

la información buscada; mantener conversaciones simultáneas con más de diez personas a través de servicios de mensajería en computadora, o marcar mensajes ágiles y abreviados en el teléfono celular”. (Dede, 2007, p.56) Sin duda, efectuar estas acciones de acceso y control sobre los medios tecnológicos implica el desarrollo de habilidades específicas para ello y, a su vez, ocasiona que algunas formas de enseñanza que antiguamente resultaban exitosas ahora sean consideradas poco efectivas para el logro de los aprendizajes. Por ello, la institución educativa debe apropiarse de estas nuevas formas de promover el proceso educativo, para incorporarlas a los modelos escolares de manera dirigida hacia el logro de los conocimientos adecuados. Adicionalmente, es importante contextualizar todos estos cambios, respecto al uso de la tecnología ya que en la mayor parte de los países de habla hispana, la relación con la tecnología suele ser considerada como un medio para el desarrollo de habilidades educativas y presenta ciertas restricciones ya que es importada como un referente desde los países con un alto desarrollo de infraestructura. En este sentido no sólo se incluyen los aparatos electrónicos y el software, sino también contenidos y formas de ver el mundo. Esta investigación presenta la alternativa para el desarrollo de multimedia educativo dirigido a la enseñanza de temáticas específicas como son las referidas al diseño gráfico, pone a prueba la oportunidad de sumar una serie de recursos, en diversas dimensiones, integrados al entorno de enseñanza- aprendizaje, de tal manera que permiten innovar en este campo a partir de la tecnología en un contexto didáctico, dirigida al logro de conocimientos, habilidades y actitudes.

## REVISIÓN DE LITERATURA

La terminología asociada a multimedia comienza a ser popular en los años noventa, su utilización es sinónimo de vanguardia, tecnología, productividad. De hecho el término multimedia, se emplea como adjetivo para múltiples servicios y productos; por ejemplo, empresas multimedia se denominan empresas desarrolladoras de productos especializados o empresas que poseen medios de comunicación. En este sentido un ordenador multimedia es un ordenador que posee una serie de características de hardware que permiten ejecutar en buenas condiciones los propios software multimedia. Puede considerarse que una aplicación multimedia, es un programa que integra y maneja distintos tipos de información (Fidalgo, 2009). Se considera multimedia la incorporación tanto de imágenes, como de videos, y bases de datos, entre otros recursos. Puede considerarse que existe más de una manera de incorporar la computadora a la educación y es indispensable que ésta incorporación se haga de manera reflexiva y crítica.

Tradicionalmente el uso de la computadora en la educación se redujo al uso de los denominados pasa páginas, muy populares durante los últimos diez años, esta es una actividad que se reduce a ir de una pantalla de texto a otra. Así es posible llenar pantallas y pantallas de texto, a veces con gráficas de baja resolución. Evidentemente, no hay nada malo en ello, salvo que no se usan a fondo las particularidades de un multimedios. En este sentido el análisis de los materiales y los paradigmas en que son propuestos requiere la atención no sólo de la idea general sino en la aplicación dirigida y el objetivo de aprendizaje que se persigue, al respecto podemos considerar que: “Los materiales multimedia educativos, como los materiales didácticos en general, pueden realizar múltiples funciones en los procesos de enseñanza y aprendizaje. Las principales funciones que pueden realizar los recursos educativos multimedia son las siguientes: informativa, instructiva o entrenadora, motivadora, evaluadora, entorno para la exploración y la experimentación, expresivo-comunicativa, proveedora de recursos para procesar datos, innovadora, apoyo a la orientación escolar y profesional, y gestión de centros.” (Marquès, 1999, p.32).

## METODOLOGIA

Para enfatizar el uso de estos recursos teóricos y los aspectos comunicacionales que se utilizaron como base del producto multimedia que se desarrolla en el presente proyecto se subraya la incorporación de aquellos elementos que son considerados como imágenes visual, textual, sonora, animación y movimiento. Ya que se pretende que el material presentado atraiga la atención del usuario. Protocolo de planeación para productos multimedia educativos. Este apartado señala la serie de elementos básicos considerados para la presentación del proyecto multimedia que se propone, recursos de elaboración (Tabla 1) , costo de elaboración (Tabla 2) y siguiendo el formato de descripción de contenidos y planteamiento de la etapas para el desarrollo del mismo.

Tabla 1: Recursos de Elaboración

Recursos Disponibles	
<b>I.</b>	<b>Recursos humanos</b> Gloria Torres, diseñador gráfico (creador del proyecto de multimedia educativa)
<b>II.</b>	<b>Recursos materiales</b> Computadora Internet Micrófono Cámara fotográfica
<b>III.</b>	<b>Recursos económicos</b> Los necesarios para concluir el proyecto.
<b>IV.</b>	<b>Recursos tecnológicos</b>
IV.1	<i>Para la producción</i> Computadora con software de producción para audio y video Cámara de video Cámara fotográfica
IV.2	<i>Para la utilización</i> Servicio de conexión a <i>Internet</i> Computadora con software de producción para audio y video Cámara de video Cámara fotográfica Servicio de conexión a <i>Internet</i>
<b>V.</b>	<b>Recursos temporales</b> Cámara de video

Tabla 2: Costos de Elaboración

Análisis costo-beneficio
<b>Beneficios esperados</b> Que el producto multimedia una vez concluido sea material de apoyo para maestros que imparten materias de diseño.
<b>Costos esperados</b> \$ 4,000 aproximadamente.

La planeación al detalle para el desarrollo de este proyecto de multimedia educativo se plantea estableciendo básicamente tres etapas (Tabla 3) a partir de las cuales se forma parte: análisis, diseño y desarrollo. Estos elementos darán cuerpo y contenido al desarrollo de productos y a la comprensión del producto en el formato propio que se propone a continuación.

## RESULTADOS

En este apartado se definen algunos lineamientos necesarios para el desarrollo óptimo del producto multimedia educativo. Es decir la especificación de cómo se presenta un producto cuya aspiración es desarrollar contenidos de enseñanza – aprendizaje. Tipos de Producto. Cada uno de los archivos desarrollados contiene la misma información teórica para adaptarse a cualquier dispositivo electrónico personal.

(1) Producto de textos con extensión .pdf. Este archivo es un documento de lectura y contiene información referente al tema *Elementos básicos del diseño*.

(1) Producto de Audio con extensión .mp3. Este archivo es un documento de audio y contiene información referente al tema *Elementos básicos del diseño*.

(1) Producto Audiovisual con extensión .pptx. Este archivo es un documento audiovisual y contiene información referente al tema *Elementos básicos del diseño*.

(1) Producto Interactivo con extensión .pptx. Este archivo es un documento interactivo y contiene preguntas del tema *Elementos básicos del diseño* para responder en falso y verdadero.

Interactividad. El alumno visualiza el tema al iniciar cada producto. En el instrumento interactivo el alumno tiene una participación en una evaluación personal de tipo preguntas con respuestas, éstas en verdadero y falso, y a este se le considera interactivo ya que el usuario es dueño de la secuencia y tiempo dedicado al contenido del instrumento. Motivación. El usuario integra las tecnologías que usa en su vida diaria en el manejo de los contenidos de sus clases teóricas. Puede tener acceso a estos documentos en cualquier dispositivo electrónico ya que el material de los archivos se encuentra disponible en varios tipos de extensiones. Estándares de estilo. En este apartado se analizan los siguientes puntos, pues se considera que la descripción de estos puede ayudarnos a crear la idea de diseño general del producto, es establecer la duración de los productos desarrollados.

Tabla 3: Etapas de Desarrollo del Producto

etapa	entregables o subproductos	responsable	fecha límite
<b>análisis</b>	en esta etapa se realizará un previo estudio de los conocimientos, habilidades y actitudes del grupo de personas a las que va dirigido este material multimedia, para poder tomar decisiones más asertivas al momento de desarrollar el material.	gloria torres	2 de mayo de 2012
seleccionar contenidos	se seleccionarán con cuidado los contenidos más adecuados para abordar el tema de una manera integral, pero sin divagar en detalles sin relevancia.	gloria torres	2 de mayo de 2012
definir perfil de usuario	se elabora un estudio del auditorio al que va dirigido el producto multimedia.	gloria torres	2 de mayo de 2012
elaborar fundamentos	se elige estratégicamente el método de instrucción con el que se quiere ilustrar el tema para que el concepto a tratar quede claro.	gloria torres	2 de mayo de 2012
seleccionar medios	se selecciona el medio con el que se quiere transmitir el mensaje, tomando en cuenta que éste será o no atractivo para el usuario.	gloria torres	2 de mayo de 2012
seleccionar modalidad	se establece la modalidad de la exposición del tema.	gloria torres	2 de mayo de 2012
seleccionar forma de distribución	da a conocer el producto multimedia, es decir cómo será difundido el mensaje que se ha elaborado.	gloria torres	2 de mayo de 2012
<b>diseño</b>	planeación de la preproducción del producto multimedia.	gloria torres	12 de mayo de 2012
bosquejo	se realizará el "borrador" del storyboard del proyecto.	gloria torres	12 de mayo de 2012
estándares	se expondrá la pauta de nuestro proyecto los estándares tendrán que ser muy claros .	gloria torres	12 de mayo de 2012
diseño final	se realiza el storyboard final del proyecto.	gloria torres	12 de mayo de 2012
<b>desarrollo</b>	producción del proyecto.	gloria torres	16 de mayo de 2012

etapa	entregables o subproductos	responsable	fecha límite
elaborar contenidos	producción de los contenidos por separado del proyecto (audio, imagen, texto)	gloria torres	1 de junio de 2012
integrar	se integran los contenidos realizados por separado para armar el producto.	gloria torres	4 de junio de 2012
revisar y probar	revisión del funcionamiento del producto adecuadamente.	gloria torres	9 de junio de 2012
liberar	el producto sale al consumidor o usuario.	gloria torres	16 de junio de 2012

*Producto de Texto:* El documento contiene 7 cuartillas, la duración del archivo será la que el usuario tarde en realizar la lectura.

*Producto de Audio:* Este documento tiene una duración de 3 minutos con 33 segundos.

*Producto Audiovisual:* Este documento tiene una duración de 4 minutos con 2 segundos.

*Producto Interactivo:* Siendo este producto interactivo el usuario es dueño de la secuencia y tiempo dedicado a contestar el cuestionario.

Redacción y gramática. Como consideración de uso de lenguaje se decide si se hablará al usuario de tú o de usted. Una recomendación general es que se hablará al usuario de tú, esto con la finalidad de romper las barreras que puedan existir a través de la pantalla de la computadora. El hablar de tú no rompe en ningún momento con el respeto, con esto sólo se pretende que el trato sea más personal. Se usará forma impersonal, porque en ningún momento se pretende dar una orden. El interesado es libre de hacer o no uso de los productos. Imagen visual fija. Por su parte la elaboración y/o selección de imágenes se pueden considerar como puntos básicos ya que las imágenes que se usaron serán de tipo fotografías en situaciones específicas para ilustrar algunos ejemplos. Imagen sonora. Se ha determinado que el material será redactado por un locutor de género femenino, tanto en el material audiovisual como en el audio. Animaciones. Cada animación de diapositiva va apareciendo conforme avance la redacción del tema. Distribución de los elementos. Los elementos están distribuidos de manera que no se distraiga la atención del usuario, para que éste comprenda y aprenda los contenidos, pues se pretende que el principal foco de atención sean los conceptos del tema.

Colores. Los colores elegidos para el documento son azules en su mayoría, pertenecen a la gama de los fríos, que motivan sensaciones de equilibrio, serenidad, sobriedad y tranquilidad, esto con la finalidad de mantener al usuario en un ambiente de calma y de éste modo no sobre exaltar sus sentidos y pueda mantener su atención durante la presentación del audiovisual. Tipografía. La tipografía usada en los documentos será de tipo sanserif *Calibri* para facilitar su lectura porque es una letra ligera y de fácil lectura que no cansa al usuario. La selección de contenidos. Se considera que las palabras y los usos del lenguaje incorporados en el desarrollo de producto multimedia, está en función del tipo de alumnos, y que de acuerdo a los objetivos de aprendizaje y en concordancia con la meta de la producción multimedia se establecen de tal manera que se puede aplicar las recomendaciones expuestas en este trabajo (Marqués, 1999) considerando oportunidades y desventajas en su desarrollo. Un ejemplo de esto se señala en la Tabla 4, que presenta una secuencia de selección de contenidos de acuerdo al tema, el objetivo, el medio, la modalidad y la forma de distribución.

Tabla 4: Selección de Contenidos

Tema	Objetivo particular	Medio	Modalidad	Forma de
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				distribución
Elementos conceptuales	Que el alumno comprenda y aprenda significativamente los elementos conceptuales del diseño	Producto multimedia de carácter visual, audio y audiovisual	Escolarizada	Plataforma Blackboard
Elementos visuales	Que el alumno comprenda y aprenda significativamente los elementos conceptuales del diseño	Producto multimedia de carácter visual, audio y audiovisual	Escolarizada	Plataforma Blackboard
Elementos de relación	Que el alumno comprenda y aprenda significativamente los elementos conceptuales del diseño	Producto multimedia de carácter visual, audio y audiovisual	Escolarizada	Plataforma Blackboard
Elementos de practicos	Que el alumno comprenda y aprenda significativamente los elementos conceptuales del diseño	Producto multimedia de carácter visual, audio y audiovisual	Escolarizada	Plataforma Blackboard

El perfil del usuario. En este punto de consideración para el desarrollo del producto multimedia aquí presentado es importante considerar que el estudiante al que se dirige es el situado en la materia de teoría del diseño I. En este sentido se espera que cuente preferentemente con el siguiente perfil académico.

Conocimientos básicos en geometría, investigación, aritmética, historia del arte y dibujo. Habilidades y destrezas para coordinación visual-manual, expresar ideas utilizando su imaginación y creatividad, desarrollo de trabajo intelectual y manual, trabajar en equipos interdisciplinarios, ser observador, analítico y capaz de sintetizar y explicar problemas, lectura y expresión correcta en forma verbal y escrita, organizarse y trabajar en equipo. En complemento las consideraciones del producto aquí presentado se refieren a alumnos de nivel superior que se forman en carreras cuya base es el dibujo, diseño o similares.

## CONCLUSIONES

El producto multimedia dirigido a los alumnos de teoría del diseño I en el nivel superior, permite la exploración de diversas estrategias para el desarrollo didáctico de materiales multimedia que en nuestra propuesta facilitan el desarrollo tanto de conocimientos, como habilidades y actitudes respecto a la comprensión de los procesos de formación profesional. En un inicio se presentó la problemática de que el desarrollo de productos multimedia podía representar para todo docente un ventaja competitiva para el diseño de procesos educativos. Si bien es un trabajo dirigido a un grupo específico, con perfiles de profesionalización altos. Las recomendaciones que se han seguido (Marqués, 1999) respecto a la clasificación de los materiales, las funciones y las ventajas e inconvenientes son interesantes para el proceso de planeación. Por su parte el cuidado de atención respecto a los estándares de la estructura educativo, el estilo y formato de presentación de los materiales propuestos, implican una estructura de organización de contenidos bajo estrategias que pueden mejorar los procesos de comunicación en el aula. Finalmente la propuesta de seguimiento de un protocolo de planeación para productos multimedia educativos.

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# LA EVALUACIÓN Y ACREDITACIÓN DE LOS PROGRAMAS ACADÉMICOS Y SU IMPACTO DESDE LA PERCEPCIÓN ESTUDIANTIL

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## RESUMEN

*El aseguramiento de la calidad educativa en las Universidades Públicas de México requiere de un proceso de evaluación y acreditación por parte de un organismo reconocido por el Consejo para la acreditación de la Educación Superior (COPAES). Los programas que ofrece la dependencia objeto de estudio, la cual pertenece a una Universidad Pública, acreditó sus programas ante este organismo en el 2005, y obtuvo la re-acreditación en 2011. El presente estudio evalúa el impacto de la acreditación desde la percepción de los estudiantes que integran la comunidad estudiantil. Para ello se obtuvo información cuantitativa de 241 estudiantes mediante un cuestionario estructurado, el cual posterior a su análisis arroja información sobre la percepción estudiantil respecto a su institución, los planes y programas, los docentes, los recursos y su autopercepción respecto al desarrollo de habilidades entre otros, así como el grado de satisfacción con la formación recibida y la carrera de estudio.*

**PALABRAS CLAVE:** Calidad Educativa, Evaluación y Acreditación de Programas Académicos, Impacto

## THE ASSESSMENT AND ACCREDITATION OF ACADEMIC PROGRAMS AND THEIR IMPACT FROM THE STUDENT PERCEPTION

### ABSTRACT

*The educational quality assurance in the Public Universities of Mexico requires an assessment and accreditation process by an agency recognized by the Council for the accreditation of superior education. The programs that the agency offers, which belong to a Public University, were accredited on 2005 and obtained the re-accreditation on 2011. The present study evaluates the impact of the accreditation from the perception of the students that belong to the student community. For that, quantitative information from 241 students were obtained via a structured questionnaire, which subsequently to its analysis produces information about the student's perception regarding its institution, the plans and programs, the professors, the resources and its auto-perception regarding the skills development among others, as well as the level of satisfaction with the received training and with the professional career.*

**KEY WORDS:** Educational Quality, Academic Programs of Assessment and Accreditation, Impact

## INTRODUCCIÓN

En los últimos años las Universidades Públicas de México, al igual que otras instituciones de educación superior han recurrido a la evaluación y acreditación de organismos externos en busca de la mejora de la calidad en la educación, ya que la sociedad demanda que se rindan cuentas sobre su desempeño y a la vez se contribuya de manera óptima al desarrollo económico, social, político y cultural del país, del que es parte activa el egresado universitario. El Consejo para la Acreditación de la Educación Superior, A.C. (COPAES), fundado el 24 de octubre de 2000, es la única instancia validada por la Secretaría de Educación Pública (SEP) para conferir reconocimiento oficial a los organismos acreditadores de los programas académicos que se imparten en este nivel educativo en México. Ese reconocimiento permite la regulación de los organismos acreditadores y los procesos de acreditación en las diversas áreas del conocimiento, con el objeto de evitar posibles conflictos de intereses y de informar a la sociedad sobre la calidad de un programa de estudios de nivel superior, particularmente a los posibles alumnos, padres de familia y a los empleadores (COPAES, 2012).

Los programas académicos de la dependencia de estudio fueron evaluados por los Comités Interinstitucionales para la Evaluación de la Educación Superior (CIEES) encargados de realizar una evaluación diagnóstica, a través de la cual después de atender una serie de recomendaciones se obtuvo el nivel 1 que es considerado el pertinente para solicitar la evaluación. Posteriormente los programas fueron evaluados y acreditados en el 2005 por El Consejo para la Acreditación de la Educación Superior, A. C. (COPAES) y re-acreditados en el 2011.

Considerando a los actores participantes en esta labor, tanto del gobierno, como la institución y la dependencia en particular, los recursos empleados y esfuerzos realizados, es necesario evaluar el impacto que esta tarea ha generado a través de la percepción que tiene el estudiante de algunos indicadores de su facultad que han sido evaluados y acreditados. Para este estudio se consideraron: los planes y programas académicos, los profesores, la dependencia, los recursos y la autopercepción del estudiante, con el objetivo de contribuir al conocimiento develando su percepción, considerando que el tiempo de maduración del proceso de aseguramiento de la calidad lleva ocho años es posible describir y analizar ciertos aspectos al respecto, los cuales podrán ser utilizados por la dependencia de estudio para continuar con la ineludible labor del aseguramiento de la calidad.

## **REVISIÓN LITERARIA**

### Calidad

El concepto de calidad ha sido ampliamente debatido y existen numerosas interpretaciones que conllevan distintos modelos de análisis. Entre otros, señala González (2008) que se ha identificado la calidad como sinónimo de perfección o consistencia, la calidad como el cumplimiento óptimo de las especificaciones dadas, como algo asociado al valor o al precio, o bien a la capacidad de generar valor agregado a lo que se produce. A estas opciones se agrega la complejidad en el caso educativo de las condicionantes valóricas que orientan toda acción pedagógica. En el informe sobre la Calidad en Latinoamérica, Toro define la calidad de la enseñanza superior “como la medida del logro de la consistencia interna y externa” (2012, p.191) entendiendo la consistencia interna como el cumplimiento de los propósitos institucionales y la externa como aquella que cumple las demandas de la sociedad.

Así mismo, la Organización Internacional de la Normalización define la calidad de la educación superior como el “especificar objetivos de aprendizaje que impliquen estándares académicos que

involucren el cumplimiento de las expectativas de la sociedad, las aspiraciones de los estudiantes, demandas del gobierno, empresas industrias y las necesidades de las instituciones profesionales” (ISO, citado en Martínez, 2008 p.3) La garantía de calidad según Zedillo (2010) puede ser definida como aquello que desencadena un proceso para que los actores involucrados en la educación tengan confianza en que la provisión del servicio cumple con sus expectativas y se alcanzan los estándares mínimos esperados. Esta definición pone de relieve los distintos aspectos de garantía de calidad que se refieren a los insumos, procesos y resultados, y es relevante recordar que la sociedad demanda esos estándares, ya que es una herramienta que permite dar señales al mercado laboral sobre las habilidades y competencias de los graduados. Para González (2008) el concepto de calidad educativa es considerado relativo, como un término de referencia de carácter comparativo que permite establecer comparaciones, en relación a un patrón de referencia real o utópico que se desea lograr, por otra parte Arrien (1996) lo establece como un concepto dinámico, diverso, multidimensional y total ya que cambia con el tiempo, porque varía según los contextos de los países, es producto de diversas condiciones y es total, dado que implica atención en diferentes dimensiones del aprendizaje. Para conocer los estándares mínimos esperados, para realizar las comparaciones pertinentes de lo real o utópico, es necesarios que las Instituciones de Educación Superior soliciten al COPAES la evaluación y acreditación de la institución y de los programas académicos.

### Evaluación y Acreditación

Evidentemente la acreditación de programas educativos se sustenta, o debe sustentarse, en una evaluación. El diseño y la ejecución de la evaluación que sustenta un sencillo padrón de acreditación es relativamente simple: se definen los criterios, se convoca a los aspirantes, se coteja la información y cuando procede se expide la acreditación (González, 2008). Eduardo Zedillo, director general del COPAES, cita que “la evaluación es un proceso integral y continuo que tiene propósitos de diagnóstico y de formulación de recomendaciones encaminadas a elevar la calidad de las instituciones y de los programas académicos” (COPAES, 2010), mientras que la acreditación es un procedimiento que implica contrastar programas o instituciones con estándares establecidos por los organismos externos, lo cual permite asegurar y desarrollar la calidad de la educación.

La acreditación “consiste en dar fe pública de cumplimiento con los estándares establecidos, tanto para las instituciones como para sus programas académicos” (González, 2008, p.12). Zapata y Tejeda (2009) definen la acreditación como un conjunto de políticas, procedimientos normas y prácticas que promueven estándares de calidad y transparencia del sistema, y de esta forma se privilegia procedimientos de evaluación permanentes asociados con verificar y certificar públicamente que se cumplen ciertos criterio de calidad. Arirén (1996), alude a que es opinión generalizada que toda universidad en razón de los recursos que recibe de la sociedad, debe de rendir cuentas a través de mecanismo apropiados de desempeño. La acreditación siempre será un marco referencial importante para procurar un desempeño eficiente así como para disponer de parámetros con los cuales rendir cuenta a la sociedad.

Considera que son los procesos internos de acreditación los que redundan en impactos más profundos y permanente en el mejoramiento de la calidad. La acreditación es una carta de solvencia académica de una universidad. Es necesario e indispensable contar con ella. Esos resultados, impactos, efectos de la acreditación empezaron a evaluarse en algunas instituciones que requerían tener conocimientos de los avances obtenidos con el proceso llevado a cabo y con el trabajo de seguir manteniendo esa acreditación, pues en el caso de México, se realizar visitas posteriores a la acreditación evaluando avances de las recomendaciones emitidas por los

organismos externos, y cada 5 años se vuelven a evaluar todos los indicadores y si existe cumplimiento de los estándares establecidos se re-acreditan los programas académicos.

### Impacto

El diccionario de la lengua española define la palabra impacto como “el efecto producido en la opinión pública por un acontecimiento, una disposición de la autoridad, una noticia, una catástrofe, etc.” Libera (2007) menciona que hay impacto cuando una acción o actividad produce una alteración, favorable o desfavorable en el contexto o medio y componentes en el cual se desenvuelve dicha actividad, y que la evaluación de impacto trata de establecer cuáles son los posibles efectos-consecuencias del objeto evaluable en una población amplia de una organización, de una comunidad o un país y las personas asociadas al usuario. La opinión de Calvo es que la evaluación de impacto, mide los cambios en el bienestar de los individuos que pueden atribuirse a un programa o a una política específica y establece que los objetivos de este tipo de evaluación son proveer información y ayudar a mejorar su eficacia (2006). Se han privilegiado estudios sobre impactos de la acreditación que describen cambios ocurridos en las instituciones tras los procesos de evaluación (Castillo, 2010; Del Castillo, 2004; González, 2008; López, 2007; Salas, 2013; Solano, 2004) o bien el impacto recibido por los diversos actores institucionales (Scharager y Aravena, 2010; Torre y Zapata, 2012; Zapata y Tejeda, 2013). En un estudio realizado por Reguroti y Bon (2012) destaca el que los estudiantes perciben la calidad académica por tener buenos maestros, buenos contenidos académicos y buenas instalaciones así como el que se brinde herramientas para la profesión, que se preparen bien a los estudiantes y que los maestros tengan experiencia. Vale la pena mencionar algo que no se encuentra en la literatura y se refiere a los que comenta Stensaker: la acreditación mantiene dificultades para proveer evidencia sustancial a lo que resulta más importante, el impacto en la calidad del proceso enseñanza-aprendizaje (2008).

### **METODOLOGÍA**

El trabajo de investigación que se llevó a cabo es de tipo cuantitativo, descriptivo y transversal. La población objeto de estudio fueron 241 estudiantes de tres carreras diferentes, los cuales cursan del 5 a 10 semestre y pertenecen a una dependencia de una Universidad Pública, mismos que fueron encuestados durante el mes de septiembre del 2013. El instrumento utilizado fue un cuestionario proporcionado por el CINDA, constituido por 38 ítems, medidos a través de la escala de Likert (5 a 1 de mayor a menor). Considerando el 5 como excelente o muy adecuado, el 4 como bueno o adecuado, 3 como regular o más o menos, el 2 como malo o inadecuado y el 1 como no sé o no responde. Por lo tanto, lo señalado en el 5 y 4 se valora como alta (favorable), el 3 mediana (poco favorable) y el 2 baja (desfavorable). Los datos cuantitativos se procesaron a través del paquete estadístico SPSS, con la finalidad de encontrar y evaluar la percepción del estudiante respecto a su facultad, los planes y programas, los docentes, la autopercepción de sus capacidades, así como el grado de satisfacción con la formación recibida y la carrera de estudio.

### **RESULTADOS**

Respecto a la muestra, se puede observar en la tabla 2 el género de los estudiantes en el cual predomina el femenino, el porcentaje de estudiantes que trabaja es de 46.1% y el que solo estudia es el 33.6%. La carga de materias que tienen oscila de 24 a 30 horas a la semana, observándose que la que mayor incide es la que corresponde a 28-30 horas semanales, con el 43% de los encuestados.

Tabla 2: Variables Dependientes: Género, Distribución Del Tiempo y Carga Horaria

Género	Porcentaje
Masculino	22%
Femenino	78%
<b>Distribución del tiempo</b>	
Trabaja jornada completa	46.1%
Trabaja media jornada	12.4%
Trabaja de 5 a 10 semanales	7.9%
No trabaja	33.6%
<b>Carga horaria</b>	
28-30 semanales	43%
25-27 semanales	39 %
20-24 semanales	18%

La muestra de estudiantes revela la incidencia del género femenino, la ocupación laboral en jornada completa de los estudiantes que representa el mayor porcentaje, así como la carga horaria que tienen por semana.

En la tabla 2, se pueden identificar la percepción de los alumnos respecto a los indicadores de la variable profesores a través de los porcentajes señalados. La que perciben como favorable la mayoría es la de asistencia y puntualidad docente con 72.2% en cambio la edición de apuntes de clase, el 46% la consideran favorable y el 44% la percibe como menos favorable.

Tabla 2: Indicadores y Frecuencias de la Variable Profesores

VARIABLE DEPENDIENTE	INDICADORES	5 %	4 %	3 %	2 %	1 %	MEDIA
PROFESORES	Edición de apuntes de clase	5.8	40.2	44.4	8.4	1.2	3.41
	Entrega de programa detallado de cada actividad docente.	10.0	51.5	32.4	4.1	2.1	3.63
	Calidad del cuerpo docente	11.2	51.5	29.9	7.1	0.4	3.66
	Atención recibida por profesores fuera de horas clase	16.2	44.8	29.5	8.7	0.8	3.67
	Disposición e interés para relacionarse informalmente	11.7	47.7	30.7	9.1	0.8	3.60
	Procedimientos para evaluar aprendizajes	07.9	49.8	37.8	4.1	0.4	3.61
	Asistencia y puntualidad docente	14.5	57.7	24.5	3.3	0.0	3.83

La percepción de los indicadores que conforman esta variable muestra una media de 3.64 en promedio.

Sobre los planes y programas, en la tabla 3 se observa que la que consideran más favorable es la de la coherencia entre la concepción educativa y planes y programas, con un 61.4%, mientras que la incidencia que tiene la opinión de estudiantes en la revisión de planes y programas presenta la un 44.6% favorable y un 38.8% menos favorable.

Tabla 3: Indicadores y Frecuencias de la Variable Planes Y Programas

VARIABLE DEPENDIENTE	INDICADORES	5 %	4 %	3 %	2 %	1 %	MEDIA
PLANES Y PROGRAMAS	Coherencia entre la concepción educativa y planes y programas	10.9	50.6	33.2	4.1	1.2	3.66
	Incidencia que tiene la opinión de estudiantes en la revisión de planes y programas	5.8	38.8	38.8	13.7	3.3	3.30
	Inclusión de actividades obligatorias y optativas	8.3	46.9	36.1	6.6	2.1	3.53
	Fijación adecuada entre teoría y práctica	6.6	50.6	34.9	7.5	0.4	3.56

Los indicadores de esta variable presentan una media de 3.51 en promedio.

En cuanto a la percepción que tienen de la dependencia en particular se puede observar en la tabla 4, una muy favorable a como se cataloga la educación que se imparte ya que el 87% la considera excelente y buena, así como la consideración del status de su dependencia que el 21.6% lo considera excelente y el 60.2% buena. Por el contrario la más desfavorable es hacia el grado y forma de participación de estudiantes en toma de decisiones, pues el 33.6% la consideran menos favorable y el 12% desfavorable.

Tabla 4: Indicadores y Frecuencias de la Variable Dependencia

VARIABLE DEPENDIENTE	INDICADORES	5 %	4 %	3 %	2 %	1 %	MEDIA
DEPENDENCIA	Como se cataloga la educación que se imparte	20.8	66.4	12.0	0.8	0.0	4.07
	Opinión sobre la misión	26.1	57.3	14.1	0.4	2.1	4.05
	Metas a corto y mediano plazo del personal administrativo y docente	10.8	49.8	30.3	3.7	5.4	3.57
	Consideración del Status	21.6	60.2	17.0	1.2	0.0	4.02
	Flexibilidad reglamentaria para adecuarse a situaciones imprevistas de los estudiantes	11.2	43.6	34.0	10.4	0.8	3.54
	Políticas de distribución de carga horaria	14.6	47.7	26.1	9.1	2.5	3.63
	Criterios de exigencia y calidad académica	10.8	54.4	29.0	5.8	0.0	3.70
	Cumplimiento de planes y programas de estudio	12.9	45.6	33.6	7.1	0.8	3.63
	Grado y forma de participación de estudiantes en toma de decisiones	10.4	38.2	33.6	12.0	5.8	3.35

*En esta variable formada por 9 indicadores se establece como la media de 3.56 como promedio.*

Referente a la autopercepción de los estudiantes, se observa en la tabla 5, que los indicadores evaluados más favorables son el de la adquisición de conocimientos útiles, ya que el 84.7% los consideran muy adecuados y adecuados. El grado de satisfacción con la carrera, y hacia la formación que reciben con una media de 4.11, equivalente al 80.9% y el 76.4% respectivamente. Por otra parte la que se percibe menos favorable en esta variable es la auto-perfección en temas o materias específicas, pues el 45.3% la considera regular.

Tabla 5: Indicadores y Frecuencias de la Variable Estudiantes

VARIABLE DEPENDIENTE	INDICADORES	5 %	4 %	3 %	2 %	1 %	MEDIA
ESTUDIANTES	Grado de satisfacción con la carrera	31.1	49.8	18.3	0.8	0.0	4.11
	Desarrollo de capacidad para interpretar información	15.8	62.7	19.9	1.2	0.4	3.92
	Desarrollo de capacidad para extraer conclusiones	10.8	63.5	23.7	1.7	0.4	3.83
	Adquisición de conocimientos útiles	30.3	54.4	14.5	0.4	0.4	4.15
	Resolución de problemas con prontitud	17.0	58.5	22.4	1.7	0.4	4.02
	Auto-perfección en temas o materias específicas	6.2	44.0	45.3	4.1	0.4	3.51
	Grado de conocimientos sobre estatutos y reglamentos	11.2	36.1	33.6	16.2	2.9	3.37
	Nivel de satisfacción respecto a la formación que se recibe	19.5	56.9	19.1	4.1	0.4	4.11
	Conocimiento y asimilación de planes y programas de estudios	10.0	51.5	32.8	5.4	0.4	3.65

*El promedio de la media de estos indicadores es de 3.85*

En la tabla 6, se puede apreciar que dentro de los indicadores el que perciben desfavorable un 49.4% ya que califican como malo, es la disponibilidad para acceder a internet, y en el de cantidad de software para apoyar la docencia, el 36.1% de la muestra coinciden en que es regular. Por el contrario la calidad de la biblioteca en relación a los requerimientos y la disponibilidad de material bibliográfico, es la que presentan las medias más altas con un 3.71 y 3.68 respectivamente.

Tabla 6: Indicadores y Frecuencias de la Variable Recursos

VARIABLE DEPENDIENTE	INDICADORES	5 %	4 %	3 %	2 %	1 %	MEDIA
RECURSOS	Disponibilidad de material bibliográfico	17.0	43.6	31.5	5.8	2.1	3.68
	Disponibilidad para acceder a internet	5.7	11.2	21.6	49.4	14.1	2.41
	Cantidad de software para apoyar la docencia	6.2	22.4	36.1	32.0	3.3	2.96
	Calidad de la biblioteca en relación a requerimientos	19.9	41.1	30.7	6.2	2.1	3.71
	Adecuación en cantidad y calidad de laboratorios	7.1	42.7	38.6	8.7	2.9	3.42
	Actualización de las bibliotecas	15.4	39.4	36.5	7.5	1.2	3.60

Cantidad de material audiovisual para atender a los estudiante	14.1	37.3	34.0	13.8	0.8	3.50
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*En esta tabla se puede observar que los indicadores presentan una media en promedio de 33.2%*

## CONCLUSIONES

Los resultados obtenidos permiten identificar las principales características de la población de estudio, la que se distingue por ser mujeres (78%), por laborar en otras empresas jornadas completas y medias jornadas (58.5%) y tener una carga horaria de 28-30 horas por semana (43%). Las cuales como variables dependientes del estudio, no mostraron ninguna asociación significativa con las variables independientes. Para tener programas acreditados por organismos externos, se han buscado estrategias e implementado acciones, para el aseguramiento de la calidad durante 8 años y aún se continúa trabajando en ello, sin embargo, el trabajo agobiante que representa el evidenciar cada una de las acciones, descuida la retroalimentación de los efectos o impactos que produce en los diferentes actores del proceso.

La variable que tiene la media más alta es la de estudiantes, ya que se percibe un grado de aceptación favorable sobre la satisfacción que tienen con su carrera, así como con la formación que reciben y el desarrollo de capacidades para interpretar información, adquirir conocimientos útiles y resolver problemas con prontitud. Definitivamente que esos indicadores se relacionan con todo lo elementos que integran su facultad, y muchos de los indicadores evaluados presentan áreas de oportunidad en la constante labor del aseguramiento de la calidad. En orden descendente, después de los indicadores de estudiantes, se tiene el de profesores con una media de 3.64, le sigue el de la dependencia con una media de 3.56, los planes y programas con una de 3.51 y para finalizar, la de recursos con un promedio de 33.2 de media. En términos generales se aprecia que ninguna de la variables de estudio muestra ser excelente, sin embargo el de estudiantes y profesores se pueden apreciar como buenos, el de planes y programas y dependencia se encuentran más distantes de alcanzar esa connotación, y el que se aprecia como regular es la variable de recursos, en la que es necesario prestar atención en algunos indicadores que se muestran deficientes, como son el acceso a internet, y la cantidad de software para apoyar la docencia. Este estudio permitirá la búsqueda de nuevas estrategias y acciones en la búsqueda del aseguramiento de la calidad a través de los procesos de evaluación y acreditación, los cuales de acuerdo con Caudillo (2010), deben enfatizar la mejora de la calidad por encima de la sola rendición de cuentas, que el enfoque sea más educativo que administrativo y se apunten los esfuerzos al cumplimiento de las misiones institucionales.

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# DISCRIMINACIÓN SALARIAL POR GÉNERO DEL SECTOR TURÍSTICO DE MÉXICO: UNA REVISIÓN

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## RESUMEN

*El presente documento muestra una revisión de la literatura reciente sobre la discriminación salarial existente en el sector turístico de México y de diferentes países. La diferencia salarial entre hombres y mujeres es la brecha o desigualdad en el salario medio de trabajadores y trabajadoras con iguales o diferentes dotaciones de características personales y laborales. En cambio, la discriminación salarial, alude a la parte de la diferencia salarial que tiene su fundamento en motivaciones estrictamente discriminatorias, es decir, aquella parte de la brecha salarial que no puede justificarse por razones distintas al sexo de la persona ocupada. El objetivo general es identificar las características del fenómeno, las hipótesis abordadas, las fuentes de información utilizadas, así como los modelos econométricos empleados en la metodología. Los resultados nos darán la pauta para conocer las posibles líneas de investigación en el tema, así como las aportaciones que han resultado de estos trabajos.*

**PALABRAS CLAVE:** diferencia salarial, discriminación salarial, mercado laboral y sector turístico.

## GENDER WAGE DISCRIMINATION OF MEXICO TOURISM SECTOR: A REVIEW

### ABSTRACT

*This document presents a review of recent literature on wage discrimination in the tourism sector in Mexico and other countries. The pay gap between men and women is the gap or inequality in the average wage of workers with the same or different personal characteristics and labor. In contrast, wage discrimination, refers to the part of the wage gap that is based on purely discriminatory reasons, is that part of the wage gap that cannot be justified for reasons different than the sex of the person employed.*

*The overall objective is to identify the characteristics of the phenomenon, hypotheses, the sources of information and the econometric models used in the methodology. The results give us an idea for possible lines of research on the topic as well as the contributions that have resulted from this work.*

**JEL:** J4, J7, J31

**KEYWORDS:** wage gap, wage discrimination, labor market and tourism.

### INTRODUCCION

La realidad económica del país durante los últimos años, ha mostrado un cambio vertiginoso en todos sentidos, uno de los cuales consiste en la manera como mujeres y hombres participan en el mercado laboral. La inserción de las mujeres en el trabajo extradoméstico se ha incrementado notablemente y su papel ha sido más activo y creciente: ahora incluso ocupan cargos tradicionalmente asignados a hombres. No obstante, el porcentaje de participación femenina representa sólo la tercera parte dentro del total de la población económicamente activa (Instituto Nacional de las Mujeres México, 2003).

Según la encuesta Nacional de Ocupación de Empleo, el total de población económicamente activa al primer trimestre del 2013, es de 50, 246,878 personas que representan el 43% de la población total. De la población económicamente activa, las mujeres representan el 38% con un total de 18,978,385 (Secretaría del Trabajo y Previsión Social, 2013).

Entre los elementos que pueden explicar la creciente participación femenina en el mercado laboral están los factores estructurales a largo plazo, como es el hecho de que la mujer tenga mayor nivel educativo, cambios culturales a favor de la inserción de la mujer en actividades laborales extradomésticas, reducción del número de hijos y un crecimiento de actividades económicas con un perfil favorable para el trabajo femenino. Por otro lado, también se encuentra la caída del poder adquisitivo del ingreso familiar, bajo el modelo organizativo de un solo proveedor, lo que obliga a que en mayor medida se requiera la participación de más de un miembro de la familia en el mercado laboral, con la finalidad de mantener el mismo ingreso real familiar (Castro y Huesca, 2007).

La participación femenina crece y aumenta el número de mujeres ocupadas con nivel superior, pero todavía no ejercen presión representativa en el sector privado de la economía. No hay aumento significativo de mujeres en posiciones jerárquicas altas ni en puestos de decisión, como tampoco se observan grandes cambios en la reducción de la desigualdad salarial (Cacciamali y Tatei, 2013). Podemos darnos cuenta que a pesar de la creciente incursión de la mujer en el mercado laboral y el incremento de mujeres calificadas, existen numerosos estudios que han confirmado que el salario de los hombres es superior, en promedio, al que perciben las mujeres y se han ocupado de medir el alcance de la diferencia entre ambos (De Cabo y Garzón, 2007).

Por lo anterior, pretendemos realizar esta investigación con el objetivo de identificar las características del fenómeno, las fuentes de información, modelo econométrico utilizado y los resultados que nos permitirán conocer las aportaciones hasta el momento y las posibles líneas de investigación para trabajos futuros. Específicamente, nos enfocaremos en el sector turístico, por ser una industria que se ha posicionado como una de las principales empleadoras de mujeres, donde la proporción entre ambos géneros casi se iguala y además se encuentra en constante crecimiento.

### Marco Teórico

Los diferenciales de salario entre hombres y mujeres, así como las diferencias en la manera en que unos y otros se incorporan al mercado laboral, constituyen una de las expresiones de la desigualdad entre los sexos (Secretaría de Turismo y Colegio de México, 2011). Al estudiar el mercado laboral, en especial la disparidad salarial, nos damos cuenta que a nivel internacional, el crecimiento de la desigualdad parece ser una constante en la mayoría de los países desarrollados y en desarrollo (Castro y Huesca, 2007). Es importante distinguir la diferencia entre ambos

conceptos, utilizados en los estudios que versan sobre la diferencia y/o la discriminación salarial de la mujer.

La diferencia salarial entre hombres y mujeres es la brecha o desigualdad en el salario medio de trabajadores y trabajadoras con iguales o diferentes dotaciones de características personales y laborales. En cambio, la discriminación salarial, alude a la parte de la diferencia salarial que tiene su fundamento en motivaciones estrictamente discriminatorias, es decir, aquélla parte de la brecha salarial que no puede justificarse por razones distintas al sexo de la persona ocupada. (De Cabo y Garzón 2007). Según McConnell, et.al., (2003) “Existe discriminación económica cuando los(as) trabajadores(as) pertenecientes a grupos minoritarios, con idéntica capacidad, nivel de estudios, formación y experiencia que el grupo mayoritario, recibe un trato inferior en la contratación, el acceso a una ocupación, los ascensos, el salario o las condiciones de trabajo”.

Lo anterior, refuerza la idea de que la diferencia salarial entre hombres y mujeres es una realidad del mercado laboral, donde el salario de los hombres es superior, en promedio, al que perciben las mujeres. Sin embargo, existe discriminación salarial cuando una mujer gana menos, por el simple hecho de pertenecer al sexo femenino. Aunque se ha tratado de alcanzar un desarrollo análogo entre hombres y mujeres, existen varios trabajos empíricos sobre el tema que han analizado los mercados laborales de países tanto desarrollados como subdesarrollados, sin encontrar un solo país en donde las remuneraciones promedio de las mujeres hayan resultado más altas o iguales a las de los hombres.

La misma situación se presenta aun cuando se toma en cuenta el nivel de educación: en la mayoría de los países, a un mismo nivel educativo, las mujeres ganan menos que los hombres y ocupan posiciones menos favorecidas. Los primeros trabajos que analizan las cuestiones de género en el sector turístico no aparecen hasta mediados de la década de los noventa con la publicación de tres recopilaciones de artículos sobre esta materia. La primera de ellas fue publicada por Kinnard y Hall en 1994, la segunda correspondiente a un volumen especial de *Annals of Tourism Research* publicado en 1995 y la tercera publicada por Sinclair en 1997. Estas recopilaciones definen el marco conceptual amplio en el cual enmarcar el análisis de las cuestiones de género en el sector turístico y presentan una serie de casos de estudio que analizan, desde distintas perspectivas, los efectos del desarrollo turístico.

Centrándose específicamente en las diferencias entre hombres y mujeres en el sector turístico, la mayor parte de los trabajos presentes en las anteriores colecciones, así como los publicados a partir de entonces se centran en la descripción de las condiciones particulares de las mujeres en el mercado laboral turístico. Aparece la evidencia de una mayor precariedad laboral, menores remuneraciones, y de segregación ocupacional. Sin embargo sólo Sparrowe e Iverson (1999) tratan de analizar con mayor profundidad las causas de las diferencias salariales por razón de género en el sector turístico. En México, solo se ha realizado una investigación en el sector turístico que mide la discriminación salarial por género y se realizó en el 2011 por la Secretaría de Turismo y el Colegio de México. El principal beneficio de la investigación fue obtener un diagnóstico del mercado laboral en las diversas ramas y empresas turísticas que permita tener un panorama de la situación actual de la participación de las mujeres y hombres. El estudio muestra que el sector turístico es el que presenta mayores diferenciales salariales entre hombres y mujeres. En 2010, los hombres tienen un ingreso promedio por hora de 27.80 pesos, en contraste con los 20.97 pesos que ganan las mujeres. La fuente de información utilizada fue la base de datos de la Encuesta Nacional de Ocupación y empleo.

## **METODOLOGÍA**

Para la presente investigación se utilizó la revisión de la literatura sobre temas relacionados con la diferencia y discriminación salarial en el sector turístico. Esto con la finalidad de situar la investigación en una panorámica general de las metodologías, resultados y conclusiones de las investigaciones realizadas a nivel nacional e internacional y realizar una mejor interpretación de los resultados obtenidos en el análisis econométrico.

## RESULTADOS

Llama la atención que, a pesar de la relevancia reconocida de la industria turística como motor de desarrollo y generadora de empleo, sea escasa la literatura que analiza los efectos sociales y económicos del sector. Existen estudios en la literatura académica turística que se han dedicado a estudiar las tendencias del turismo, sobre todo las relacionadas con el turismo alternativo, o ecoturismo como muchos lo han llamado, así como investigaciones de desarrollo turístico sustentable. Sin embargo, hacen falta estudios del turismo que midan o evalúen el impacto de este sector en la economía, sobre todo los relacionados con las diferencias de género.

## CONCLUSIONES

En México, la incorporación creciente de las mujeres en la vida económica, política y social, ha impulsado y favorecido la perspectiva de género e igualdad de oportunidades como una forma de desarrollo y constante evolución de la sociedad mexicana, favoreciendo la visión que concibe a la mujer como sujeto de desarrollo sobre aquella que se les asigna un papel de inferioridad y subordinación. En este contexto la Secretaría de Turismo y sus organismos sectorizados se comprometen a provocar los cambios necesarios para alcanzar la igualdad entre mujeres y hombres, convencidos de que se está contribuyendo a consolidar la democracia de nuestro país. Sin embargo, es una realidad que aún existen diferencias salariales entre hombres y mujeres, y lo más preocupante que se sigue dando el fenómeno de la discriminación salarial por género. De aquí la importancia de seguir evaluándolo, que permitan proponer estrategias y política pública que ayude a solucionar un problema de la mujer en el mercado laboral.

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# **EL SISTEMA DE GESTIÓN DE CALIDAD BAJO LAS NORMAS ISO 9001:2008 COMO ELEMENTO ARTICULADOR DE LOS LINEAMIENTOS DE LA EVALUACIÓN Y ACREDITACIÓN DE PROGRAMAS EDUCATIVOS DE CIENCIAS SOCIALES Y ADMINISTRATIVA DE LA UNIVERSIDAD ESTATAL DE SONORA**

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## **RESUMEN**

*Las principales consideraciones del modelo de calidad en la educación en México explican los factores principales de la gestión de la calidad en las instituciones de educación, así como las acciones realizadas para elevar la calidad en la educación superior. Se hace énfasis en la interpretación de la competitividad académica a través del reconocimiento de la calidad de los programas educativos por medio de una organización de acreditación reconocida por el Consejo para la Acreditación de la Educación Superior (COPAES) o evaluadas por el nivel superior de los Comités Interinstitucionales para la Evaluación de la Educación Superior (CIEES), así como la certificación de proceso estratégicos por medio de la norma mexicana NMX-CC-9001-IMNC-2008 y sus normas complementarias. La contribución de la investigación permite visualizar la integración de los aspectos de la competitividad académica al Sistema de Gestión de la calidad bajo la norma ISO 9001:2008. Plantea el impacto del sistema integrado en la calidad en la educación de la Universidad Estatal de Sonora (UES) y los aspectos importante para determinar la competitividad de una institución de educación superior*

**PALABRAS CLAVES:** Sistema de Gestión de Calidad, Calidad Educativa, Acreditación e ISO 9001:2008

## **QUALITY MANAGEMENT SYSTEM BASED STANDARDS ISO 9001:2008 AS INTEGRAL ELEMENT IN SOCIAL AND ADMINISTRATION ACADEMIC PROGRAM FOR SONORA STATE UNIVERSITY CRITERIA EVALUATION AND ACCREDITATION**

## **ABSTRACT**

*The consideration fundamentals of quality model in the Mexican education explain the fundamentals factor about management system in University Education, as the action for increase the quality in the University academic programs. In this document emphasizes in the interpretation of academic competitive through quality academic program recognize of accreditation company approval for Accreditation for Superior Education Council or Interinstitutional for Evaluation of Superior Education Committee, also process strategic*

*certification by international standards ISO 9001:2008 and complementary standards. The contribution of research allows visualize the integration topics of academic competitive to Quality Management System by international Standards ISO 9001:2008. Describe the impact to integral System in the Quality Education of Sonora State University and fundamentals topics for determine the competitive of University Education.*

**JEL:** I23, M10

**KEYWORDS:** Quality Management System, Quality Education, Accreditation, ISO 9001:2008

## INTRODUCCIÓN

Pérez (1996b) señala que la evaluación es un ingrediente básico en la planeación educativa y en la formulación de políticas de mejoramiento educativo y de financiamiento de este servicio, en el caso de Yzaguirre (2005) nos dice que la evaluación es un importante factor de calidad, y para que un sistema educativo que ha planeado como meta la calidad en la educación es necesario que se establezcan mecanismos de evaluación en su conjunto para analizar el aprendizaje de los estudiantes, los procesos educativos, el currículo, los profesores, y las escuelas. Por otra parte los criterios del Consejo Superior de Educación para las Universidades de Marzo de 1996 mencionan que la institución debe evaluar periódicamente el grado de concreción de su declaración de misión y usar los resultados de esa evaluación para mejorar su desempeño. Actualmente, la Universidad Estatal de Sonora (UES) ha definido su Sistema de Gestión de Calidad (SGC) basado en lineamientos de normas internacionales y nacionales de calidad, como son: la norma mexicana NMX-CC-9001-IMNC-2008 (Requisitos para un sistema de gestión de calidad); y la NMX-CC-9004-IMNC-2009 (Desarrollo sostenible).

Por otra parte al implementar el SGC, los procesos académicos no son abarcados totalmente en su alcance, detectándose la importancia de integrar la evaluación por los Comités Interinstitucionales para la Evaluación de la Educación Superior (CIEES) y la acreditación por los organismos del Consejo para la Acreditación de la Educación Superior (COPAES), a través del Consejo de Acreditación en la Enseñanza de la Contaduría y Administración (CACECA). Al considerar que la mayoría de los programas educativos pertenecen a las áreas de conocimientos de ciencias sociales y administrativas según la Asociación Nacional de Universidades e Instituciones de Educación Superior (ANUIES), La inclusión de la evaluación y autoevaluación de los programas educativos permitirá tanto documental como operativamente, verificar la congruencia entre las actividades relacionadas con la gestión institucional y los procesos educativos que impactan a la comunidad académica.

“La evaluación y autoevaluación deben apreciarse como una oportunidad para mejorar las condiciones en que operan nuestras instituciones de educación superior, de modo que maestros, estudiantes, autoridades, funcionarios y personal de apoyo técnico, administrativo y manual realicen sus trabajo de una manera más productiva y satisfactoria” (Pérez, 1996a). La evaluación permite monitorear las condiciones de las actividades, procesos y clientes, con el único objetivo de converger en sus necesidades o superar sus expectativas con los recursos disponibles. El proceso de acreditación de los programas educativos consiste en la verificación de una serie de criterios aplicados a las instituciones de educación superior para demostrar su cumplimiento y emitir las recomendaciones que contribuyan a la mejora continua. En caso del Consejo de Acreditación en la Enseñanza de la Contaduría y Administración (CACECA), el manual se conforma de las siguientes variables: Profesores; Estudiantes; Programa de Licenciatura;

Formación Integral; Recursos Financieros; Recursos-Eficiencia; Extensión-Investigación e Información adicional.

La norma NMX-CC-9001-IMNC-2008 es un modelo de calidad utilizado para incrementar la eficacia de los procesos, actualmente es aplicada para el desarrollo de los SGC en las instituciones de educación superior, su esquema principal es conformado por los siguientes apartados: Introducción; Objeto y campo de aplicación; Referencias normativas; Términos y definiciones; Sistema de gestión de la calidad; Responsabilidad de la dirección; Gestión de los recursos; Realización del producto o servicio; y Medición, análisis y mejora. Dicha norma permite en su apartado 0.4, la compatibilidad con otros sistemas de calidad existentes para fortalecer y consolidar los requerimientos o particularidades de las instituciones de educación superior.

## REVISIÓN LITERARIA

### Importancia de la Mejora Continua en las Instituciones de Educación Superior en México

La mejora continua de los elementos que caracterizan a una institución de educación superior reconocida por su buena calidad considerada por la Secretaria de Educación Pública (SEP) a través de la Secretaria Educación Superior (SES) “está compuesta por dos vertientes principales, la oferta educativa de buena calidad y la gestión institucional competente” (Guía PIFI, 2012). La oferta educativa de buena calidad se caracteriza por la alta capacidad y competitividad académica, para esta última, se enfoca en la acreditación o evaluación de los programas educativos por su buena calidad por los esquemas y procedimientos del sistema nacional de evaluación y acreditación, y el porcentaje que representa su matrícula total, en el caso de la gestión institucional competente se describe como la certificación de procesos estratégicos bajo las normas ISO 9000:2008.

Donde la función de los procesos estratégicos certificados debe representar una estrategia para mejorar la oferta educativa de calidad, sin embargo debido a que no existen lineamientos para la definición de procesos estratégicos por las dependencias correspondientes, se aprecia en el manual de calidad de la UES que la selección de procesos y procedimientos para el SGC no impacta directamente a los aspectos relacionados a la competitividad académica, provocando una diferenciación entre los modelos de acreditación-evaluación-certificación en la institución. “El enfoque de las normas ISO 9000 aplicadas a los servicios educativos, se entiende en dos vertientes principales. Primero como forma de organizar la administración de la calidad, mediante un sistema adaptada internamente y segundo, como una asignatura dentro del currículo escolar. Sin embargo, no pueden disociarse, la educación deber ser integral, teoría y práctica cotidiana” (Oria, 1998). Por esta razón, el SGC bajo las normas ISO 9000:2000 debería considerar procesos que impacten actividades relacionadas a la competitividad académica, contribuyendo a la supervisión e identificación de áreas de mejora de los procesos estratégicos.

“En general, podría afirmarse que las prácticas de aseguramiento de la calidad en México aún se encuentran dispersas en una serie de componentes que no integran un todo coherente, visto desde una perspectiva sistémica, el mecanismo actual de calidad es complejo y no es aun suficiente en términos de rendición de cuentas ante la sociedad mexicana” (OCDE, 2006). Los sistemas de gestión de calidad basados en las normas ISO 9000:2000 están fundamentados por el principio de enfoque de sistema, para el caso de la UES, establecer los aspectos relacionados a la competitividad académica proporcionará un enfoque sistémico en toda la institución, atendiendo las actividades relacionados a los estudiantes, y al personal docente, administrativo y directivo.

La norma ISO 9001:2000 “es una herramienta, un medio que evidencia de manera sistemática y metódica las áreas de oportunidad que las organizaciones educativas tienen en torno al desempeño de sus procesos” (Yzaguirre, 2005).

“Aunque no hay una receta ni patrones que mencionen el cómo debe estar organizada una escuela u oficina de gestión desde un modelo propio de calidad educativa, si hay aspectos que el modelo de gestión de calidad en ISO 9001:2000 incluye a manera de asegurar la calidad de los servicios que presta. La implementación de un sistema de gestión de la calidad es un buen comienzo para reorganizar la tarea educativa desde la instancia gestora y las escuelas” (Yzaguirre, 2005). Las actividades relacionadas a la competitividad académica representan el fundamento para que el SGC considere en su alcance los procesos académicos y administrativos, evitando que los procesos se encuentren basados en el cumplimiento de actividades en sus procedimientos con un impacto bajo en los actividades relacionadas a la evaluación y acreditación de los programas educativos.

“Considerar los estándares como un requisito mínimo que los competidores pueden alcanzar. Son plataformas precompetitivas a partir de las cuales cada compañía en particular puede contribuir sus propias ventajas competitivas” (González, 2003). Lo que permite utilizar los lineamientos de los organismos de evaluación y acreditación reconocidos por COPAES para mejorar internamente o complementarlos con los propios estándares. Al considerar a las normas ISO 9000:2000 como “una filosofía de la administración total de calidad con un mayor énfasis en la satisfacción de clientes y la efectividad de los procesos orientados hacia el enfoque del desempeño mejoramiento continuo” (Chan, 2002), contemplando que “una organización de educación superior en relación al sistema de calidad y los programas deben ser diseñados para demostrar que es un sistema de manera holística, abierto, en constante cambio, interactivo y con características adheridas” (Mizikasi, 2006).

### Gestión de la Calidad en las Instituciones de Educación Superior en México

Es evidente que hoy en día las instituciones u organizaciones buscan hacer eficientes las actividades para obtener un beneficio de alto impacto que se manifiesta en ahorro de costos, tiempo, energía, esfuerzo, espacio o capacidad. Los cambios constantes en el entorno provocan que las organizaciones adquieran la habilidad de tener la pro-acción en adecuarse a los cambios derivados del ambiente donde se encuentran interactuando. El enfoque de calidad en las diferentes perspectivas que pueda visualizarse en las organizaciones es una de las estrategias principales para monitorear constantemente los requerimientos exigidos por los clientes, así como la definición correcta de las especificaciones de los procesos y las condiciones en que se brinda el producto o servicio al cliente. La calidad es un término utilizado de una manera general como la satisfacción de los requisitos de los clientes, por otro lado, “la calidad no es únicamente la calidad del producto terminado o el servicio entregado, si no la calidad de los procesos que va hacia estos productos o servicios” (Imai, 1997).

Por tal motivo el enfoque de la calidad debe estar centrado en lograr administrar o gestionar la calidad en las organizaciones, tanto en los procesos como en la perspectiva del cliente. “La educación debe transformarse para enfrentar retos de la sociedad actual. Hoy en día directivos de las instituciones educativas se enfrentan a cada vez mayores exigencias, provenientes ya sea de autoridades gubernamentales, sectores patronales o las familias” (Huerta 2001). Por tal motivo, las instituciones educativas deben de tener como fin principal la generación de valor agregado para los alumnos, personal académico y administrativo, los empleadores y la sociedad, buscando establecer una imagen institucional de prestigio que refleje las ventajas competitivas, la flexibilidad a las necesidades de la comunidad, el desarrollo de investigación y vinculación para

la generación de innovación y el establecimientos de estándares institucionales de calidad que aseguren la perduración del mejoramiento diario de sus actividades en beneficio de la sociedad. “La evaluación educativa debería partir de un criterio de calidad bajo un criterio suficientemente amplio como para abarcar todos los aspectos significativos del sistema: gestión y administración; políticas y programas; recursos y eficiencia; capacitación de los maestros; acceso y permanencia de los alumnos; aprendizajes y habilidades adquiridas; impacto en las vidas de los individuos y en la sociedad en su conjunto; etcétera” (González, 2005).

Al hablar de calidad en la educación se puede abundar extensivamente sobre ello, por tal motivo es importante primeramente definir la administración o gestión escolar, definiéndola como una función que considera los aspectos administrativos y académicos para establecer un cambio significativo en la forma de atender a las necesidades presentes y futuras de las instituciones educativas, a través de la óptima administración de los recursos en beneficio de la comunidad escolar. Esto implica el desarrollo de liderazgo y participación de toda la institución para desarrollar proyectos que aporten en la transformación de las instituciones, así como la consideración de las tendencias de las políticas educativas en el ámbito nacional e internacional.

“El sistema de gestión es un sistema holístico, que aglutina estrategia y gestión con un sentido global y participativo, ajustándose perfectamente a los nuevos conceptos en recurso humano, y que da respuesta a la lucha permanente de las instituciones educativas en la búsqueda de la eficiente para ofrecer mayor calidad en la enseñanza, y en la búsqueda de la eficacia para que el estudiante alcance el éxito en su formación” (Fernández, 2001).

### La Perspectiva de la Calidad de la Educación Superior en México

Hablar de calidad de la educación incluye varias dimensiones o enfoques, complementarios entre sí (Yzaguirre, 2005):

1) La eficiencia entendida como una educación de calidad que logra que los alumnos aprendan lo que se supone que deben aprender, aquellos que están establecidos en los planes y programas curriculares. Esta dimensión pone en primer plano los resultados de aprendizaje efectivamente alcanzados por la acción educativa.

2) Está referida a los que se pretende en el sistema y a su pertinencia en términos individuales y sociales. En este sentido la educación de calidad es aquella que responde adecuadamente a lo que el individuo necesita para desarrollarse como personal intelectual, efectivo, moral, físicamente, y poder interactuar en los ámbitos económicos, políticos y sociales. Es dimensión poner en primer plano la acción académica y su realización en el diseño y contenidos curriculares.

3) Se refiere a los procesos y medios que el sistema brinda al alumno para el desarrollo de su experiencia educativa. En esta perspectiva una educación de calidad es aquella que le ofrece al estudiante un contexto físico adecuado para el aprendizaje, un docente convenientemente preparado para la tarea de enseñar, buenos materiales didácticos y de trabajo, estrategias adecuadas de aprendizaje. Esta dimensión pone en análisis los medios empleados para la acción educativa. Es importante considerar otros aspectos con relación al aprendizaje del estudiante para ampliar el enfoque sobre la educación de calidad, los siguientes factores contribuyen a la calidad de los centros de enseñanza (Graells, 2002):

La infraestructura: aulas de clase, aulas de recursos, biblioteca, laboratorios, patio, instalaciones deportivas y mobiliario.

La competencia de los recursos humanos: nivel científico y didáctico del profesorado, experiencia y actitudes del personal en general, capacidad de trabajar en equipo, alumnos/profesor, tiempo de dedicación a la instrucción, los servicios y las actuaciones que realizan las personas son algunos de los factores que determinan la calidad de toda organización.

La dirección y gestión administrativa y académica del centro: planeación, labor directiva, organización, funcionamiento de los servicios, relaciones humanas, coordinación y control.

Aspectos pedagógicos: Proyecto Educativo de Centro (PEC), Proyecto Curricular de Centro (PCC), evaluación inicial de los alumnos, adecuación de los objetivos y los contenidos, tratamiento de la diversidad, metodología didáctica, utilización de los recursos educativos, evaluación, tutorías y logro de los objetivos previstos.

Métodos evaluativos: la evaluación del sistema se suele abordar desde dos perspectivas metodológicas contrapuestas:

- *Los métodos cualitativos se orientan a la búsqueda de pautas para la mejora de la calidad; subyace en ellos la incidencia en las políticas educativas de mejora.*
- *Los métodos cuantitativos se centran fundamentalmente en el análisis de los rendimientos escolares del alumnado como indicador de la calidad. predominan la orientación estadística y la aplicación de evaluaciones periódicas, esta tendencia ha experimentado mejoras definitivas en los últimos tiempos; actualmente se atiende a la mejora de los rendimientos como elemento de equidad, puesto que la evaluación rigurosa de los rendimientos es el primer paso para el logro de una educación de calidad para todos.*

La calidad bajo diferentes aspectos, enfoques y dimensiones, nos llevan en su objetivo final que es la formación de los alumnos, y en caso de México no es la excepción, los elementos para dar seguimiento a la calidad en las IES, a través de los objetivos estratégicos de las propias IES y articulados al Programa Nacional de Educación 2007-2012 continúan siendo:

- *Capacidad académica: Los profesores de tiempo completo con posgrado (Doctorado, Maestría y Especialización), la productividad académica de la planta docente por adscripción al Sistema Nacional de Investigadores (SNI) y la consolidación de cuerpos académicos. El programa de mejoramiento del profesorado (PROMEP) es una de las estrategias principales para la habilitación de profesores en posgrado.*
- *Competitividad académica: El incremento de matrícula en programas educativos de buena calidad en base a parámetros nacionales. Evaluación de los Comités Interinstitucionales para la Evaluación de la Educación Superior (CIEES), acreditación por organismos reconocidos por el Consejo para la Acreditación de la Educación Superior (COPAES), programas de posgrado en el Padrón Nacional de Posgrado (PNP) y en el Programa Institucional de Fortalecimiento de Posgrado (PIFOP).*
- *Gestión Institucional: Certificación de procesos administrativos y académicos bajo la norma NMX-CC-9001-IMNC-2000.*
- *Planeación y evaluación: Contar con una estructura colegiada y participativa de planeación estratégica y auto-evaluación que construya mecanismos de seguimiento de*

*metas e indicadores para mejorar en forma efectiva la administración, el liderazgo, los sistemas de información y la comunicación, así como los diferentes mecanismos de financiamiento.*

La calidad ha estado en el centro del debate a nivel nacional e internacional sobre la educación superior. Al respecto ANUIES, “considera necesario precisar su posición de la manera siguiente. De entrada, la calidad se entiende como la eficiencia de los procesos, la eficacia en los resultados y la congruencia y relevancia de estos procesos y resultados con las expectativas y necesidades de la sociedad. Es un ideal que nunca se alcanza plenamente, pero se constituye como un punto de reflexión y búsqueda permanente para las instituciones de educación superior en docencia, investigación y la difusión. La calidad no puede entenderse de manera separada de la pertinencia social, es decir, la responsabilidad social como valor que sustenta a la educación superior. La ineludible referencia a la responsabilidad social de las IES se expresa permanente con compromiso, el desarrollo nacional y el bienestar de la población” (ANUIES, 2006).

En el documento de política y la educación superior en México 1995-2006: Un balance, del autor Julio Rubio Oca en el 2006, podemos observar en el apartado de mejora y aseguramiento de calidad en la educación superior, los aspectos del sistema de evaluación y acreditación de la educación superior, así como la mejora y aseguramiento de calidad de la educación superior como los vértices principales sobre la percepción de la calidad en las IES. Referente al sistema de evaluación y acreditación de la educación superior, el principal organismo impulsor de esta actividad es el COPAES, que busca regular los procesos de acreditación y dar certeza de la capacidad técnica y operativa de las organizaciones especializadas y dedicadas a la acreditación de programas académicos y como objetivos particulares: promover la superación constante de los umbrales de calidad de los programas de educación superior, mediante el desarrollo de procesos de acreditación eficaces y confiables; coadyuvar con las autoridades educativas en su propósito de elevar y asegurar la calidad de la educación superior; propiciar un mejor conocimiento del tipo educativo mediante la difusión de los casos positivos de acreditación; orientar a la sociedad sobre la calidad de los programas; dar seguimiento a los organismos que logren el reconocimiento del consejo, e intervenir como mediador de buena fe en controversias entre los organismos acreditadores y las instituciones.

## **METODOLOGIA**

La metodología de investigación realizada en este trabajo es basado en el método científico que es un “procedimiento riguroso, válido, y fiable para adquirir conocimiento acerca de las leyes que siguen los hechos las ideas” (Mercado, 2003). Considerando que la existencia de dos paradigmas diferentes en el método científico como son el positivismo (cuantitativo) y la fenomenología (cualitativa), se determinó que el estudio cumple con las características cualitativas, considerando que la “tarea del científico social no debe ser reunir hechos y medir que tan frecuente ocurren algunos de ellos, sino apreciar las diferentes construcciones y significados que la gente tiene de su experiencia” (Marcos, 1998).

Uno de los aspectos en la investigación cualitativa “es que el investigador estará muy involucrado en el estudio, considerando libremente los intereses, su relación sistémica, y su contribución basada en la inducción” (Marcos, 1998). La primera parte es el análisis documental de la competitividad académica de la UES, seguido el análisis del sistema de gestión de la calidad con respecto a la competitividad académica, después es la aplicación de los métodos de investigación como son las entrevistas y observación para interactuar con los involucrados en el estudio y finalmente la integración del caso de estudio. Al aplicar la metodología de investigación

se proporcionará el impacto de la integración de los aspectos con la competitividad académica en el sistema de gestión de la calidad basada en las normas ISO 9000:2000 en la calidad de la educación en la UES.

### Planteamiento del Problema

El SGC basado en las normas ISO 9000:2000 de la UES tiene un alcance limitado hacia los procesos administrativos y un impacto menor a los procesos educativos, existiendo una necesidad en la institución para consolidar y mejorar los indicadores relacionados con la competitividad académica. La competitividad académica se refiere a la evolución del número y matrícula de programas educativos de licenciatura reconocidos por su buena calidad por los esquemas y procedimientos del sistema nacional de evaluación y acreditación, sin embargo para su cumplimiento es necesario considerar la administración de la calidad en los aspectos relacionados al financiamiento, adquisiciones, personal académico, atención y formación académica de los alumnos, investigación, extensión, y la revisión, administración e impacto que tienen los programas educativos de ciencias sociales y administrativa de la UES. Por tal motivo, es necesario determinar el impacto de la integración en el esquema de evaluación, acreditación y certificación a través de su SGC, donde refleje la interacción de una manera armónica para mejorar la competitividad académica.

### Definición De Factores Para Investigar

- 1) La interpretación de la calidad de la educación.
- 2) La evaluación competitividad.
- 3) La verificación de los aspectos relacionados a la competitividad.
- 4) La estructura orgánica del Sistema de Gestión de Calidad.
- 5) El alcance del Sistema de Gestión de Calidad en los procesos administrativos y académicos.
- 6) La revisión de los aspectos relacionados a la competitividad académica en el Sistema de Gestión de Calidad.
- 7) El impacto actual del Sistema de Gestión de Calidad en los aspectos relacionados con la competitividad académica.
- 8) La integración en el Sistema de Gestión de Calidad y los aspectos relacionados con la competitividad académica.
- 9) La eficacia de las actividades en el Sistema de Gestión de Calidad considerando los aspectos relacionados a la competitividad académica.
- 10) El impacto de la integración de los aspectos relacionados en el Sistema de Gestión de Calidad para consolidar la calidad de la educación.

*Investigación de campo:* Por medio de la observación directa y al análisis documental de la situación bajo estudio.

*Análisis de datos y creación del producto final:* Analizar los datos que componen el caso de estudio de la UES con respecto a la competitividad, extendiendo recomendaciones y comentarios alineados al objetivo de la investigación

*Contribución del estudio:* El impacto de la integración de los aspectos de la competitividad académica en el sistema de gestión de la calidad basados en ISO 9000.

*Diseño de la investigación:* La metodología que se desarrolló es la fenomenología (cualitativa) debido a que permitió apreciar las diferentes construcciones y significados de la gente que tiene

experiencia sobre el área de estudio, con el propósito de encontrar las respuestas a las preguntas del tipo cómo, por qué, de qué manera.

## MÉTODOS DE INVESTIGACIÓN

1) Estudio del Caso de estudio. Consiste en el establecimiento de la pregunta de estudio, considerado “el objetivo de la investigación; es decir, qué se pretende lograr con el estudio” (Marcos, 1998), por otra parte se establece la unidad de estudio que es “el elemento base por estudiar cómo es un individuo, un grupo de individuos, una empresa o un grupo de empresas” (Marcos, 1998). La unidad de estudio investigación será representado por el personal directivo e involucrado en las actividades relacionadas a la competitividad académica dentro del sistema de gestión de la calidad de la UES.

Sin embargo para la recopilación de datos se consideran los métodos de la entrevista, la observación y el análisis de documentos, para posteriormente realizar el análisis de datos con la utilización de herramientas cualitativas.

2) Entrevistas. La entrevista se realizará de forma grupal para los integrantes del grupo interdisciplinario de calidad de la UES, y se realizará de manera individual los sujetos de estudios. El tipo de entrevistas realizada es de manera semi-estructurada donde el investigador (entrevistador) “pregunta al entrevistado su opinión sobre una serie de ideas generales referente al tema de estudio” (Marcos, 1998).

La población es la estructura directiva y apoyo al Sistema de Gestión de calidad es: Unidades Académicas: 2 directores de unidad académica, 2 enlaces del Sistema de Gestión de Calidad, 5 representantes de dirección de unidad académica, 8 auditores internos. Dirección General: 1 Director general, 3 Secretarios Generales, Secretario técnico, Director de área, 4 Representantes de dirección general, 1 Coordinador de área y 4 Auditores internos.

La muestra que se utilizará es no probabilística, ya que la selección de los elementos no depende de la probabilidad sino de las características de la investigación (Hernández, Fernández y Baptista, 2002). Se aplicaran 17 encuestas considerando la estructura de la parte directiva y apoyo principal del SGC, desagregada del siguiente manera: 1 Director General; 1 Director de Unidad Académica; 3 Secretarios Generales; 1 Secretario técnico, 1 Director de área; 2 Jefes de carrera, 1 Coordinador de área, 1 Enlace del SGC; 2 Representantes de dirección general, 2 Representantes de dirección de unidad académica y 2 Auditores internos. En este estudio se seleccionaron específicamente las personas mencionadas anteriormente debido al conocimiento y funciones para administrar el Sistema de Gestión de Calidad, con el fin de validar los elementos importantes que debe considerar el modelo propuesto, y en caso de ser necesario aportar otros elementos relevantes para su integración.

Instrumentos de medición. Se desarrollaron guías de entrevistas, realizando un estudio piloto para validar el instrumento de medición y posteriormente el instrumento (Anexo 6) se aplicará a la muestra seleccionada de la población del estudio, la información detallada se menciona en el apartado. Para su diseño se tomó por una parte los aspectos relacionados con la competitividad académica y considerando la auto-evaluación de las guías del ISO/IWA-2:2002, Comité de ciencias sociales y administrativas de CIEES, y Consejo de Acreditación en la Enseñanza de la Contaduría y Administración-(CACECA).

El cuestionario es “un conjunto de preguntas organizadas con una secuencia lógica, los cuales, de acuerdo con su forma, pueden llamarse encuestas o guías para entrevistas”. El instrumento empleado tiene 12 preguntas de las cuales se desglosa de la siguiente manera:

1 pregunta cerrada para conocer las actividades que impactan directamente en los aspectos de la competitividad académica por parte del personal directivo del Sistema de Gestión de Calidad de la UES.

11 Preguntas abiertas para obtener información que contribuyan a contestar las preguntas específicas de investigación.

Aplicación y recolección de datos. Después de haber determinado el instrumento de medición definitivo, se visitó con fecha programa, a las áreas de trabajo de manera individual. La recolección de los datos se realizó simultáneamente durante la entrevista, asegurando la obtención de la información oportunamente.

## RESULTADOS OBTENIDOS

Al aplicar los métodos de investigación se obtuvo de manera general la siguiente información para la integración del Sistema de Gestión de la Calidad:

Demostración documental como operativamente verificar la congruencia entre las actividades relacionadas con la gestión institucional y los procesos educativos que impactan a la comunidad académica. Atención oportuna de las necesidades presentes y futuras de las instituciones educativas y la disminución de la gestión educativa de lenta capacidad de respuesta, con insuficiencia de infraestructura para el desarrollo de las tareas educativas e Insuficiencia de recursos económicos públicos y privados destinados a la educación., a través de la óptima administración de los recursos en beneficio de la comunidad escolar, así como la convergencia entre las necesidades o superación de las expectativas de los clientes con los recursos disponibles. Optimización y mejoramiento de las condiciones de la institución mediante un proceso de toma de decisiones adecuado y basado en un enfoque de mejora en los procesos de enseñanza del alumno.

Compromiso firme, decidido y contenido para influir en la responsabilidad de cada persona en los procesos para satisfacer necesidades y expectativas de los consumidores y clientes. Instituciones que cuesten menos, reduciendo el gasto que no agrega valor para ofrecer mayores beneficios a la sociedad. Cambio de cultura hacia el trabajo, con un compromiso de la alta dirección sobre el quehacer y los compañeros de equipo mejorando la transformación de los procesos. Comunicación efectiva, para diseñar, transmitir, supervisar la implementación de planes estratégicos que transforman la misión y valores institucionales en acciones concretas y establece estándares de desempeño para conseguir las metas y resultados educacionales y financieros de la institución. La operación de una estructura colegiada y participativa de planeación estratégica y auto evaluación que construya mecanismos de seguimiento de metas e indicadores para mejorar en forma efectiva la administración, el liderazgo, los sistemas de información y la comunicación, así como los diferentes mecanismos de financiamiento.

Impulso a las actividades de investigación, para la realización de actividades y la participación como pares académicos en evaluaciones extensa, para consolidar la calidad en la producción académica de los profesores-investigadores. Detección y gestión los recursos para el mejoramiento de los docentes a través de la realización de estudios de posgrados en universidades de excelencia para contribuir al mejoramiento de las instituciones de educación superior y de la sociedad a través de promoción de investigadores. Actualización de la normativa institucional para el cumplimiento de los requisitos del cliente. Atención de problemas estructurales que

ponen en riesgo su viabilidad académica y financiera y la creación de modelos eficaces para la rendición de cuentas, entre otros aspectos.

Nueva cultura de la evaluación y de hacer del aseguramiento de la calidad parte integral de su operación. En términos de procesos administrativos, un enfoque más claro y sistemático a la operación educativa, afirmando que este enfoque científico, es un instrumento central, efectivo y probado de la administración que proporciona la reacción progresiva en cuanto a las escuelas y su personal que realiza la administración, y que este enfoque eficaz lleva a la mejora continua. Evaluación de maestros y desempeño de estudiantes para proveer energía en la enseñanza y el aprendizaje. Identificación y gestión de numerosas actividades relacionadas entre sí, a través de la dirección y operación de una gestión sistemática y visible, con la intención de liderar a la organización hacia la mejora del desempeño considerando el seguimiento de la satisfacción del cliente mediante la evaluación de la información relativa a la percepción del cliente acerca de si la Institución ha cumplido sus requisitos.

Aseguramiento que los altos ejecutivos puedan influir que el personal entiendan la importancia de conocer los requerimientos del cliente. Disminución de la gestión educativa de lenta capacidad de respuesta, con insuficiencia de infraestructura para el desarrollo de las tareas educativas e Insuficiencia de recursos económicos públicos y privados destinados a la educación. Identificación de los procesos y procedimientos para desarrollar y mejorar la eficacia y la eficiencia del sistema de gestión de la calidad a fin de satisfacer las expectativas de todos los grupos interesados en la educación. El uso del auto evaluación para la identificación de debilidades y asegura el logro de las metas. Las instituciones no sólo deben adoptar la autoevaluación sino además desarrollar un modelo efectivo y flexible que represente en forma precisa la misión y las metas, que identifique los procesos claves y relevantes y que enfatice las relaciones entre los factores del sistema, sus procesos y sus resultados.

## CONCLUSIONES

Es evidente que entre mayor sea el alcance del sistema de gestión de la calidad, los procesos y procedimiento enfocados a la competitividad académica, mayor será su impacto en la calidad institucional. Para proporcionar el impacto es importante tomar en cuenta los comentarios realizados en las entrevistas, las percepción de la calidad en la educación y el análisis de la documentación del sistema de gestión de la calidad de la UES, considerando a los clientes finales identificados en los procesos orientados a los clientes como son la demanda de las instituciones de media superior (aspirantes y alumnos), egresados, empleadores, y comunidad en general, así como los clientes identificados en los procesos de soporte. En la actualidad la educación es base fundamental para el desarrollo de la sociedad, a través de la permanencia de la Asociación Nacional de Universidades e Instituciones de Educación Superior (ANUIES), el Consorcio de Universidades Mexicanas, la participación de Proyectos.

Integrales de Fortalecimiento Institucional, la evaluación y acreditación de organismos reconocidos por el Consejo para la Acreditación de la Educación Superior (COPAES) las instituciones educativas pueden compararse, retroalimentarse y tomar acciones para lograr el nivel de calidad educativa que tienen otras instituciones. La utilización de modelos de calidad en la educación superior contribuye a disminuir las brechas que existen entre universidades, agregando estrategias de planeación, organización y evaluación a las instituciones educativas, con el fin de generar valor agregado para los alumnos, personal académico y administrativo, los empleadores y la sociedad, buscando establecer una imagen institucional de prestigio que refleje las ventajas competitivas, la flexibilidad a las necesidades de la comunidad, el desarrollo de

investigación y vinculación para la generación de innovación y el establecimientos de estándares institucionales de calidad que aseguren la perduración del mejoramiento diario de sus actividades en beneficio de la sociedad. Sin embargo, para su implementación es necesario considerar el análisis del contexto aplicación, buscando la adecuación correcta y el aprovechamiento máximo del esfuerzo y recursos necesarios, evitando el rechazo derivados de interpretaciones erróneas, incredibilidad y decepción en la operación.

Al analizar la interpretación de la mejora continua de los elementos que caracterizan a una institución de educación superior reconocida por su buena calidad considerada por la Secretaría de Educación Pública, abarca la oferta educativa de buena calidad que impacta a los aspectos relacionados a la competitividad académica, y la gestión institucional competente relacionado a los procesos certificados bajo las normas ISO 9000:2008. Sin embargo es necesario definir los procesos estratégicos que deben ser certificados o administrados bajo esquemas de calidad con el propósito de impactar directamente a las actividades de competitividad académica, evitando la implementación aislada de un sistema de gestión de la calidad con visión académica o administrativa, escasas interrelación sistémica entre estas dos visiones, y enfoques unilaterales sobre estas visiones que pueden resultar brechas significativas y polarizar el concepto de la calidad total. Por otro lado, es necesario que el alcance del sistema de gestión de la calidad sea definido de una manera homologada y diseñado en todos los niveles de la institución, evitando producir logros individuales que son apreciados de manera limitada.

La implementación norma ISO 9001:2008 y la atención a las recomendaciones de IWA2 en las instituciones de educación superior contribuyen a la consolidación de las actividades que impactan a la competitividad académica, asegurando un enfoque integral del desempeño institucional y permite alinearse a los criterios de los organismos reconocidos por el COPAES. En la UES los programas educativos de buenas calidad se incrementaron de 0 en el 2005 a 18 en el 2011, representando el 100% de los programa evaluables y acreditables, la matrícula general atendida representa el 100% (7,723 alumnos). Con el propósito de contribuir a estos logros, la implementación del sistema de gestión de la calidad a través de las actividades de documentación de procedimientos, control de registros y documentos, revisiones por la dirección, control y seguimiento de las actividades, atención de retroalimentaciones de los alumnos y maestros, auditorías internas, utilización de acciones correctivas y preventivas y un enfoque integral de la mejora continua en el desempeño institucional, apoyará a las actividades relacionadas a la competitividad académica para mantener las acreditaciones y evaluaciones de buena calidad, atender adecuadamente a las recomendaciones por los organismos reconocidos por el COPAES, promover la cultura de la mejora continua en todas las actividades, apoyar a otros programa educativos y unidades académicas en la implementación de modelos de calidad aplicables con mayor facilidad y encontrar flexibilidad en la adaptación de cambios exigidos por el entorno.

Al utilizar un sistema de gestión de la calidad de manera integral sobre todos los procesos que intervienen en la competitividad académica, permite visualizar la planeación, organización y evaluación de las actividades, y sobre todo la aplicación de recursos en la operatividad y en las acciones de mejora. Información que contribuye a la rendición de cuentas ante organismos externos, internos y la sociedad en general. Considerando la mejora continua de los elementos que caracterizan una institución de educación superior reconocida por su buena calidad (PIFI, 2012), y el sistema de gestión de la calidad bajo las normas ISO 9000 con los aspectos relacionados a la competitividad académica, podemos observar la importancia de la definición de los procesos estratégicos enfocados a la adecuada identificación de procesos de soporte y orientados al cliente.

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# PROPUESTA METODOLÓGICA PARA EL DISEÑO DE UN MODELO DE DIAGNÓSTICO DE INTERVENCIÓN ORGANIZACIONAL, BASADO EN LA NORMA ISO 9001:2008 Y EL ENFOQUE SISTÉMICO

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## RESUMEN

*En la ciudad de Hermosillo, Sonora, México; se realizó un proceso de consultoría en una empresa de medios masivos de comunicación, en medios impresos, por cuestiones de confidencialidad no se menciona el nombre de la organización, sin embargo esto no es impedimento para que se pueda plasmar de forma general la metodología utilizada en el diagnóstico de la misma. Durante una década se ha brindado apoyo a diversas organizaciones que requieren realizar cambios, en todo este tiempo no se ha encontrado un documento que presente una metodología para realizar diagnóstico, las referencias encontradas señalan los puntos a evaluar, las herramientas que se pueden utilizar, objetivos, filosofía, mucha información, pero no los pasos o el cómo realizarlo. El presente estudio busca entregar una propuesta sencilla, amigable, a todos aquellos profesionales de la administración que tienen la necesidad de realizar un diagnóstico organizacional basado en la norma ISO 9001:2008 y con un enfoque sistémico.*

**PALABRAS CLAVES:** Diagnostico organizacional, enfoque sistémico e ISO 9001:2008

## METHODOLOGY PROPOSAL FOR MODEL DESIGN ORGANIZATIONAL INTERVENTION DIAGNOSTIC, BASED INTERNATIONAL STANDARD ISO 9001:2008 AND FOCUS SYSTEMIC

## ABSTRACT

*In Mexico, Sonora, Hermosillo City, performed consultancy process in the company about communication and newspaper, for situations of confidentiality can't mention the name company, but isn't problem to describe the methodology applicable for diagnostic. During a decade was provide support to several companies that needs change, in this time not found mythology document for performed diagnostic, the reference describe evaluation points, tools administrative, objectives, philosophy, a lot information but don't describe the fundamental steps for perform organizational diagnostic. This Study attempts to provide simple form proposal for the professional administration that necessity to do organizational diagnostic base international Standard ISO 9001:2008 and focus systemic.*

**JEL:** L15, M10

**KEYWORDS:** Organizational Diagnostic, focus systemic and ISO 9001:2008

## INTRODUCCIÓN

El pensar que en la actualidad podamos crecer o desarrollarnos de forma aislada es inconcebible, necesitamos estar enlazados, interconectados con otros sistemas que nos apoyen y permitan no sólo mantenernos, sino crecer, mejorar cada día. Como nunca antes, nuestra visión del mundo es holística.

Así como necesitamos de otros sistemas hacia el exterior, al interior pasa lo mismo, es necesario utilizar diversos sistemas que permitan que la organización no sólo sobreviva, sino que tenga un crecimiento sostenido. Para utilizar los sistemas adecuados, es necesario partir de un diagnóstico lo más exacto y preciso posible, ya que será la base fundamental para determinar cuáles serán los sistemas a implementar.

El intervenir una organización es como el médico que interviene un cuerpo, para eliminar la enfermedad requiere identificar dónde está el problema, que lo origina y así poder otorgar el o los medicamentos que ayudarán al paciente a recuperarse; en las organizaciones pasa igual, para poder utilizar el o los sistemas que apoyarán a la empresa o institución no sólo sobrevivir, sino crecer, se requiere de un buen diagnóstico. El trabajar desde hace doce años con organizaciones tanto públicas, como privadas, nos permite asegurar que para consolidar procesos de cambio dentro de éstas, es necesario partir de un diagnóstico real, completo y basado en normas internacionales, como lo es la ISO 9001:2008. Durante este tiempo la metodología que será expuesta en el presente trabajo de investigación, ha sido probada por diversas generaciones, ya que se ha compartido con estudiantes de la Maestría en calidad, en la Universidad del Estado de Sonora. En cada ocasión se ha podido mostrar la importancia de conocer la situación real que guarda la organización, antes de implantar cualquier proceso de cambio planeado.

Un elemento fundamental en la propuesta metodológica es que se combina la parte “dura” o “fría” con la parte humana, ya que se revisa la atención a los puntos de las normas ISO, además del “sentir” de la organización. Ambos puntos tienen como posición de partida la necesidad sentida del cliente, es decir, se parte del problema presentado por la persona que solicita el servicio de consultoría. La expresión del problema por parte del Directivo de la organización no sólo es la manifestación de que hay algo que mejorar, sino la oportunidad de establecer un compromiso con él para que ese proceso de cambio planeado cuente con buenos cimientos, de lo contrario será una estrategia más que terminará siendo un gasto y no una inversión con ganancias claramente visibles. Hasta el momento, la aplicación de la presente metodología ha permitido observar como las organizaciones intervenidas han podido atender sus diversas problemáticas y hacer frente a las situaciones que les aquejaban, para efectos de compartir este procedimiento se tomó como ejemplo una empresa de medios masivos de comunicación, de la cual se omite el nombre con el fin de guardar la confidencialidad de la misma.

## REVISIÓN LITERARIA

El contenido de este documento, de los apartados del 2.1 al 2.4, están fundamentadas en la teoría de Kubr Milan plasmada en su libro la consultoría de empresas. Guía para la profesión, 2002; texto que se consideró básico para el procesos de consultoría. De forma breve se presentan conceptos que son básicos para una comprensión de la metodología que se presentará en el siguiente apartado.

### Definición y Enfoques de la Consultoría

*Kubr (2002) define la consultoría de las empresas como:* Ante un método para mejorar las prácticas de gestión, este puede ser empleado por una empresa privada independiente, una empresa dependencia interna de consultoría (o algo análogo), en una organización privada o pública, un instituto de perfeccionamiento del personal de dirección, de productividad o de fomento de la pequeña empresa, un servicio de extensión o un particular (por ejemplo, un consultor independiente o un catedrático universitario). Incluso un gerente o director puede actuar como consultor, si proporciona asesoramiento a sus colegas o subordinados (p.XXI).

Más adelante para continuar ampliando el concepto de consultoría Kubr (2002) cita a Fritz Steele, Peter Block, Larry Greiner y Robert Metzger de la siguiente manera:

Fritz Steele quien define la consultoría como sigue: “ Por proceso de consultoría entiendo cualquier forma de proporcionar ayuda sobre el contenido, proceso o estructura de una tarea o de un conjunto de tareas, en que el consultor no es efectivamente responsable de la ejecución de la tarea misma, sino que ayuda a los que lo son”. Asimismo cita a Peter Blockel cual sugiere incluso que “se actúa como consultor siempre que se trata de modificar o mejorar una situación, pero sin tener control directo sobre la ejecución”. Larry Greiner y Robert Metzger quienes señalan que “la consultoría de empresas es un servicio de asesoramiento contratado por y proporcionado a organizaciones por personas especialmente capacitadas y calificadas que prestan asistencia, de manera objetiva e independiente, a la organización cliente para poner al descubierto los problemas de gestión, analizarlos, recomendar soluciones a esos problemas y coadyuvar, si así se les solicita, en la aplicación de soluciones (p.3),

#### La Consultoría y el Cambio de la Organización.

Kubr (2002, p. 79) comenta que el cambio es la razón de ser la consultoría de empresas. Si las diversas tareas de consultoría tienen alguna característica en común, es la de que contribuyen a la planificación y aplicación de cambios en las organizaciones clientes.

*Kurb(2002) comenta en su libro que:* Las organizaciones no cambian por cambiar, pero como forman parte de un proceso más amplio de desarrollo y tienen que reaccionar ante los nuevos cambios, trabas, exigencias y oportunidades del medio ambiente, se ven permanentemente obligadas a adaptarse al medio en el que existen y funcionan. Los cambios pueden referirse a cualquier aspecto o factor de una organización. Por tanto, pueden afectar a los productos y los servicios, las tecnologías, los sistemas, las relaciones, la cultura de la organización, las técnicas y el estilo de dirección, las estrategias aplicadas, las competencias, los rendimientos y cualquier otra característica de una empresa. Afectan asimismo a las transformaciones de la estructura básica de la organización, con inclusión de la índole y el nivel de la actividad empresarial, las disposiciones jurídicas, la propiedad, las fuentes de financiamiento, las actividades y repercusiones internacionales, la diversificación, las fusiones y las alianzas con nuevos asociados y cuestiones análogas (p.81).

*La Consultoría y el Cambio en las Personas:* En el cambio de una organización es fundamental el factor humano, Kubr (2002) señala que Las personas que trabajan en la organización – su personal directivo, técnico y sus trabajadores – son las que determinan en última instancia con su comportamiento cuáles cambios se pueden introducir en la organización y que beneficios reales se van a obtener de ellos. La empresa y las organizaciones son, por encima de todo, sistemas humanos. El personal debe entender, desear y poner en práctica cambios que, a primera vista, pueden parecer únicamente tecnológicos o estructurales, y competencias exclusivas de la alta

dirección, pero que en la práctica repercutirán en las condiciones de trabajo, intereses y satisfacción de muchas otras personas. Para realizar un cambio en la organización, el personal tiene que cambiar también: debe adquirir nuevos conocimientos, absorber más información, abordar nuevas tareas, perfeccionar sus conocimientos técnicos, renunciar a lo que preferiría conservar y, muy a menudo, modificar sus hábitos de trabajo, sus valores y las actitudes que tiene con respecto a la forma de actuar en la organización. Los cambios de valores y actitudes son esenciales. Probablemente no haya ninguna modificación real y duradera sin un cambio de actitudes (p.82).

*La consultoría y la cultura organizacional:* Antes de iniciar un proceso de consultoría, es necesario tomar en cuenta la cultura de la empresa para poder apoyar a la misma, si el consultor violenta esta cultura es casi seguro que no logre el cambio que busca porque la resistencia del personal será fuerte. Kinicki, Kreitner (2003, p.30) definen la cultura organizacional como el conjunto de supuestos compartidos e implícitos, que dan por sentado, en un grupo, el cual determina la manera en que el grupo percibe sus diversos entornos, piensa respecto de ellos y reacciona a ellos mismos.

Robbins, Judge (2009, p.551) presentan el concepto de cultura organizacional para referirse a un sistema de significado compartido por los miembros, el cual distingue a una organización de las demás.

*Kubr (2002) expresa que:* Las organizaciones tienden también a tener su cultura propia: una mezcla peculiar de valores, actitudes, normas, costumbres, tradiciones, comportamientos y rituales que, en su totalidad, son específicos de la organización de que se trate. Algunas organizaciones están conscientes de su cultura y la consideran como un poderoso instrumento estratégico, que utilizan para orientar a todas sus dependencias y miembros hacia objetivos comunes, movilizar la iniciativa de los empleados, asegurarse de su lealtad y facilitar la comunicación. Tienden a crear una cultura propia y asegurarse de que todos los empleados la comprenden y se adhieren a ella (p.120).Kubr (2002, p. 125) El consultor tiene que hacer uso de toda su experiencia y talento para aprender lo suficiente acerca de los factores culturales que pueden ser pertinentes para su cometido. En algunos casos, será perfectamente aceptable preguntar directamente acerca de los valores imperantes, cómo se hacen normalmente las cosas en la organización del cliente y qué trampas se han de evitar, en particular si el cliente desea obtener una solución técnicamente válida y es también consciente de las diferencias entre culturas.

*Desarrollo Organizacional (D.O.):* El Desarrollo Organizacional (D.O.) como una herramienta dentro de las organizaciones es aún incipiente en nuestro País, es a finales del siglo pasado, en la década de los 60's que en México se habla por primera vez de este concepto, en realidad es una corriente nueva, aún no explorada por muchas empresas, sobre todo en las pequeñas y medianas que al tener poco personal consideran improbable el contar con un área que se encargue de implementar esta herramienta. Lo anterior es más por desconocimiento porque puede ser desarrollada por la misma persona que administra la organización.

*Definiciones del D.O:* Hasta el momento hemos visto cómo evolucionó el concepto en nuestro País ¿pero qué es el D.O.? Tomaremos como base las definiciones que nos presenta Guízar (2008):

- Implica el estudio de los procesos sociales que se dan dentro de una empresa con el objetivo de ayudar a sus miembros a identificar los obstáculos que bloquean su eficacia como grupo y

a tomar medidas para hacer óptima la calidad de sus interrelaciones, para influir de manera positiva y significativa en el éxito de los objetivos de la empresa. (Alejandro Guzmán de la Garza)

- Es la tendencia al mejoramiento de las relaciones interpersonales como medio para impulsar a la empresa (Harris).
- Es una respuesta al cambio, una estrategia de carácter educacional que tiene la finalidad de cambiar creencias, actitudes, valores y estructuras de las organizaciones de modo que puedan adaptarse mejor a las nuevas tecnologías, a los nuevos desafíos y al ritmo vertiginoso del cambio (Bennis).
- Es un esfuerzo planeado que abarca desde arriba toda la organización administrativa para aumentar su eficiencia y su salud mediante intervenciones planeadas en los procesos organizacionales y que emplea los conocimientos de las ciencias del comportamiento. (Beckhard).

*Importancia y necesidad del D.O:* La importancia del DO radica en que es una herramienta que potencia el conocimiento y la experiencia que tiene el capital humano, además de que al complementarse con otras herramientas como la planeación estratégica y sistemas de calidad, ayuda a marcar una dirección clara del rumbo y a caminar seguros hacia esa meta.

El D.O. permite a los administradores obtener mejores resultados, a ser más eficaces mientras se cuidan las relaciones entre el personal; es una herramienta que sirve de apoyo en estos momentos en donde la única constante es el cambio, en donde el aprendizaje es tan acelerado que como dijo Alvin Toffler en su libro La tercera Ola: “Los iletrados no serán aquellos que no puedan leer o escribir. Sino aquellos que no puedan aprender, desaprender, y re aprender. Al momento de intervenir una empresa, un consultor está apoyando a que la organización viva su proceso de Desarrollo Organizacional, ese proceso de cambio planeado que lo llevará a caminar de forma sustentada y por un camino menos escabroso a un éxito futuro. El consultor al momento de entrar a la empresa genera una catarsis que debe provocar cambios favorables para la empresa, esto será posible si es un profesional que es experto en la esfera de la gestión que esté interviniendo: gestión general y estratégica, gestión financiera, gestión de la comercialización y la distribución, en la dirección de la producción, en la esfera de la administración de los recursos humanos, entre otras. Si es un experto, sólo entonces podrá generar ese cambio favorable, será una inversión de la empresa... si no sólo será un consultor que pasó a generar un gasto.

### Comportamiento organizacional

El objetivo de implementar un cambio organizacional es el mejorar los resultados de la operación y de las condiciones de las personas que conforman la organización. Para estructurar un plan de acción que conlleve un cambio significativo, primeramente se debe estudiar el comportamiento organizacional.

La filosofía del comportamiento organizacional (CO) tiene un enfoque de apoyo y está orientada a los recursos humanos. El CO investiga el impacto que los individuos, los grupos y la estructura tienen sobre el comportamiento dentro de las organizaciones, con el propósito de aplicar tal conocimiento al mejoramiento de la eficacia de la organización.

Entre las variables que se toman en cuenta en el estudio del CO destacan: productividad, ausentismo, personalidad, valores, comportamiento en grupo y satisfacción en el trabajo. (Internet). Robbins et al. (2009), definen el Comportamiento Organizacional como: Un campo de estudio que investiga el efecto que los individuos, grupos y estructuras tienen sobre el comportamiento dentro de las organizaciones, con el propósito de aplicar dicho conocimiento

para mejorar la efectividad de las organizaciones. El comportamiento organizacional es un campo de estudio, lo que significa que es un área distinta de experiencia con un cuerpo común de conocimiento. ¿Qué es un área distinta de experiencia con un cuerpo común de conocimiento? ¿Qué estudia? Estudia determinantes del comportamiento en las organizaciones: individuos, grupos y estructura. Además, el CO aplica el conocimiento que se obtiene sobre individuos, grupos y el efecto de la estructura sobre el comportamiento, para hacer que las organizaciones trabajen con más eficacia. El CO se ocupa del estudio de lo que hacen las personas en una organización y de cómo afecta su comportamiento al desempeño de ésta. Y como el CO estudia en específico las situaciones relaciones con el empleo, no es de sorprender que haga énfasis en que el comportamiento se relaciona con los puestos, trabajo, ausentismo, rotación de los empleos, productividad, desempeño humano y administración (p.10).

### Cambio Planificado

El hablar de que las organizaciones planificaran su cambio significa que primero deben conocer la situación actual, es decir, conocer que fortaleza tienen al interior, que debilidades les impiden o disminuyen sus resultados; así como las amenazas y oportunidades que hay en su entorno. Algunos investigadores manejan que el cambio planeado debe iniciar identificando las fuerzas impulsoras y las fuerzas restrictivas de la organización, independientemente de la palabra que se use, el concepto es el mismo, iniciar ese proceso de cambio planificado, partiendo de donde estoy, cuál es mi realidad. Una vez que ya sé dónde estoy, debo de marcar el rumbo hacia donde me dirijo, para esto es fundamental el tener una filosofía (Misión, Visión y unos valores) En este trayecto del hoy hacia ese futuro esperado, el D.O será fundamental, constituirá la herramienta que a través de sus diversas intervenciones (procesos humanos, equipo, tecnoestructurales) logrará una mayor eficacia y eficiencia, en un ambiente sano.

Se dice que los procesos de cambio se consolidan en 20 años, pero si partimos de que la dinámica en la que vivimos es de contante cambio, lo que hoy es vanguardia, seguramente en pocos años será algo obsoleto, así que hablar de que un proceso de cambio se consolida en 20 años es definitivamente poco viable. Los procesos de cambio deben de ser trabajados con la visión de la planeación estratégica, es decir a los 5 años. El administrador de este proceso de cambio deberá ser alguien que tenga, no sólo la formación, sino también el carácter para poder ser un facilitador del proceso de cambio, ya que las resistencias que encontrará serán diversas, deberá saber identificarlas y tomar las medidas adecuadas para disminuirlas.

### Evaluación Integral

Fleitman (2007, p.1) La evaluación integral es una metodología por medio de la cual se estudian, analizan y evalúan las fuerzas, debilidades, amenazas y oportunidades de las empresas; sirve como instrumento por medio del cual se analiza y evalúa el entorno de un organismo, su base legal, organización, estructura, políticas, planes, programas, sistemas, procesos y controles. La propuesta de diagnóstico se fundamenta en la visión de sistemas con el fin de auxiliar el cumplimiento del desarrollo administrativo. La selección de un modelo de diagnóstico, la combinación de varios de ellos o la construcción de uno diferente dependerá del problema derivado del juicio del administrador y su conocimiento acerca de las circunstancias de su trabajo, con objeto de que el modelo que se elija cumpla significativamente sus requerimientos y se integre al diagnóstico administrativo de acuerdo con la visión de sistemas.

El diagnóstico es un proceso en el cual se detecta la problemática con sus causas y efectos y nos induce a la decisión de tomar alternativas de apoyo de solución para el mejoramiento

administrativo, abarca una serie de actividades destinadas a auxiliar al administrador y sus equipos de trabajo a describir y evaluar su sistema institucional. Para explicarlo utilizaremos el símil de un paciente y un médico. El modelo del diagnóstico se aplica en los siguientes propósitos:

- a) Generar retroinformación en los administradores que tienen a su cargo el sistema operativo, con base en conocimiento, experiencia y observación.
- b) Visualizar para dar solución a los males obedeciendo a una necesidad del director o directrices de momento que viven la institución, como dice (Fleitman Jack, 2007).

Según la Norma ISO 9001:2008, un sistema de gestión de calidad es un conjunto de elementos mutuamente relacionados o que interactúan para establecer la política y los objetivos, su énfasis principal son los principios de calidad, el enfoque basado en procesos y la administración total de la calidad, por tal motivo, toda la información obtenida en el diagnóstico organizacional proporcionan las bases para el desarrollo de la implementación del Sistema de Gestión de la Calidad basado en la Norma ISO 9001:2008, debido a que su alcance impacta a los requisitos relacionados a la documentación, planificación de la calidad, gestión de recursos, realización del producto o servicio y mejora continua. Con los resultados del diagnóstico se aprecia las fortalezas y debilidades sobre los requisitos de cumplimiento con el propósito de establecer acciones inmediatas de atención.

## **METODOLOGIA**

### Sujetos y Escenario

El presente trabajo de consultoría fue desarrollado en una empresa de medios masivos de comunicación, en forma impresa, la cual se ubica en la ciudad de Hermosillo, Sonora; México. Esta empresa está dirigida por directivos expertos en su actividad, cuando se fundó, se buscó que los mejores de cada profesión estuviera trabajando en ella, sólo que al carecer de una administración profesional, poco a poco el personal empezó a emigrar a otras empresas, aun así, su nivel profesional es alto.

### Planteamiento del Problema

La empresa carece de elementos de gestión administrativa y de calidad que le permitan eliminar los problemas existentes y mejorar su productividad.

### Instrumentos

Cada etapa en el proceso de consultoría es fundamental, sólo que en lo particular la búsqueda de información la considero básica para una consultoría profesional. Esta etapa es el cimiento de las siguientes ya que si los resultados no son verdaderos, las correcciones tampoco; además de que es posible que algunas personas se vean afectadas por los resultados y por lo mismo se cuestionen la veracidad de los mismos. Si una de las herramientas está mal diseñada o aplicada, los resultados carecerán de validez y correos un riesgo alto de perder el proceso de consultoría. Buscando que no quede ninguna duda de los resultados es que es muy importante seleccionar por lo menos dos fuentes de información, y diseñarlas para confirmar la problemática de la empresa.

El presente trabajo se realizó utilizando cinco instrumentos para recopilar información, mismos que partían del modelo de diagnóstico y buscaban identificar las fortalezas y debilidades de la empresa.

El primer instrumento diseñado fue la guía de entrevista a nivel directivo, este buscaba identificar cuál es el problema o los problemas que adolece la empresa, según el nivel más alto de arquitectura organizacional. La información obtenida en esta reunión es determinante, ya que se buscará desechar o confirmar las posibles causas al problema o problemas que presenta el Director de la empresa.

De esta reunión saldrán los datos iniciales que apoyaran al diseño del modelo de diagnóstico y al resto de los instrumentos para recopilar información. El segundo instrumento fue el cuestionario para los colaboradores. Una vez que se analizó la información obtenida por los directivos, se estructuró el cuestionario partiendo de los resultados de la entrevista. Este instrumento se diseñó sabiendo que la tendencia de las personas es buscar el punto medio, por lo que las opciones de respuesta eran cuatro, en donde dos de ellas definían la fortaleza (totalmente de acuerdo y de acuerdo) mientras que las otras dos establecían la debilidad (medianamente de acuerdo y totalmente en desacuerdo).

El valor que tenían las opciones eran cuatro, tres, dos y uno respectivamente. Así, si el personal decía que estaba de acuerdo era capturar un valor tres y sería una fortaleza, mientras que si optaban por un medianamente de acuerdo sería un valor dos siendo esta una debilidad. En el cuestionario se colocaron dos reactivos, mismos que se colocaron aleatoriamente, cuidando que no quedan juntos para que el personal o pudiera identificar que se evaluaba, además para confirmar la respuesta. Al momento de diseñar el cuestionario se cuidaba la redacción de cada ítem, entre los elementos que se cuidaba era que se redactaran como afirmaciones, además de que no evaluaran dos variables y también que fueran en positivo. Al final cada ítem se leyó cuidando que su respuesta fuera acorde a las opciones presentadas.

El tercer instrumento que se definió fue la lista de verificación, está buscaba corroborar aquellos puntos que era necesario confirmar después de la entrevista a directivos y la aplicación del cuestionario a colaboradores. El cuarto instrumento utilizado fue el *sensing* bien es cierto no tiene un cuerpo tan definido como los anteriores instrumentos, también es cierto que permite recopilar información y en algunos casos es muy valioso para establecer conclusiones. Este instrumento sigue teniendo como base el modelo de diagnóstico, sólo que su forma de recabar son los sentidos del consultor. El quinto y último instrumento que se diseñó fue el análisis de productividad de la empresa con relación a los ingresos y egresos, y el aprovechamiento de los recursos. Aplicando herramientas de manufactura esbelta para detectar desperdicios en los procesos productivos.

### Recolección de datos

La recopilación de los datos se realizó buscando que fuera una representación lo suficientemente alta que permitiera tener información confiable, y así disminuir el margen de error, se utilizó un mínimo de 50%. El ejercicio se dio en varios momentos, en todos ellos se buscó crear un clima de confianza, de apertura y respeto a la opinión de cada uno de los integrantes del equipo de trabajo. En un primer momento se obtuvo información de los dueños de la empresa, los datos obtenidos por ellos permitieron diseñar el modelo de diagnóstico que fue la brújula durante todo el proceso de consultoría. Este tiempo sirvió para recolectar los datos de la dirección, para lo cual se

estableció contacto con el Director General para concertar el día y la hora en que se aplicaría la entrevista tanto a él como el Administrador General.

Como ya se mencionó anteriormente, el resultado de estas entrevistas es fundamental para precisar el modelo de diagnóstico, por lo que con los datos obtenidos en estas entrevistas, se vuelve a revisar el modelo de diagnóstico y se cuida que no quede ningún ámbito que impacte en el problema, fuera del modelo. Una vez que ya se tenían las bases firmes se procedió a recopilar la opinión del personal técnico, utilizando el cuestionario. En un segundo momento se llevó a cabo una reunión con el personal de niveles técnicos – operativos, para lo cual fue necesario que previamente se acordara con el director administrativo el día y la hora en que se podía disponer del personal, el lugar que se estableció para tal fin fue la sala de juntas de la empresa. En el caso de los cuestionarios que se aplicaron al personal técnico, se les citó a todos los colaboradores y se les explicó que era fundamental que respondieran con sinceridad los reactivos, se hizo una analogía con un revisión médica señalando la importancia de que para hacer un buen diagnóstico de la enfermedad y dar la medicina adecuada era necesario que la información de obtenida por los análisis al cuerpo fueran reales, sólo así la medicina podría ser efectiva.

El cuestionario se aplicó al 50% del personal, quienes en todo momento mostraron una actitud receptiva, motivada, dispuestos a colaborar, sólo que en algunos momentos hicieron comentarios que permitieron observar que había inconformidad con la empresa. Si el colaborador tenía dudas de algún reactivo preguntaba y se le aclaraba, ya que concluía salía a su lugar de trabajo. En un tercer momento y ya con datos recabados, se realizó una visita en campo para confirmar la existencia de algunos registros y/o documentos. En el caso de la herramienta llamada lista de verificación, fue necesario establecer el día y la hora en que se podría visitar las instalaciones de la empresa para poder identificar los registros que mostraran o evidenciaran que existía o se carecía del punto evaluado. Durante el recorrido se fue tomando nota de las evidencias mostradas durante la revisión. La recopilación mediante el instrumento del *sensing* fue permanente, desde el primer momento que se visitó la empresa se estuvo percibiendo información que era utilizada para alimentar los datos hasta este momento obtenidos. El quinto instrumento fue las visitas al área de producción, ya que se realizaron una serie de recorridos a las áreas productivas para determinar los tiempos antes, durante y después de la producción, recolectando datos en las bitácoras y apuntando las áreas de oportunidad de aprovechamiento de recursos y eliminación de desperdicios.

### Análisis de la Información

Para poder hacer el análisis de la información primeramente se tomó como base el modelo de diagnóstico, que es la parte medular del mismo, ya que si no se cuenta con un modelo es muy probable que el consultor se pierda en el mar de información que está obteniendo. Durante las primeras visitas realizadas a la empresa se pudo detectar que carecían de algunas herramientas administrativas, así que era necesario confirmar la apreciación para poder apoyarla. En el caso de esta empresa, se diseñó un modelo que permitiera confirmar si la falta de herramientas de gestión administrativa y de calidad era lo que tenía a la empresa en la situación actual, por lo que el modelo utilizado se diseñó basado en un enfoque sistémico, buscando conocer las fortalezas y debilidades de la misma. El modelo de diagnóstico se dividió en 5 subsistemas, cada subsistema a su vez estaba dividido en ámbitos o indicadores, cada uno de los ámbitos tenía tres puntos a evaluar. Este equilibrio es fundamental para obtener resultados que no estén cargados a una parte del sistema. El modelo que se utilizó en esta empresa fue el siguiente:

*Subsistema:* Administración

*Ámbito: Personal:* \_Contrataciones, Sueldos y salarios; Prestaciones e incentivos.

*Ámbito: Arquitectura Organizacional:* \_Estructura organizacional, Descripción de puestos y Evaluación del desempeño

*Ámbito: Sentido de pertenencia:* Satisfacción en el trabajo, Seguridad en el empleo y Igualdad en el empleo.

*Subsistema:* Equipos De Trabajo

*Ámbito: Al interior:* Énfasis en objetivos, Facilitación del trabajo y Apoyo al interior del departamento.

*Ámbito: Entre departamentos:* Reuniones, Facilitación del trabajo y Apoyo entre departamentos

*Ámbito: Integración Informal:* Formación de equipos, Relaciones informales y Comunicación

*Subsistema:* Infraestructura

*Ámbito: Espacios:* Espacios adecuados, Mobiliario y Herramientas y equipo

*Ámbito: Tecnología:* Aprovechamiento de la tecnología, Equipo e Innovación y creatividad.

*Ámbito: Seguridad:* Instalaciones, Manejo de equipo de seguridad y Seguridad e higiene personal.

*Subsistema:* Procesos

*Ámbito: Anticipación a los procesos:* Establecimiento de objetivos, Diseño del trabajo, Planeación estratégica.

*Ámbito: Procesos:* \_Definición de procesos, Servicio al cliente interno y Medición de resultados del proceso.

*Ámbito: Calidad del producto:* \_Percepción del empleado con respecto al producto, Percepción del empleado con respecto al servicio, Calidad y productividad.

**SUBSISTEMA:** LIDERAZGO

*Ámbito: Dirección:* \_Énfasis en objetivos, Dirección, Apoyo por parte de la Dirección

*Ámbito: Supervisión:* \_Apreciación del rendimiento, Normas del rendimiento y Tensión

*Ámbito: Manejo del personal:* \_Comunicación, Manejo de conflictos y Toma de decisiones.

El diseño del modelo se conforma de dos vertientes, una de ellas es la necesidad sentida que presentan los niveles Directivos y partiendo de ellas el grupo consultor, mediante una lluvia de ideas, establece las posibles causas por las que se está presentando el o los problemas que presenta el cliente. Una vez que se tienen las ideas, se procede a agruparlas por subsistema y ámbito, así se va formando el modelo de diagnóstico con la primera vertiente; la segunda vertiente se forma cuando a cada ámbito se le asigna la norma y el punto de la norma a la cual impacta. Con el modelo de diagnóstico ya definido, se procede a diseñar las herramientas que se utilizarán para recopilar la información, para lo cual se cuidó en todo momento que los ámbitos

evaluados fueran cruzados con al menos dos herramientas. Por ejemplo: si en el cuestionario se evaluaba comunicación, en la entrevista también.

Cada uno de los instrumentos fue analizado de forma independiente, el resultado de este se plasmaba en la tabla cruzada que contenía todos los ámbitos de la evaluación y los instrumentos definidos para recopilar los datos. Primeramente se analizó los datos obtenidos en la **entrevista a directivos**. Al ser dos directivos, cada uno de ellos significaba el 50% de la información, por lo que las respuestas que brindaron se tradujeron en un porcentaje, además las respuestas solamente podían ser traducidas en que existía o no existía el elemento evaluado, por ejemplo, existía o no existía la estructura organizacional. Lo anterior se traducía en fortaleza o debilidad.

Posteriormente se revisaron los resultados obtenidos de la aplicación de **cuestionarios**. Los cuestionarios se diseñaron con cuatro opciones de respuesta, previendo que los colaboradores no se fueran por un punto medio, que es probable cuando se presentan tres opciones de respuesta. Cada una de las respuestas tenía un valor: totalmente de acuerdo valía cuatro puntos, de acuerdo, valía tres puntos; medianamente de acuerdo equivalía a dos puntos y totalmente en desacuerdo un punto. Los cuestionarios se capturaron en el programa SPSS, lo que permitió identificar claramente aquellos valores que eran fortaleza y debilidad. Como cada pregunta evaluaba un ámbito, y existían dos preguntas por ámbito, al final se promediaron, en el caso de que existiera un número fraccionado, es decir que quedara un valor como 2.5, 3.5, etc. Se consideraba como menor, es decir, se le daba un valor de 2, o 3.

Para poder analizar la información obtenida a través de la **lista de verificación** fue necesario establecer previamente que si existía la evidencia se manejaba como una fortaleza, si no mostraban el registro era debilidad. Una vez que se obtuvieron los resultados de estas tres herramientas se procedió a analizar los datos obtenidos hasta este momento, para determinar si el ámbito evaluado era una fortaleza o una debilidad para la empresa, para lo cual se diseñó una tabla que tenía como base los ámbitos del modelo de diagnóstico y ahí se fue concentrando los resultados obtenidos en cada herramienta, el sensig ayudaba a precisar los resultados. Del resultado de las visitas al área de producción se obtuvo información como: volumen de producción diaria, desperdicios por día, tiempos de producción y costos de producción, esta información se obtuvo de un mes completo. Una vez que se obtuvieron los datos, se procedió a realizar un informe de costeo de desperdicios, lo que permitió concluir que si la empresa continuaba trabajando así, en un año tendría desperdicio de varios millones de pesos. Con todo este análisis de la información obtenida de las diversas herramientas, se pudo concluir que era indispensable mejorar el aprovechamiento de los recursos y la eliminación de desperdicios con el propósito de mostrar a la empresa lo que representaba en costos las prácticas administrativas y operativas actuales.

## RESULTADOS DEL DIAGNÓSTICO

Los resultados fueron desfavorables para la empresa. Al ser 47 ámbitos evaluados y tener debilidad en 38 fue necesario hacer una presentación en Power Point que tuviera todos los vínculos necesarios para soportar los resultados. A continuación se presenta una parte de los resultados del modelo de diagnóstico.

Tabla 1: Describe los Resultados de Diagnóstico Aplicado

D= Debilidad; F=Fortaleza

ADMINISTRACION	Encuesta	Entrevista	Visita de campo	Resultado
Personal	D	F	D	D
Contrataciones	F	No aplica	D	D
Sueldos Y Salarios	D	F	D	D
Prestaciones E Incentivos	D	F	D	D
Arquitectura Organizacional	D	No aplica	D	D
Estructura Organizacional	F	F	D	D
Descripción De Puestos	F	F	D	D
Evaluación Del Desempeño	D	F	D	D
Sentido De Pertenencia	F	D	D	D
Satisfacción En El Trabajo	F	F	F	F
Seguridad En El Empleo	F	D	D	D
Igualdad En El Empleo	D	D	D	D
Equipo De Trabajo	Encuesta	Entrevista	Visita de campo	Resultado
Al Interior	F	F	F	F
Énfasis En Objetivos	F	F	D	D
Facilitación Del Trabajo	F	F	F	F
Apoyo Al Interior Del Equipo	F	No aplica	F	F
Entre Departamentos	D	D	D	D
Reuniones	D	D	D	D
Facilitación Del Trabajo	F	No aplica	D	D
Apoyo Entre Departamentos	D	No aplica	D	D
Integración Informal	D	F	D	D
Formación De Equipos	D	F	D	D
Relaciones Informales	D	D	D	D
Comunicación	D	No aplica	D	D
Infraestructura	Encuesta	Entrevista	Visita de campo	Resultado
Espacios	F	F	F	F
Espacios Adecuados	F	F	F	F
Mobiliario	F	F	F	F
Herramientas Y Equipo	F	F	F	F
Tecnología	D	F	D	D
Aprovechamiento De La Tecnología	D	F	D	D
Equipo Necesario Para Trabajar	D	F	D	D
Tecnología E Innovación	F	F	F	F

*Tabla de auditoría propia que ordena los diferentes formas de análisis del diagnóstico y los resultados por ámbito.*

## CONCLUSIONES

Hoy en día es imprescindible trabajar de manera interrelacionada para potencializar los resultados, el laborar de forma aislada ya es imposible. Lo anterior es también para la investigación, el querer solucionar problemáticas sociales, organizacionales, del área que sea, basados en una sola visión, una sola vertiente o enfoque es una pérdida de recursos. Actualmente no es posible querer mantener una organización Pública o Privada operando, además siendo productivos y rentables, si dentro de la misma se implementa sólo un sistema de gestión. Necesitamos como administradores o asesores tener un enfoque sistémico de la empresa y buscar la implementación de todos aquellos sistemas de gestión que nos ayuden a optimizar los recursos de la misma. Será fundamental que estos sistemas de gestión estén interrelacionados, que sea un solo modelo, utilizando las gestiones necesarias, no como sucede frecuentemente, un modelo de gestión bajo la norma ISO 9001:2008, que trabaja de forma independiente a otro modelo gestión bajo la norma de seguridad industrial o de desarrollo humano.

Bajo el enfoque anteriormente descrito es que desarrollo la propuesta metodológica que se expuso en el presente documento. Es el resultado de más de una década de experiencia, la cual ha sido enseñada y aplicada a alumnos de la Maestría en calidad en la Universidad del Estado de Sonora. Varias generaciones han probado que funciona, que es valiosa en la obtención de resultados reales y que además les ha permitido entender más sistemas de gestión de forma aislada no comprendían, que si operaban, pero porque estaba establecido por escrito, pero que carecía de un sentido real en su labor cotidiano.

Esperamos que sea de utilidad para aquellos que aún no han encontrado una forma práctica de realizar un diagnóstico que contemple las diversas variables que intervienen en un problema organizacional. Esta propuesta es la base para que otros profesionales puedan mejorarla o utilizarla tal cual se propone, ya que no buscamos descubrir el hilo negro, sino generar sinergia con ellos.

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# REVALOREMOS LA UNIVERSIDAD AUTÓNOMA “BENITO JUÁREZ” DE OAXACA, UNA PROPUESTA DE RESPONSABILIDAD SOCIAL UNIVERSITARIA

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## RESUMEN

*El proyecto tiene como objetivo general continuar con la segunda etapa de “La Guelaguetza de acervo bibliográfico para municipios marginados en el estado de Oaxaca” misma que por la necesidad de obtener recursos económicos para continuar operando, participó en la convocatoria del Programa de Fomento a la Investigación (PROFI 2013) de la Universidad Autónoma “Benito Juárez” de Oaxaca (UABJO) del cual salió beneficiario. La metodología consiste en motivar a la comunidad universitaria y a la sociedad en su conjunto para donar libros que tienen almacenados en casa y no utilizan, sin importar el nivel académico ni el grado de deterioro en el que se encuentren, ya que se ingresan al hospital del libro ubicado en la Dirección de Servicios Editoriales de la misma universidad, los cuales son restaurados y catalogados en bloques de 500 a 600 unidades, entregándose a las autoridades municipales de las poblaciones con características de marginación. Los resultados obtenidos en la primera etapa contempló la entrega de cinco acervos bibliográficos, la cual fue superada al entregarse ocho, beneficiando a una población aproximada de 25,000 usuarios.*

**PALABRAS CLAVES:** Responsabilidad Social, Municipios marginados, Educación.

## WE REASSESS THE UNIVERSIDAD AUTÓNOMA "BENITO JUÁREZ " OF OAXACA, A PROPOSAL FOR UNIVERSITY SOCIAL RESPONSIBILITY

### ABSTRACT

*The project's general objective is to continue with the second stage of "La Guelaguetza bibliographic for marginalized municipalities in the state of Oaxaca" same as by the need for financial resources to continue operating , participated in the announcement of the Program for the Promotion of Research (PROFI 2013) of the Universidad Autónoma "Benito Juárez" of Oaxaca (UABJO) which came beneficiary. The methodology is to motivate the university community and society at large to donate books that are stored and used at home , regardless of academic level or degree of impairment in which they are, as they enter the hospital Workbook on the Publishing Services Division of the university , which are restored and cataloged in blocks of 500-600 units , giving municipal authorities populations with characteristics of marginalization . The results obtained in the first stage looked at the delivery of five library collections, which was overcome by surrendering eight benefiting a population of approximately 25,000 users.*

**JEL:** I2, I24, I240, O1, O15, O150

**KEYWORDS:** Social Responsibility, Municipalities Marginalized, Education

## INTRODUCCIÓN

Revaloremos la UABJO una propuesta de Responsabilidad Social Universitaria es la segunda parte del Proyecto denominado de “La Guelaguetza de acervo bibliográfico para municipios marginados en el estado de Oaxaca” el cual emana de la presentación, discusión y realimentación de algunos trabajos expuestos durante el desarrollo del Primer Congreso Internacional, Investigación, Desarrollo Sustentable y Entorno Cultural del Área Económico Administrativa 2012” organizado por los Cuerpos Académicos de emprendedores e Innovación Mercadológica de la Facultad de Contaduría y Administración y realizado en las instalaciones de la UABJO. El objetivo central es la obtención de los recursos económicos necesarios para continuar operando, participando en la convocatoria del Programa de Fomento a la Investigación (PROFI 2013) de la UABJO del cual salió beneficiario. En esta segunda fase se contempla trabajar de manera conjunta a través de los investigadores Carmen Eloísa Cruz Robles y Abraham Espejo Martínez integrantes del cuerpo académico Innovación Mercadológica UABJO-CA-45 y Ana Luz Ramos Soto del cuerpo académico Emprendedores UABJO-CA-46 como una forma de incentivar el trabajo colaborativo sin menoscabo de los demás investigadores y estudiantes que durante su desarrollo deseen unirse al proyecto con la finalidad de obtener resultados similares a los alcanzados durante la primera fase denominada “Red Colecta Libros” que fue respaldada por la Agencia de Desarrollo Integral UABJO-SEDESOL.

## REVISIÓN LITERARIA

Tomando como marco el Plan Institucional de Desarrollo (PID) 2012-2016 de la UABJO, el cual plantea la revaloración de la relación de la Universidad con los Gobiernos Federal, Estatal y Municipal que permita dejar atrás el paradigma [...] de ver a la Universidad como parte de la problemática que debían atender los gobiernos y emerja el paradigma de ver a la Universidad como parte de la solución de la problemática que deben atender éstos (PID, 2012-2016); situación presente en la misión al indicar que [la universidad] debe vincularse sólidamente con la sociedad, e incluirla con responsabilidad social (RS) actuando siempre bajo la ética y la congruencia. De ahí que este proyecto se basa como lo establecen Campos y Sánchez, (2005) en la vinculación como conjunto de relaciones que existen [...] entre la universidad y la sociedad de la cual forma parte, [considerada aquella] como una función deseable o un elemento de “virtud” en las instituciones de educación superior para a través de la motivación a la comunidad y sociedad en su conjunto se brinde apoyo a las poblaciones marginadas del estado de Oaxaca; tomando en cuenta que como lo establecen Moreno y Maggi (s.f) “las universidades constituyen hoy en día los espacios por excelencia para la generación y aplicación del conocimiento, principal factor de desarrollo económico de la sociedad actual”.

Existe una corriente de investigadores como Leonel Corona y un grupo de investigadores del doctorado en Economía de la Tecnología, de la Universidad Nacional Autónoma de México (UNAM) que han sembrado la inquietud de que la vinculación es realmente una *nueva función de la universidad moderna* y no una subfunción derivada de las actividades sustantivas tradicionales [y] colocan el concepto de la vinculación en el sentido de la “agencia”; es decir, si bien puede ser importante el papel de ciertos individuos en particular, es más importante el impacto que pueden tener los agentes institucionales articulados en una red que, en conjunto, resuelva el problema de la vinculación a través de los avances de la investigación (Campos y Sánchez, 2005). Hasta ahora se plantea que las universidades tienen tres funciones sustantivas: la docencia, la investigación y la extensión. Sin embargo, cada vez es más necesario ampliar este horizonte de funciones hacia la vinculación [a la cual] se le considera un eje estructurador de la planeación académica, esto es, que las funciones de docencia e investigación universitarias encuentren mecanismos y formas de

articulación de manera más estrecha y efectiva con la sociedad y la economía, salvando el carácter asistencial que hasta antes prevalecía. Este cambio significa además el establecimiento de un nuevo contrato social entre la academia y la sociedad, el cual requiere de un amplio y fuerte apoyo gubernamental, de acuerdo con el papel que se le ha asignado a la investigación en el nuevo modelo económico (Campos y Sánchez, 2005). También se ha definido a la vinculación como “el proceso integral que articula las funciones sustantivas de docencia, investigación y extensión de la cultura, así como los servicios de las instituciones de educación superior, para su interacción eficaz y eficiente con el entorno socioeconómico” (Gould, 2002). La vinculación es una función que permite a las universidades realinear sus objetivos y visiones a futuro [...] como instituciones interesadas en participar en la solución de las problemáticas que enfrentan los ciudadanos de las regiones en las cuales están localizadas o de la sociedad en general. (Campos y Sánchez, 2005) Por lo tanto la relación entre universidades y [sociedad] debe renovarse y convertirse en una parte esencial de la vida académica de las instituciones educativas del nivel superior, para responder a los requerimientos del contexto social e impactar en los [pueblos marginados] en un marco de beneficio mutuo y de comprometida RS (Moreno y Maggi, s.f.) Las relaciones entre la Universidad y la Sociedad se suceden de diferentes formas.

En algunas oportunidades se desarrollan procesos que no necesariamente involucran los proyectos curriculares, o por lo menos no los afectan directamente; en otras, las vinculaciones surgen dentro de los programas académicos y comprometen el conjunto del proyecto curricular. De allí que se pueda hablar de una perspectiva social, cuando la Universidad favorece la vinculación con sectores sociales vulnerables, impulsa la extensión solidaria e investiga para elevar la calidad de vida del conjunto de la población. (Malagón, 2006). La importancia del carácter social de la vinculación universidad y sociedad radica precisamente en que, sin desconocer la necesidad de una sólida formación técnica y científica de los estudiantes, el propósito de formación apunta a dar una formación integral que le permita a la institución intervenir en el entorno con las herramientas necesarias para generar dinámicas de cambio hacia una sociedad más justa y solidaria (Malagón, 2006).

En estos tiempos de crisis y desigualdades sociales, tanto a nivel mundial como nacional, las instituciones y organizaciones de diversa índole, que forman parte de una sociedad, están acogiendo los principios de la RS, concepto que ha venido asumiendo el sector empresarial. Hoy día ha surgido la necesidad de redefinir y activar las nuevas dimensiones de ésta obligación, como referente socioeducativo en las Instituciones de Educación Superior (IES), de tal manera que comprende una visión y misión de gestión institucional con sentido ético, susceptible de expresarse principalmente fuera del ámbito universitario a través de la Función Extensión, mediante diferentes formas o modalidades y de acuerdo a las particularidades de cada institución (Bustos e Inicarte, 2012). De tal manera, que han sido muchas las acepciones que se le han venido dando a la RSU a lo largo de la historia, pero independientemente de cómo se le llame y las diversificaciones que el concepto pueda tener, siempre se llega a la conclusión que es un compromiso institucional con la comunidad, que se realiza a través de las tres funciones básicas universitarias, pero primordialmente mediante la Extensión Universitaria, que ha sido el término mayormente utilizado por las universidades y otras instituciones de educación superior (Bustos e Inicarte, 2012).

En este sentido el Artículo 6 ley orgánica de la UABJO establece que: [...] las Instituciones Universitarias [entiéndase facultades, escuelas e institutos] tenderán a desarrollar en los miembros de la comunidad [universitaria] una conciencia crítica social, comprometida con el pueblo, que atienda al avance reclamado por la entidad dentro del contexto histórico social, y que proponga alternativas de solución para los diferentes problemas regionales y nacionales. Más adelante en el

Artículo 7 menciona que: Son fines de la universidad: [...] III. Organizar y desarrollar la investigación científica, aportando a la sociedad proyectos adecuados para la solución de sus necesidades; finalizando en este sentido el Artículo 10 establece que: son funciones de la Universidad: [...] II.- La docencia, la investigación científica y social. III.- La extensión universitaria y la difusión de la cultura hacia la comunidad (LOUABJO,1988) .

Producto de la interacción universidad-comunidad, se derivan demandas y exigencias que obligan a la institución a la renovación y actualización permanente, para responder al entorno social y nutrirse de los cambios presentes en la sociedad, lo que conlleva a que la Extensión Universitaria y la RSU representen un binomio inseparable en las IES, que se fortalece al (Bustos e Inicarte, 2012) relacionarse con la problemática del entorno social. (Díaz, 2012). Las Instituciones de Educación Superior (IES), [por tanto] desempeñan un decisivo papel social y moral tanto en la formación profesional como en la transformación de su entorno. [...] Fundamentalmente deben establecer relaciones con la sociedad que les permita consolidar su quehacer docente e investigador, el que a la vez ve aumentar el interés que genera en diferentes personas, grupos, el Estado, el Mercado y la Sociedad Civil. [...] Resulta necesario señalar en función de lo que la RSU representa, que esta no puede ser una tarea de desempeño de la función extensión, ni vista de manera simplista como asunto de proyección social, su enfoque es más complejo y debe abarcar de manera transversal todas las funciones propias de las IES es decir: docencia, investigación, extensión y gestión. [...] De allí que las IES, como instituciones sociales ejercen funciones estratégicas para el desarrollo cultural, científico y tecnológico y para los proyectos de consolidación de una sociedad (Aristimuño, 2012). En ese sentido, es también responsabilidad de las instituciones académicas generar soluciones para los problemas contemporáneos, así como constituirse en difusores de pensamiento crítico que contribuyan al bienestar de la sociedad (Sánchez-Castañeda y Caballero, 2003).

Se pretende entender que la responsabilidad social de la Universidad como servicio para la sociedad, es fruto de una gestión basada en la ética y la eficiencia, que supera la mera filantropía y la gestión organizacional. De ahí que la RSU pueda entenderse como una mística que trasciende la esfera del conocimiento y la investigación para concretarse en la utilidad de la sociedad (Rodríguez, 2012). De igual forma las universidades deben reconocer los límites de sus capacidades así como sus fortalezas y debilidades, pues solamente así serán capaces de seleccionar adecuadamente los proyectos que son capaces de desarrollar exitosamente. La selección de proyectos también debe tener como punto de referencia el potencial [...] para contribuir a la enseñanza dentro de la universidad. Asimismo, los proyectos deben ser aceptados por [la comunidad] de las instituciones de educación superior, toda vez que son ellos quienes tendrán la responsabilidad de desarrollarlos (Sánchez-Castañeda y Caballero, 2003).

La Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO) recomienda a las universidades fortalecer las funciones de servicio a la sociedad, especialmente aquellas orientadas a erradicar la pobreza, la intolerancia, la violencia, el analfabetismo, el hambre, el deterioro del medio ambiente y las enfermedades. (UNESCO, 1998). Esto es, vincular el proceso formativo y de generación y distribución del conocimiento que realizan las IES con las necesidades y requerimientos presentes y futuros de las organizaciones productivas y sociales en general (Padilla y Marúm, 2004). El gran fracaso de la democracia moderna es no haber podido todavía suprimir los privilegios sociales, reducir las grandes iniquidades y asegurar una calidad de vida decente y autónomamente decidida para la mayoría de la población mundial, dentro del respeto de las diferencias culturales, la democracia avanza, pero la pobreza y la injusticia siguen presentes. Sin embargo, los últimos estudios sobre los procesos de desarrollo eficientes tienden a resaltar la importancia del capital humano y del capital social en las experiencias exitosas. Por lo

tanto, no es utópico pensar que el principal pilar de un desarrollo sostenido y sostenible sea la formación de los profesionales con un enfoque de desarrollo social. Todo lo que nos falta es el sentimiento de urgencia para que esta meta reoriente rápidamente la formación académica actual. (Vallaey, 2012). Cada cierto tiempo la humanidad cae en la cuenta que debe ser mejor. Los hombres pensantes intensifican su búsqueda en las razones para tener una vida de calidad y los prácticos se detienen a pensar en aquello que daría más calidad a la vida. Se va tomando conciencia que lo hecho hasta ahora pudo haberse realizado mejor y más aún cuando es de utilidad para el ser humano y la sociedad.

El movimiento de la RS también ha llegado a la universidad, haciéndonos recordar hasta qué punto cumple su misión, haciéndonos reflexionar que la RS es un aspecto propio de la Universidad porque está orientada a servir a la sociedad desde la ciencia, la investigación y el conocimiento; de ahí nuestra postura de que la RSU es inherente a la naturaleza y misión de la universidad. La RSU es un enfoque ético del vínculo mutuo entre universidad y sociedad. Se trata de un compromiso moral irrenunciable que, a la par que genera nuevo conocimiento relevante para la solución de los problemas sociales, permite la aplicación directa del saber científico y tecnológico, así como una formación profesional más humanitaria. La RSU como nuevo paradigma implica el abordaje de temas de carácter pedagógico ético y filosófico del propio entorno de la universidad. Además de enfatizar el trabajo de extensión universitaria y proyección social y de articular las estrategias del proceso de formación académica y producción científica, exige calidad de gestión que supere la esfera de una mera filantropía o asistencialismo, lo que no siempre es aceptado en la comunidad universitaria, dado que exige una conciencia autocrítica que motiva a la transformación de la Universidad. Así, la RSU va más allá de la extensión universitaria; la precisa y supera, dado que sitúa a la universidad en un mismo movimiento de coherencia organizacional, ofrece herramientas de gestión que permiten medir los avances, implica la participación y el diálogo con todas las partes interesadas dentro y fuera de la Universidad (Vallaey y Sasia, 2012).

“implica que los centros de educación superior se comprometen no sólo a formar buenos profesionales, sino también personas sensibles a los problemas de los demás, comprometidas con el desarrollo de su país y la inclusión social de los más vulnerables, personas entusiastas y creativas en la articulación de su profesión con la promoción del desarrollo participativo de su comunidad” (UDLAP, 2013). Otro de los aspectos sobre los que ha basado el proyecto que nos ocupa es la Mercadotecnia Social [...] tendencia que tiene como característica aplicar las tecnologías del marketing comercial al desarrollo de programas diseñados para influir en el comportamiento voluntario de determinados destinatarios con el fin de mejorar el bienestar de la sociedad en general. El lado filantrópico de la mercadotecnia es algo real y vanguardista, es considerada la filosofía más fresca dentro de la Mercadotecnia que [...] ahora va más allá de considerar los fines lucrativos para tener como fin principal el beneficio social; propone la utilización responsable del marketing, surgido en los años 70 y que hoy ha sido adicionado con una nueva pregunta: ¿Por qué no puede venderse la solidaridad como se vende algún producto? (Pimentel, 2010) Es por tanto que unidas estas tres directrices: vinculación, RSE y Mercadotecnia han dado origen a este proyecto sustentable que permite beneficiar a las poblaciones marginadas del estado de Oaxaca, México.

## METODOLOGÍA

En esta fase del proyecto se pretende motivar a la comunidad universitaria y a la sociedad en su conjunto para donar libros que tienen almacenados en casa y no utilizan, sin importar el nivel académico de los mismos ya que son catalogados e integrados a los acervos bibliográficos que se

entregan a las autoridades de los municipios beneficiados verificando que cada uno de dichos acervos contenga material bibliográfico de los diferentes niveles con la finalidad de que sean útiles a todos los pobladores de las comunidades. De igual forma el grado de deterioro en el que se encuentren no resulta ser un obstáculo para su recepción ya que se ingresan al hospital del libro ubicado en la Dirección de Servicios Editoriales de la misma universidad, para ser restaurados y como se dijo anteriormente debidamente catalogados, para más adelante ser integrados en bloques que oscilan entre las 500 a 600 unidades para finalmente entregarse a las autoridades municipales de las poblaciones con características de marginación. Para la selección de municipios sujetos a beneficiar se toma en cuenta a aquellos con más alto grado de marginación (GM) y menor Índice de Desarrollo Humano (IDH) para confirmar que los acervos se entreguen a quienes más necesidades de mejora posean. La entrega de los acervos bibliográficos se realiza por el rector de la UABJO firmándose para tal efecto un acta de entrega que ampara lo ejemplares que conforman los mencionados acervos de tal forma que ambas partes cuenten con el soporte documental correspondiente.

## RESULTADOS

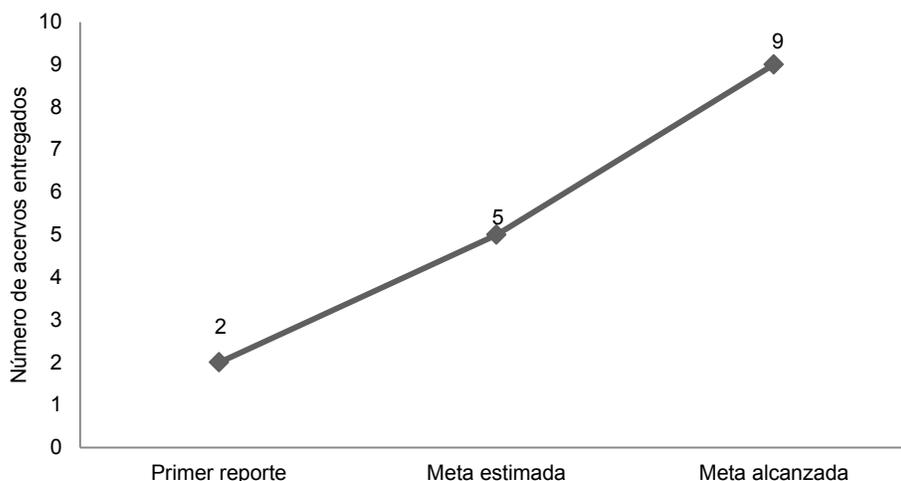
Desde la fecha de la puesta en marcha del proyecto en su primera etapa se han recolectado 5,400 libros entre los cuales se encuentran ejemplares de nivel preescolar, primaria, secundaria y bachillerato así como libros de nivel profesional y de tipo general como novelas, cuentos, leyes, entre otros. Otro aspecto de mencionar son los bloques de revistas tanto populares como de carácter científico que fueron recibidas y entregadas cuya cantidad oscila entre la 2,475 unidades. Dentro de los resultados obtenidos en las entregas realizadas durante la primera fase y que inspiran a los investigadores para seguir trabajando en el proyecto cuantitativo se mencionan los siguientes:

Figura 1: Cantidad De Libros Entregados Por Municipio



Fuente: Elaboración propia con resultados de la investigación

Figura 2: Comportamiento de Entrega de Acervos Bibliográficos



Fuente: Elaboración propia con resultados de la investigación

Con lo anterior se pone de manifiesto que todo proyecto que persiga el beneficio de la sociedad puede tener resultados benéficos de manera colateral como se pueden palpar en este.

Tabla 1: Resumen Acumulativo de Beneficiarios

Municipio	Población beneficiada	Población acumulada
San Pedro y San Pablo Ayutla	5,602	5,602
San Martín Peras	11,361	16,963
San Juan Bautista Jayacatlán	1,462	18,425
San Juan Tepeuxila	2,773	21,298
Santo Domingo Tlatinalgo	791	21,989
Santiago Apóstol	4,220	26,209
San Pedro Apóstol	1,544	27,753
Yogana	1,308	29,061
El Círuelo Pinotepa Nal.	2,185	31,246
<b>Población beneficiada total</b>	<b>31,246</b>	

Fuente: Elaboración propia con resultados de la investigación

## CONCLUSIONES

La vinculación como factor de enlace entre la universidad y la sociedad permite apoyar a ésta con proyectos que incidan directamente en el desarrollo regional. La RSU es una forma de establecer vínculos que permiten a la universidad ir más allá de su labor de formación de profesionistas incidiendo directamente en la problemática de las comunidades de escasos recursos con proyectos que encadenan otras actividades como los planes de desarrollo y la obtención de recursos para actividades específicas de cada uno. Los proyectos de RS colaboran a que las comunidades marginadas obtengan un apoyo adicional para su desarrollo a través de proyectos como el mencionado. Los congresos permiten la vinculación de investigadores, académicos y la sociedad en general para a través de ellos identificar problemáticas en las cuales intervenir a través de la creación de proyectos elaborados de acuerdo a las necesidades detectadas.

*“La educación es fundamental para la felicidad social; es el principio en el que descansan la libertad y el engrandecimiento de los pueblos”.*

Lic. Benito Pablo Juárez García

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# ANÁLISIS COMPARATIVO DE FACTORES COMPETITIVOS DE LAS PYMES DEL ESTADO DE COLIMA, DURANGO Y VERACRUZ

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## RESUMEN

*La competitividad es un aspecto que adquiere cada vez mayor relevancia, debido a que es la capacidad de obtener éxito respecto a otras organizaciones con ganancias por encima de la media del mercado. Debido a lo anterior, este trabajo presenta un análisis comparativo de los factores que influyen en la competitividad de las pymes en los estados de Colima, Durango y Veracruz en México. Para lograr el objetivo, se identificaron las investigaciones que han estudiado dichos factores, tanto conceptual como empíricamente y que han aplicado la misma metodología. Los resultados obtenidos muestran cuatro factores sobresalientes que son determinantes en el nivel de competitividad de las empresas: Recursos humanos, innovación, tecnologías de información y comunicación y aspectos contables y financieros. Los autores concluyen que para realizar un mejor análisis de los factores de competitividad es necesario incluir aspectos tanto cuantitativos como cualitativos.*

**PALABRAS CLAVE:** Competitividad, Recursos Humanos, Innovación, Tecnologías de Información y Comunicación, Aspectos Contables y Financieros

## COMPARATIVE ANALYSIS OF COMPETITIVE FACTORS OF THE SMEs FROM THE STATES OF COLIMA, DURANGO AND VERACRUZ

### ABSTRACT

*This paper presents a comparative analysis of the factors influencing the competitiveness of SMEs in the states of Colima, Durango and Veracruz in Mexico. To achieve the goal, the researches that have studied the factors were identified, both conceptually and empirically and have applied the same methodology. The results show four outstanding factors that are decisive in the level of competitiveness of companies: human resources, innovation, information and communication technologies and financial and accounting aspects. The authors conclude that for a better analysis of the competitiveness factors is necessary to include both quantitative and qualitative aspects.*

**KEYWORDS:** Competitiveness, Human Resources, Innovation, Information and Communication Technologies, Financial and Accounting Aspects

## INTRODUCCIÓN

En la actualidad las Pymes necesitan adaptarse a los cambios que el proceso de globalización ha provocado, el cual se caracteriza por los avances tecnológicos, nuevos mercados y la integración de las economías de todo el mundo, logrando consecuencias como la formación de grandes bloques económicos, donde su principal objetivo es sobrevivir ante la competitividad de los países, de sus economías y sus empresas, siendo este un aspecto que ha impactado en México. De esta manera, la búsqueda e identificación de factores competitivos en las Pymes representa un tema de actualidad y de mucha importancia para la teoría de la economía de negocios, ya que la capacidad para competir es lo que permite a las empresas ser exitosa, pues de esa capacidad proviene el crecimiento económico, lo que deriva en empleos y un mejor nivel de vida de la población (Cervantes, et al. 2012). Debido a eso, esta investigación se concentra en un análisis comparativo de los factores competitivos de las pymes de los estados de Colima, Durango y Veracruz, aprovechando los resultados que se han logrado en dichos estados en materia de competitividad. Como criterio para determinar si los factores de las Pymes de los tres estados participantes tienen un nivel de competitividad aceptable, los investigadores de este estudio consideraron un valor del 70%. Con el objeto de analizar dichos factores, este trabajo se ha estructurado de la siguiente manera: en la sección de revisión literaria, se definen los factores utilizados en las diferentes investigaciones consultadas; posteriormente se muestra la metodología empleada y finalmente se presentan los resultados, las conclusiones y posibles líneas de investigación de los aspectos considerados en este estudio.

## REVISIÓN LITERARIA

Actualmente las empresas se encuentran inmensas en una compleja economía mundial, por lo que se hace necesario tener un conocimiento de las organizaciones y de cuáles son las variables o factores, que se convierten en aspectos clave para su éxito competitivo. Cómo lograr posicionarse de forma competitiva en un determinado mercado y qué hacer para sostener o mejorar esa posición que constituye un tema central en la dirección de la empresa (Martínez et al, 2008). Según Aragón y Rubio (2006), el éxito competitivo de una empresa se debe al conjunto de recursos y capacidades que ésta posee que le permita conseguir una posición competitiva favorable, mantener y aumentar su posición en el mercado y obtener unos resultados superiores que la hacen diferente a los demás competidores del sector.

### Recursos Humanos

Algunos de los principales factores explicativos de la competitividad empresarial son los relacionados a los recursos humanos de la empresa. Los conocimientos, habilidades y actitudes de los trabajadores y la forma de cómo estos trabajan son aspectos cada vez más importantes para las empresas debido a que las fuentes tradicionales de rentabilidad, tecnología y productos, mercado, recursos financieros y economías de escala, son menos poderosas de lo que una vez lo fueron (Pfeffer 1994). No dar el valor requerido a la gestión de los recursos humanos constituye una de las principales causas de fracaso en las Pymes (McEvoy, 1984).

### Innovación

Vermeulen (2004), menciona que la innovación permite a las empresas obtener ventajas competitivas sostenibles a lo largo del tiempo y representa un factor determinante del crecimiento económico. En una muestra de 918 empresas británicas se encontró que las empresas medianas con una intensa actividad de innovación son las que realmente consiguen incrementar sus márgenes de beneficios (Hughes, 2001).

### Tecnologías de Información y Comunicación (Tics)

Las pyme deben desarrollar TICs que les permita ser competitivas, para lograr, la interacción entre los empleados, favorecer la comunicación, almacenar y transmitir el conocimiento generado por los individuos que forman parte de la empresa. Por otro lado, el acceso y uso de las nuevas tecnologías ligadas a internet les puede permitir competir en un mercado cada vez más abierto y competitivo, generar autonomía y aumentar el aprendizaje colectivo, entender mejor el entorno y por tanto adaptarse y aprovechar mejor las oportunidades que este ofrece (Tetteh y Burn, 2001).

*Aspectos contables y financieros:* La literatura muestra que el mantenimiento de buenos estándares financieros, a través de una adecuada gestión financiera, es uno de los principales factores resaltados como necesarios para alcanzar el éxito competitivo en las Pymes. En este sentido, es necesario implantar y controlar sistemas de contabilidad de costos, realizar análisis de la situación económico financiera e intentar, en la medida de lo posible, utilizar fuentes de financiamiento propias (Birley y Westhead, 1990).

### **METODOLOGÍA**

Con el propósito de identificar los factores competitivos estudiados y analizados de manera previa en la literatura, se llevó a cabo un análisis de contenido de varios documentos académicos publicados en Internet, con énfasis en aquellos que consideraban factores comunes de competitividad. Finalmente se seleccionaron las investigaciones denominadas: Análisis estratégico para el desarrollo de la micro, pequeña y mediana empresa (mipyme), que publicaron la información de las Pymes de los estados de Colima, Durango y Veracruz y que siguieron la misma metodología. El trabajo que se presenta en esta investigación es de tipo descriptivo, en la cual los datos se agruparán en cada uno de los factores para poder comparar entre sí los resultados de los tres estados participantes.

### **RESULTADOS**

Al realizar el análisis, se encuentran los siguientes resultados en cada uno de los factores competitivos de los tres estados participantes.

#### Recursos Humanos

En este factor se trata de conocer, el grado de aplicación que hacen las Pymes de las tres entidades de los principales procesos o prácticas de Recursos Humanos: reclutamiento y selección de personal, sistemas de evaluación del rendimiento/desempeño, capacitación del personal, promoción del personal y sistemas de pago variable (incentivos).

Tabla 1: Porcentaje de Empresas de los Estados de Colima, Durango y Veracruz Que Realizan las Siguietes Prácticas de Recursos Humanos

<b>Prácticas</b>	<b>Colima</b>	<b>Durango</b>	<b>Veracruz</b>
Reclutamiento y selección de personal	74.2	69.6	56.5
Evaluación del rendimiento / desempeño	70.8	70.1	56.0
Capacitación del personal	81.7	81.2	56.6
Promoción del personal	56.5	52.2	37.7
Sistemas de pago variable (incentivos)	73.6	68.1	54.7

*Esta tabla muestra el porcentaje de empresas de los tres estados que realizan prácticas de recursos humanos. La cual nos indica de manera general que en el estado de Colima es donde más se utilizan estas prácticas.*

Respecto a la utilización de cada una de las prácticas de recursos humanos (Tabla 1) en las empresas de las tres entidades, la “capacitación del personal” aparece como la más utilizada (81.7%, 81.2% y 56.6% respectivamente), seguida de “reclutamiento y selección de personal” sólo en Colima y Veracruz (74.2% y 56.5%), con una variación en el estado de Durango el cual tiene en segundo lugar la evaluación del rendimiento/desempeño con un 70.1%. Como menos utilizada, figura la promoción del personal en los tres estados (56.5%, 52.2% y 37.7%). También se puede observar que en relación a los estados de Colima y Durango, el estado con más baja aplicación de las prácticas de recursos humanos es Veracruz.

### Innovación en la Empresa

Los resultados en las tres entidades muestran que la importancia media que las empresas otorgan a estos tres tipos de innovación (Tabla 2), sitúan por delante a las innovaciones relacionadas con los productos y servicios que ofrece al mercado, a una distancia poco significativa de las relacionadas con la gestión de la empresa y, después, las vinculadas con procesos productivos. En cualquier caso, la importancia de los tres tipos de innovación para las empresas de las tres entidades en general es elevada.

Tabla 2: Importancia Media de Diferentes Tipos de Innovación Para la Empresa de las Tres Entidades (Escala 1-5)

Tipos de innovación	Colima	Durango	Veracruz
Innovaciones relacionadas con procesos productivos	2.93	3.34	3.07
Innovaciones relacionadas con los productos/servicios	3.89	3.65	3.75
Innovaciones relacionadas con la gestión de su empresa	3.29	3.38	3.47

*En esta tabla se muestra la importancia que le asignan las empresas a los diferentes tipos de innovación. En donde se observa que las más importantes son las innovaciones relacionadas con los productos/servicios.*

Si analizamos detalladamente cada uno de los tipos de innovación de manera comparativa, en las tres entidades de estudio, nos encontramos lo siguiente: En cuanto a las *Innovaciones relacionadas con procesos productivos*, podemos mencionar que las empresas del estado de Durango, son las que figuran con una cantidad mayor. Caso contrario es el mostrado por las empresas del estado de Colima. Respecto a las *Innovaciones relacionadas con los productos/servicios*, aparece que las empresas del estado de Colima, son las que esencialmente le dan una mayor importancia a este tipo en sus procesos de innovación. También, se puede visualizar en la tabla que las empresas del estado de Durango, son las que menos importancia le dan. Con relación a las *Innovaciones relacionadas con la gestión de su empresa*, las empresas del estado de Veracruz son las que primordialmente valoran el uso de ellas, con un valor de 3.47; no así las empresas del estado de Colima.

### Tecnologías de Información y Comunicación

Las Tecnologías de Información y Comunicación (TIC) están logrando incrementar el desarrollo eficaz y productivo en la pyme. Su utilización y aplicación aporta una serie de ventajas competitiva en todas las áreas funcionales de la empresa, permitiendo una mayor agilidad en la generación, acceso y distribución de la información, una mayor coordinación en la toma de decisiones, una mejora en la conexión y asistencia a clientes y proveedores.

Tabla 3: Porcentaje de Empresa de los Estados de Colima, Durango y Veracruz con Implantación de las Tecnologías de Información y Comunicación

<b>Tecnología</b>	<b>Colima</b>	<b>Durango</b>	<b>Veracruz</b>
Dispone de correo electrónico	83.5	82.6	50.0
Dispone de página Web	40.4	35.4	21.0
Relaciones con clientes y proveedores a través de Internet	77.3	26.8	42.0
Realizar mercadotecnia usando Internet	46.9	32.2	25.0

*Esta tabla indica los porcentajes de empresas en los tres estados que tienen implantadas las TICs. Donde el estado con mayor implantación de estas tecnologías es el estado de Colima.*

Al comparar el grado de implantación de las TICs en las tres entidades de la Tabla 3, se muestra que las Pymes del estado de Colima son las que más han invertido en tecnologías de información y comunicación, seguidas por las pymes del estado de Durango y en menor medida el estado de Veracruz.

Donde sobresale la implantación de la herramienta Correo Electrónico, seguido por la Relaciones con clientes y proveedores a través de Internet.

### Aspectos Contables y Financieros

La fuerte competencia que en la actualidad provoca la globalización de los mercados y el cambio tecnológico, está motivando a las Pyme a desarrollar e implantar en sus organizaciones, modelos económico-financieros y contables que se ajusten a las necesidades actuales. En la práctica pueden crear una ventaja competitiva, puesto que aportan información útil y eficaz para la toma de decisiones en la organización.

### Grado de Utilización de las Técnicas Económico Financieras

Este indicador hace referencia a la habitualidad en la utilización de las técnicas económico-financieras, como el análisis financiero, los presupuestos de ingresos y egresos y la situación económico-financiera.

Tabla 4: Grado de Utilización de las Técnicas Económico-Financieras (Escala 1-5)

<b>Técnica</b>	<b>Colima</b>	<b>Durango</b>	<b>Veracruz</b>
1. Implantación y control de un sistema de contabilidad de costos	3.70	3.37	2.97
2. Establecimiento de presupuestos de ingresos y gastos anuales	3.77	3.62	3.27
3. Análisis de la situación económico-financiera	4.02	3.80	3.45

*Esta tabla muestra el grado de utilización de las técnicas económica financieras, donde se observa que el estado que más utiliza estas técnicas son las empresas del estado de Colima.*

En la Tabla 4, denominada el grado de utilización de técnicas económico-financieras, en general se observa que el estado que muestra un mayor uso de las mismas es Colima, seguido por Durango y el estado que menos grado de utilización tiene de las técnicas es Veracruz. Respecto a la utilización de cada una de las técnicas, en las empresas de las tres entidades, el análisis de la situación económico-financiero aparece como el más utilizado (4.02, 3.80 y 3.45 respectivamente), seguido de los presupuestos de ingresos y gastos anuales y por último la implantación y control de un sistema de contabilidad de costos.

*Nivel de desempeño de los factores que inciden en la competitividad:* Al medir el nivel de desempeño de cada uno de los factores de competitividad en los tres estados participantes (Tabla 5), se observó a lo largo de esta de investigación, que solamente los factores que presentan un nivel de competitividad del 70% ó más, es el factor de recursos humanos (en Colima) y aspectos contables y financieros (en Colima y Durango). Y los que presentaron un porcentaje menor al

70% en los tres estados, fueron los factores de Innovación y tecnología de información y comunicación (TIC's).

Tabla 5: Nivel de Desempeño de los Factores Que Inciden en la Competitividad

Factor	Tiene nivel de competitividad al menos de un 70% ó más		
	Colima	Durango	Veracruz
1. Recursos humanos	Si	No	No
2. Innovación	No	No	No
3. TICs	No	No	No
4. Aspectos contables y financieros	Si	Si	No

*Esta tabla muestra el nivel de desempeño de los factores que inciden en la competitividad. Se observa que las empresas del estado de Colima son las que superan en más de un factor el nivel de competitividad del 70% o más, el cual fue definido como aceptable por los investigadores.*

### Análisis Comparativo de Factores Que Afectan la Competitividad Entre los Tres Estados Participantes.

Al realizar el análisis comparativo de los factores que afectan la competitividad entre empresas de los tres estados (Tabla 6), se observó que tienen el mismo nivel de competencia en innovación y TICs, y difieren en recursos humanos y en aspectos contables y financieros.

Tabla 6: Análisis Comparativo de Factores Que Afectan la Competitividad Entre los Tres Estados

Factor	¿Tienen el mismo nivel de competencia los tres estados?
1. Recursos humanos	No
2. Innovación	Si
3. TICs	Si
4. Aspectos contables y financieros	No

*Esta tabla muestra el nivel de competencia de los factores en los tres estados. En la que se observa que tienen el mismo nivel en innovación y los aspectos contables y financieros.*

## CONCLUSIONES

La dinámica economía actual, se caracteriza principalmente por la intensidad de la competencia en los mercados de productos y servicios, de los mercados de capital y por un espectacular desarrollo tecnológico. Todo esto lleva a crear un entorno incierto y considerablemente competitivo, para lo cual las Pymes tendrán que hacer cambios radicales enfocados principalmente a los factores de: recursos humanos, innovación, tecnológico y a los aspectos contables y financieros, pues es en éstos donde las empresas pueden alcanzar una gran ventaja competitiva, es por ello, la importancia de conocer y analizar los esquemas empresariales, para poder evolucionar, crecer, ser productivos y por lo tanto ser competitivos (Eliseo y Montejo, 2010). De este modo, los diversos factores de competitividad analizados en este estudio, permiten identificar fortalezas y debilidades que muestran los estados de Colima, Durango y Veracruz al compararlos unos con otros. Por lo que se puede concluir que, las Pymes del estado de Colima, son las que tienen implantado un mejor esquema empresarial de desarrollo y crecimiento, ya que

son las que aplican en mayor grado las principales prácticas de recursos humanos, las que cuentan con una mayor implantación de TICs y también son las que en mayor medida utilizan las técnicas económico financieras, caso contrario son las empresas del estado de Veracruz las que presentan los niveles más bajos de competitividad en los diferentes factores analizados.

En cuanto a la importancia que las empresas otorgan a los tipos de innovación las Pymes de Durango se posicionan en primer lugar con una mínima diferencia respecto a las Pymes de Colima y Veracruz. Como resultado de este trabajo de investigación han surgido nuevas líneas de investigación que a continuación se describen: Llevar a cabo el estudio utilizando los mismos factores en otras empresas de otros estados del país, así como tratar de ampliar el estudio de competitividad con políticas de gobierno, aplicando el modelo de competitividad sistémica, el cual se refiere al esfuerzo colectivo de las empresas, las asociaciones, el Estado y otros actores sociales, con cuatro niveles económicos y sociales. Micro, macro, meta y meso, que pueden conducir a un desarrollo más acelerado de las ventajas competitivas (Esser et al., 1996).

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## LA COOPERACIÓN INTEREMPRESARIAL EN MICROEMPRESAS DE AGUASCALIENTES

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### RESUMEN

*La cooperación en el entorno actual, se ha convertido en un imperativo para todas las empresas, sean pequeñas, medianas o grandes y su difusión ha promovido su realización (Gómez, 2005 en Araiza, Velarde y Zarate, 2008). El estudio realizado tuvo como objetivo el identificar y analizar la cooperación interempresarial de las microempresas del estado de Aguascalientes, bajo la siguiente pregunta de investigación: ¿Cuáles son los tipos de cooperación inter-empresarial que se presentan en las micro empresas del estado de Aguascalientes? Fue del tipo cuantitativo, descriptivo, transversal y no experimental. El tipo de muestra fue no probabilística y las unidades de análisis fueron las microempresas que recibieron apoyo de la secretaría de economía, ubicadas en el estado de Aguascalientes y que participaron en el Foro Pyme 2012. Se utilizó el instrumento diseñado por Araiza, Velarde y Zarate (2010) para medir los tipos de cooperación interempresarial y el diseñado por Silva (2010) y modificado por Parga en (2012) para medir el perfil del emprendedor. La confiabilidad del instrumento según el coeficiente de alpha de cronbach, fue de 0.956. Los resultados de la estadística descriptiva muestran que el 44.4% de las empresas realizan cooperación, el 40% lo hace de tipo formal y 60% informal. Respecto al perfil del emprendedor, predomina aquellos que ocupan puestos de gerente general, cuya edad sobrepasa los 46 años, con una escolaridad de licenciatura y siendo en su mayoría del género masculino y casados. En cuanto a la cooperación (para el mercado, innovar, producir y administrar) los promedios oscilan entre 7.8 y 8.4 respectivamente.*

**PALABRAS CLAVE: Cooperación interempresarial, microempresas.**

## THE INTERMANAGERIAL COOPERATION IN AGUASCALIENTES'S MICRO BUSINESS

### ABSTRACT

*The cooperation in the current environment, has become an imperative for all companies, whether small, medium or large and dissemination has promoted its implementation (Gómez, 2005 in Araiza and Velarde, 2008). The study was aimed to identify and analyze the inter-firm cooperation of micro enterprise in the state of Aguascalientes, under the following research question: What are the types of inter-company cooperation that are presented in the micro-businesses in Aguascalientes state. It was the quantitative, descriptive, transverse and non-experimental. The type of the sample was not probabilistic and the units of analysis were the micro that received support from the secretariat of economy, located in the state of*

*Aguascalientes and participated in the SME Forum 2012. The instrument used was designed by Araiza (2010) to measure the types of inter-firm cooperation and designed by Silva in (2010) and modified by Parga at (2012) to measure the profile of an entrepreneur. The reliability of the instrument according to the Cronbach's alpha coefficient, was 0.956. We used descriptive statistics, the results show that companies are located in Aguascalientes state capital of 44.4 % which made cooperation, 40 % do and 60 % formal type casual. Regarding the profile of the entrepreneur, predominantly those in positions. The results of the descriptive statistics show that 44.4 % of the companies realizes cooperation, 40 % does it of formal informal type and 60 %. With regard to the profile of the entrepreneur, it prevails those that occupy positions of general manager, whose age exceeds 46 years, with an education of master and being in the main of the kind masculine and married. As for the cooperation (for the market, to innovate, to produce and to administer) the averages they range between 7.8 y8.4 respectively.*

**JEL:** M10

**KEYWORDS:** Firm Cooperation, Small Businesses

## INTRODUCCIÓN

En la actualidad la mayoría de las empresas muestran una gran preocupación por permanecer en los diferentes mercados locales, regionales, nacionales, internacionales y mundiales, debido a los cambios globales que viven día tras día las empresa se obligan a elaborar y ofertar un bien o servicio de mejor calidad posible, para satisfacer las necesidades presentes y futuras de los clientes actuales y potenciales.

Las redes empresariales buscan la manera de que las empresas se integren, vinculen, cooperen y coordinen, para que entre las mismas logren eficiencia colectiva, resuelvan problemas comunes y conquisten mercados a los que no podrían acceder de forma individual. La cooperación interempresarial (CI) ha sido estudiada como un tipo de redes entre empresas, que se presenta como una posibilidad de desarrollo y crecimiento con innumerables ventajas para el sector de pequeñas empresas, ya que estas generan mecanismos de promoción de capacidades productivas, desarrollo local y la generación de empleo e ingresos dentro del exigente mundo globalizado en el que vivimos.

## REVISIÓN LITERARIA

### Cooperación Interempresarial

El presente estudio pretende contribuir a generar conocimiento sobre la cooperación interempresarial (CI) en el micro empresas del estado de Aguascalientes, específicamente mediante la creación de una tipología de la CI en base a las necesidades que impulsan a las empresas a colaborar. En los últimos años han reaparecido los acuerdos de CI, estos cobran gran protagonismo desde la década de los setenta y con mayor intensidad en la de los ochenta, pues son consideradas como una forma más eficiente de adquirir determinadas habilidades para penetrar en mercados desconocidos y/o en nuevos negocios, proporcionar mayor eficiencia, fluidez y flexibilidad a las nuevas estructuras y aumentar la capacidad innovadora (Hamel, Doz y Pahalad, 1989). En el entorno actual, según Gómez (2005 citado por Araiza et al 2008) la cooperación se ha convertido en un imperativo para todas las empresas, sean pequeñas, medianas o grandes y su difusión ha promovido su realización; las alianzas estratégicas son formas de cooperación que implican, entre otras cosas, la conjunción de conocimientos y habilidades para superar obstáculos que son más difíciles de lograr si se actúa de manera aislada.

La cooperación interempresarial es definida por Araiza et al (2008) como la interacción de las Pymes independientes con un propósito específico, que les permiten intercambiar recursos que mutuamente las benefician. La cooperación sugiere que una buena parte de la ventaja competitiva esta fuera del ambiente interno de las empresas. Esto significa cambios gerenciales, las exigencias son mayores, teniendo en cuenta que, nuevos paradigmas son creados. La cooperación crea nuevos papeles para el gobierno, para las instituciones de apoyo y por eso sus influencias son decisivas y necesarias, principalmente en nivel microeconómico (Fernández, 2005). Según Araiza, Velarde y Zarate (2010), la cooperación es un proceso difícil de lograr, ya que en las PyMES se percibe una baja inclinación a la asociación y cooperación. Desde hace años en países como México, la creación, consolidación y fortalecimiento de las PyMES es fundamental para dinamizar el crecimiento económico, generar empleos permanentes y conservar los que ya existentes (Simón y Rueda, 1998).

## METODOLOGÍA

El estudio realizado tuvo como objetivo el identificar y analizar la cooperación interempresarial de las microempresas del estado de Aguascalientes, bajo la siguiente pregunta de investigación: ¿Cuáles son los tipos de cooperación inter-empresarial que se presentan en las micro empresas del estado de Aguascalientes? El tipo de investigación fue de cohorte cuantitativo, descriptivo, transversal y no experimental. El tipo de muestra fue no probabilística y las unidades de análisis fueron las microempresas que recibieron apoyo de la secretaría de economía, ubicadas en el estado de Aguascalientes y participaron en el Foro Pyme 2012 y Foro Hispano 2012. Se utilizó el instrumento diseñado por Araiza et al (2010) para medir los tipos de cooperación interempresarial y el diseñado por Silva en (2010) y modificado por Parga en (2012) para medir el perfil del emprendedor. Dicho instrumento se aplicó a 18 empresas.

## RESULTADOS

Se analizaron los 18 casos recolectados, con los cuales se presentan el análisis de confiabilidad y la validez del instrumento. Después se complementa con resultados preliminares de datos descriptivos del perfil del emprendedor y de la empresa. El 40% han sido actividades cooperativas formales y el 60% informales.

### Confiabilidad

La confiabilidad del instrumento Alpha de Cronbach es considerada aceptable, conforme a Kline citado por Tejada (2004 en Araiza y Velarde, 2012), quien indica la siguiente interpretación de los índices de confiabilidad “coeficientes de confiabilidad de alrededor de 0.90 se consideran excelentes, valores alrededor de 0.80 muy buenos, valores alrededor de 0.70, como adecuados, aquellos menores de 0.50 indican que al menos la mitad de la varianza observada puede ser debida a error al azar, y medidas tan poco confiables deberían de ser evitadas.

Tabla 1: Resultados de Alfa de Cronbach

Variable	Reactivos Utilizados	Reactivos analizados	Primer análisis de Alpha de Cronbach
Cooperación para producir	14	103,104,105,106,107,108,109,110,111,112,113,114, 115,116	.952

Cooperación para innovar	12	117,118,119,120,121,122,123, 124,125, 126,127	.944
Cooperación para el mercado	14	129,130,131,132,133,134,135,136,137,138,139, 140,141,142	.962
Cooperación para administrar	16	143,144,145,146,147,148,149,150,151,152,153, 154,155,156,157,158	.952

La tabla 1 muestra los resultados del coeficiente de Alfa de Conbach, cuyo valor global fue de: 0.956, por lo que se considera elevada la confiabilidad, según lo expuesto anteriormente por Kline citado por Tejada (2004) en Araiza, Z. y Velarde, E. (2012). Cabe señalar que no se eliminaron reactivos ya que el análisis es aceptado tal y como se muestra en la tabla anterior.

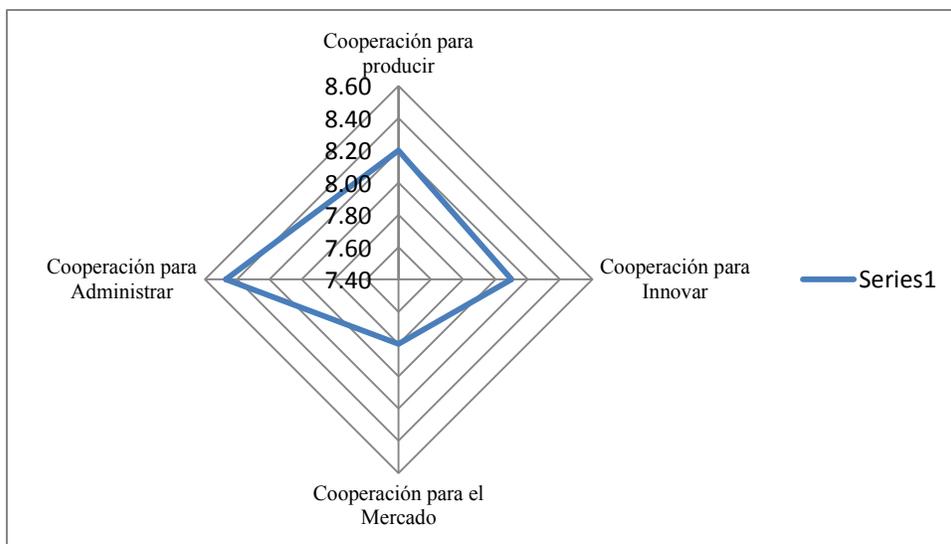
### Descriptivos de los Datos Demográficos

Los resultados del perfil del emprendedor muestran una tendencia clara del puesto del respondiente tiende a desempeñarse en el puesto de gerente general, con una escolaridad de licenciatura (50%), en su mayoría el que predomina es el sexo masculino y casados (72% en ambos). La edad que se presenta con mayor frecuencia es la de mayor de 46 años.

### Análisis la Cooperación Interempresarial

La cooperación interempresarial ha tomado gran relevancia en la época actual, como podemos observar la mayor ponderación la tiene la cooperación para producir con un promedio de 8.2, mientras que en la cooperación para innovar se obtuvo un promedio de 8.1, por otro lado la cooperación para administrar alcanzó un promedio de 8.4 y finalmente la cooperación para el mercado un promedio de 7.8.

Grafico 1: Tipos de Cooperación



Fuente: Elaboración propia

### **CONCLUSIONES**

El presente trabajo de investigación nos ha permitido un acercamiento a las determinantes que influyen en la cooperación inter-empresarial entre microempresas, sin embargo se debe considerar la posibilidad de aplicar a otras áreas de actividad económica como lo es el de sector turístico, por poner algún ejemplo, esto con el fin de conocer la existencia de redes de cooperación empresariales que se presentan en esta rama de la economía. Desde el punto de vista

práctico, esta investigación ha permitido realizar una compilación de literatura que pretende abordar la problemática de la escasa cooperación entre empresas; así mismo se dio evidencia que es necesario que las empresas trabajen de manera conjunta, y se puedan palpar los resultados en todas las áreas de la organización que considera el estudio de la cooperación interempresarial. Así mismo, el estudio tiene aplicaciones no solo para las empresas que realizan algún tipo de cooperación, sino también generalmente para las pequeñas y medianas empresas. El marco en el que se presentan los diferentes tipos de cooperación, ofrecen posibilidades de un análisis riguroso a los profesionales y empresarios de todo tipo de organizaciones, en un ámbito en el que se hace cada vez más necesaria la vinculación entre estas empresas.

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# COMPETITIVIDAD DE LAS PYMES EXPORTADORAS DEL ESTADO DE COLIMA

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## RESUMEN

*En este artículo investigamos acerca de la competitividad de las PYMES exportadoras del Estado de Colima, enfocado en sus sistemas de calidad, competitividad internacional, innovación y estrategias de mercadotecnia. La competitividad refleja la medida en que una nación, en un sistema de libre comercio y condiciones equitativas de mercado, puede producir bienes y servicios que superen la prueba de los mercados internacionales, al tiempo que mantiene e incrementa el ingreso real de su población a largo plazo. Colima es un estado en constante crecimiento económico, una tierra de desarrollo y ventajas competitivas por su privilegiada ubicación geográfica, el dinamismo de su población, su sólida y creciente infraestructura, su enorme riqueza natural, así como las crecientes actividades comerciales, portuarias y extractivas que contribuyen a fortalecer una economía diversificada. Debido a esto se eligió por hacer un estudio y determinar la Competitividad de las PyMES del estado de Colima por su relevancia y dinamismo para la economía del estado.*

**PALABRAS CLAVE:** Competitividad, pymes, exportadoras, estrategias.

## THE COMPETITIVENESS OF SMALL AND MEDIUM ENTERPRISES IN COLIMA

### ABSTRACT

*This paper investigates the performance of SME exporters in the State of Colima, focused on quality systems, international competitiveness, innovation and marketing strategies. The competitiveness reflects the extent to which a nation, in a system of free trade and fair market conditions, can produce goods and services that meet the test of international markets while maintaining and increasing the real income of its population long term. Colima is a state in constant economic growth, a land development and competitive advantages for its privileged location, the dynamism of its population, its strong and growing infrastructure, its enormous natural wealth and growing business, port and extractive help strengthen a diversified economy. Because of this they chose to do a study and determine the competitiveness of business SMEs Colima State for their relevance and dynamism to the state's economy.*

**JEL:** F230, M01, M100, M110, M150, M160,

**KEYWORD0:** Competitiveness, SME, Export, Strategies

### INTRODUCCIÓN

De acuerdo con datos del Instituto Nacional de Estadística y Geografía, en México existen aproximadamente 4 millones 15 mil unidades empresariales, de las cuales 99.8% son MIPYMES que generan 52% del Producto Interno Bruto (PIB) y 73% del empleo en el país. Ruiz (2002)

comenta que; “hoy en día, los gobiernos de países en desarrollo reconocen la importancia de las PyMES por su contribución al crecimiento económico, a la generación de empleo, así como al desarrollo regional y local. Sin embargo, las PyMES tienen algunas dificultades en virtud de su tamaño: acceso restringido a las fuentes de financiamiento; bajos niveles de capacitación de sus recursos humanos; limitados niveles de innovación y desarrollo tecnológico; baja penetración en mercados internacionales; bajos niveles de productividad; baja capacidad de asociación y administrativa”.

No obstante sus limitaciones, el papel de las PYMES en la economía de los países ha sido un factor que ha generado incrementos en la producción, valor agregado, aportaciones fiscales, fortalecimiento del mercado interno, incremento de exportaciones, etc., por lo que han sido motivo de diseño de políticas encaminadas a promoverlas y apoyarlas para elevar su competitividad y enfrentar la competencia de un mundo globalizado, sin olvidar el mundo de los emprendedores, donde las empresas líderes son aquellas que adoptan modelos de subcontratación y alianzas estratégicas con PYMES, que gracias a su adaptación y flexibilidad crecen en mundo en constante cambio, demostrando además que cuando se organizan pueden superar las aparentes limitaciones de su tamaño. Son varias las debilidades que presentan las PYMES en México, entre ellas son: la falta de actualización y capacitación, desconocimiento de mercados, falta de fuentes de financiamiento y desconocimiento de procesos de certificación de la calidad, etc. Las pequeñas y medianas empresas del sector exportador en el estado de Colima, no son la excepción. El estudio de campo realizado en esta investigación revisa los factores que debilitan la competitividad de las pymes en el estado de Colima y demuestra campos de acción para mejorar su rentabilidad, competitividad y permanencia en el estado.

## REVISIÓN LITERARIA

Según Moreno (2009) “la clasificación de las Pymes varía dependiendo del país. En general los países tienden a seguir un patrón, en el cual se consideran los siguientes criterios: número de trabajadores, volumen de ventas anuales y valor de sus activos”. En México, la Secretaría de Economía (SE) y la Secretaría de Hacienda y Crédito Público (SHCP) modificaron la clasificación para las, Pequeñas y Medianas Empresas (PyMES), con el fin de ampliar el acceso a los programas diseñados para estas unidades. "La estratificación busca evitar la discriminación en el sector, para que empresas con intensiva mano de obra y aquellas que tienen ventas significativamente altas puedan participar en los programas de apoyo para las PyMES", señaló la SE en un comunicado. Las Pymes en sus tres sectores, comercio, servicios e industria, son en su mayoría operadas por una sola persona que funge como administrador, técnico, comercializador, financiero y fiscalista, por consiguiente, enfrentan una serie de problemas; laborales, fiscales, financieros y de regulación, que frenan su desarrollo dejándolas indefensas ante la competencia nacional, al hacerle frente a las grandes firmas nacionales e internacionales. Con base en lo expuesto por Dávila (2010) México tiene una base aproximada de 4 millones de empresas pequeñas y medianas de los sectores industriales, comercio y servicios, se encontró que:

- El 65% de las pymes en México son de carácter familiar,
- Más de 80% no cuenta con algún tipo de certificación;
- Cerca de 50% no utiliza técnicas en calidad o productividad;
- Sólo 24 % maneja alguna licencia o patente
- El 83% no realiza actividad alguna para consolidar su presencia en el exterior.
- Dentro del sector manufacturero se destaca que el 35% de los negocios no realizó ninguna inversión.

Cabe hacer mención que en la actualidad, en el estado de Colima, el tema de las MIPYMES ha ido tomando cada vez mayor importancia, por sus aportaciones a la producción, distribución de bienes, el gran potencial de generación de empleos y porque representan un excelente medio para impulsar el desarrollo económico y una mejor distribución de la riqueza en el estado. La clasificación publicada en el Diario Oficial de la Federación del 30 de junio de 2009 establece que el tamaño de la empresa se determinará a partir del obtenido del número de trabajadores multiplicado por 10%; más el monto de las ventas anuales por 90%. Esta cifra debe ser igual o menor al Tope Máximo Combinado de cada categoría, que va desde 4.6 en el caso de las micro, hasta 250 para las medianas.

Tabla 1: 1 Estratificación

tamaño	sector	rango de número de trabajadores	rango de monto de ventas anuales (mdp)	tope máximo combinado*
micro pequeña	todas	hasta 10	hasta \$4	4.6
	comercio	desde 11 hasta 30	desde \$4.01 hasta \$100	93
	industria y servicios	desde 11 hasta 50	desde \$4.01 hasta \$100	95
mediana	comercio	desde 31 hasta 100	desde \$100.01 hasta \$250	235
	servicios	desde 51 hasta 100	desde \$100.01 hasta \$250	235
	industria	desde 51 hasta 250	desde \$100.01 hasta \$250	250

\*Tope Máximo Combinado = (Trabajadores) X 10% + (Ventas Anuales) X 90% Fuente: Diario Oficial de la Federación del 30 de junio de 2009.

Las PYMES son entidades que incluyen a las pequeñas y medianas empresas. Los micros se clasifican por tener hasta 10 trabajadores, 4 mdp. Millones de pesos en ventas; las pequeñas llegan hasta 50 trabajadores y 100 mdp en ventas, finalmente las medianas empresas que llegan a tener hasta 250 trabajadores y 250 mdp en ventas. Su principal función es a dedicarse a las siguientes actividades: producción, transformación, el comercio, la agricultura, y los servicios. Por la importancia de las PYMES, es importante instrumentar acciones para mejorar el entorno económico y apoyar directamente a las empresas, con el propósito de crear las condiciones que contribuyan a su establecimiento, crecimiento y consolidación. El estado de Colima además de ser uno de los estados con una de las posiciones geográficas estratégicas para el intercambio de bienes y servicios ya que, cuenta con uno de los puertos más importantes a nivel nacional, se encuentra ubicado en el municipio de Manzanillo que es un puente estratégico para el desarrollo de relaciones comerciales con diferentes países, impactando en el sector del comercio exterior, lo que conlleva a convivir en dentro de un puerto concebido comercialmente.

La competitividad es la capacidad que tiene una empresa o país de obtener rentabilidad en el mercado en relación a sus competidores. La competitividad depende de la relación entre el valor y la cantidad del producto ofrecido y los insumos necesarios para obtenerlo (productividad), y la productividad de los otros oferentes del mercado. (Gómez 2005) Para poder hacer negocios en el exterior, las pequeñas y medianas empresas denominadas pymes en la presente investigación, se han visto en la necesidad de implementar acciones y revisar procesos para facilitar el proceso y la mejora de la exportación de sus productos.. En el estado de Colima, el crecimiento de pequeñas y medianas empresas que se dedican a la exportación ha ido ha sido favorable, no obstante también se enfrentan a la situación generalizada de las pymes en México, en la cual se desconocen los mercados, fuentes de financiamiento, estrategias mercadotécnicas, etc. Por lo anterior, surge la necesidad de estructurar un panorama de la competitividad de las empresas y las mejoras que podrían realizar para que ser más competitivas en el sector exportador.

## METODOLOGÍA

El objetivo principal de esta investigación es revisar y analizar la competitividad de las PyMes para poder ofrecer alternativas que les permita tener una mejoría en su posicionamiento a nivel nacional e internacional. Además se pueden enlistar algunos objetivos específicos que se cumplirán al término de la investigación: indagar sobre las prácticas actuales para competir a nivel nacional e internacional como pymes exportadoras del Estado de Colima y determinar si han funcionado. Examinar sus estrategias y mercados de exportación. El cumplimiento de los objetivos planteados, así como la resolución a las preguntas elaboradas para la investigación, conducen una hipótesis general: las micro, pequeñas y medianas empresas exportadoras del estado de Colima no aplican todos los elementos y recursos que les permitirían mejor su posicionamiento y competitividad a nivel nacional e internacional.

En el transcurso de la investigación se determinará la cantidad de Pymes exportadoras del estado de Colima, y al tenerlas plenamente identificadas se realizará una investigación campo. La investigación tendrá un enfoque cuantitativo ya que para comprobar la hipótesis, el estudio se basará en los instrumentos de medición aplicados, dichos instrumentos son cuestionarios que se podrán tabular de manera estadística, a través de herramientas informáticas como el Excel. La información de las empresas exportadoras del estado de Colima no se encuentra concentrada en una sola base de datos, si no que se obtuvo de una fusión de información obtenida en PROMÉXICO, Secretaría de Economía (SE) y Secretaría de Fomento Económico del estado de Colima. Cabe hacer mención que la información analizada fue obtenida de una encuesta que se aplicó al total de las empresas exportadoras en el estado de Colima (60), sin importar su tamaño, es decir, se realizó un censo. Sin embargo, solo se consideraron los datos obtenidos de las 45 Pymes que resultaron de dicha investigación de campo, por ser el objeto de estudio de la presente tesis. La investigación de campo se realizó durante el 2012.

## RESULTADOS

Con base en información proporcionada en el censo de unidades económicas de la Secretaría de Fomento Económico del estado de Colima, PROMEXICO y SE, se aplicaron un total de 60 cuestionarios, de los cuales solo 45 fueron contestados completamente porque el objeto de estudio eran solamente las Pymes y no todas las empresas exportadoras, cabe hacer mención que se hace la consideración de empresa pyme, por la cantidad de empleados que laboran en ellas y por su volumen de ingresos, Al realizar las encuestas, arrojó como resultado que el 76 % de las pymes exportan a América del Norte (Estados Unidos y Canadá), esto debido al TLCAN y a la cercanía que tenemos con el mercado más grande del mundo, mientras el que el resto 22%, se divide entre Sudamérica y Europa y un 2% a otros destinos del mundo.

El 100% de las empresas colimenses que participan en el proceso de exportación y que fueron encuestadas, están de acuerdo que elevan su competitividad debido a que tienen contacto con clientes más exigentes, que exigen excelente servicio y calidad óptima. Solo el 32% de las pymes en Colima hacen investigación de mercados para incursionar en el sector exportador, el 68% dice no realizar estudio de mercado, pues les compran en planta la producción. Cabe hacer mención que el principal motivo para realizar las exportaciones, de las pymes de Colima es el precio de venta de sus productos, e indican que es alrededor del 30% de incremento, comparado con el precio de venta nacional. Un elemento que será necesario mejorar para elevar la competitividad es el tiempo de entrega ya que el 64% de las empresas encuestadas afirma cumplir con sus pedidos de manera periódica, sin embargo el 36% restante no lo hace por falta de capital para invertir en la empresa.

También será necesario pensar en capacitar a las empresas, para que puedan realizar un plan de mercadeo, pues solo el 44% de las empresas tiene un plan de marketing para realizar sus exportaciones debido a que la mayoría usa intermediarios los cuales se encargan de la comercialización. El otro 56% que no cuentan con un plan de marketing debido a que dicen no necesitarlo o no contar con presupuesto destinado para ello. En cuanto a la administración financiera, el 40% de las pymes acepta haber tomado algún apoyo gubernamental para realizar sus exportaciones, sin embargo, el 60% afirma no tener acceso a los mismos, por el excesivo papeleo y burocracia para someter los proyectos. Además el 28% de las pymes dice que sí ha sido fácil obtener financiamiento pero el 72% restante dicen que es casi imposible, pues no saben hacer proyectos de inversión y son requeridos por las autoridades gubernamentales y empresariales. Se plasma y confirma la hipótesis principal, ya que se comprueba que las Pymes exportadoras en Colima, no aplican todos los elementos y recursos que les permitirían mejor su posicionamiento y competitividad a nivel nacional e internacional.

## CONCLUSIONES

Debido a los resultados que confirman la hipótesis de la investigación, se propone que se deberían tomar los siguientes lineamientos para mejorar la competitividad de las pymes exportadoras del estado de Colima: Debe realizarse una revisión de la estructura interna, ya que el 85% de las empresas son familiares y carecen de un estructura organizacional que permitirá alcanzar los objetivos trazados, así como canalizar y guiar las actividades de su personal. Además, resulta fundamental que las diferentes áreas de la empresa estén involucradas y comunicadas entre sí (producción, compras, ventas, mercadeo, entre otros. Resulta indispensable incorporar en el estilo gerencial y una cultura de organización, con enfoque a mercados internacionales. De lo contrario, cualquier actividad realizada para fomentar el crecimiento en ésta área, será esfuerzo desperdiciado.

Las empresas deberán realizar y en su caso definir la estructura u organigrama, para definir funciones y acciones con base en los requerimientos de conocimientos técnicos y de capacitación que se necesitarán para ajustar el recurso humano disponible, a la orientación de la empresa de exportación. La adecuada gestión financiera es el último punto a recomendar, sin embargo, resulta el principal, pues en el estudio demuestran la carencia de recursos económicos para cumplir con compromisos, falta de capital para expandir los mercados, falta de presupuesto para realizar estudios de mercadeo o marketing. Definitivamente, las pymes exportadoras del estado de Colima, tampoco hablan de innovación, pues la mayoría de ellas apenas incursiona en el ámbito de exportación con los productos que vende también en el mercado nacional.

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# **PROPUESTA PARA APLICACIÓN DE LA METODOLOGÍA DE SEIS SIGMAS EN LOS PROCESOS DE LA UNIVERSIDAD ESTATAL DE SONORA**

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## **RESUMEN**

*Las instituciones de educación superior pública se encuentran afectadas por los factores sociales y económicos que vive en la actualidad México, la exigencia de la pertinencia y factibilidad de la oferta educativa cada vez se hace evidente, así como la cobertura en áreas especializadas para los sectores productivos y sociales. Por otro lado, el presupuesto asignado por entes gubernamentales se encuentra reducido tanto en los subsidios ordinarios como los extraordinarios. Los retos de las universidades deberá enfocarse en establecer o consolidar sus estructuras administrativas, operativas y principalmente directivas hacia la administración de la calidad procurando fundamentar esquemas orientados a la productividad y eficiencia que demuestren un ahorro, aprovechamiento de recursos y reducción de desperdicios con el propósito de re-direccionar recursos hacia las prioridades que determinen las instituciones de educación superior en sus planes de desarrollo. La Universidad Estatal de Sonora preocupada ante esta situación, retoma las acciones realizadas en el Sistema de Gestión de la Calidad para fortalecer el requisito de Medición, Análisis y Mejora con proyectos de Seis Sigmas que pueda mejorar el ejercicio y aprovechamiento presupuestal en las actividades académicas y administrativas hacia los estudiantes. La metodología seis sigmas tiene como objetivo determinar las causas raíces de los problemas por medio de acciones factibles y viables, considerada una técnica bondadosa para las empresas que requieren potencializar la utilización de los recursos.*

**PALABRAS CLAVES:** Seis Sigma, Mejoras, Desperdicios, Aprovechamiento de recursos

## **PROPOSAL FOR APPLICATION OF SIX SIGMA METHODOLOGY IN SONORA STATE UNIVERSITY PROCESS**

### **ABSTRACT**

The public universities are affected by social and economic factor that Mexico live today, the programs academics requirement about relevance and feasibility is becoming evident, also public and private necessity of specializes knowledge area. On other hand, the proportionate budget for federal and state government is decrease as ordinary as extraordinary subsidies. The universities challenge must to focus in establish o consolidate administrative, operative and fundamentals strategic organizational structure to Quality Management for base strategic about efficiency and productivity as decrease waste, avail and save resources with propose of provide resource to university priorities describe in develop plan. The Sonora State University interested for this situation, take action in the Quality Management System for consolidate the measurement, analysis and improve requirement with Six Sigma projects that improve budget avail in academic and administrative focus students. The Six Sigma Methodology has objectives for determine

roots causes of problems and action feasible and viable, considered softhearted technic for companies that require improve to use resources.

**JEL:** L15, M10

**KEYWORDS:** Six Sigma, Improve, Waste, Avail resources

## INTRODUCCIÓN

En un mundo tan dinámico y competitivo, la relación oferta y demanda, la exigencia de los clientes hacia la excelencia, y el aprovechamiento de los recursos cada vez se vuelve un tema cotidiano en el sector privado, sin embargo esta preocupación se ha trasladado al Sector Público debido a que los proyectos y programas de los gobiernos federales, estatales y municipales se ponen en riesgo cada vez por falta de recursos en la operación. Para estas entidades gubernamentales, la eficacia es una opción de subsistencia, pero no suficiente, se requiere llegar a la eficiencia en los términos de lograr lo mismos o mejores resultados con menos recursos. Esta situación no es un caso atípico de las Universidades de México de carácter público, actualmente los recursos son limitados, algunos fondos de subsidios se han disminuido o desaparecidos, a nivel general el país redujo en su gasto corriente la inversión a la educación y los retos de competitividad en la educación a nivel nacional e internacional son desafiantes según lo exige la Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO) y la Organización para la Cooperación y Desarrollo Económicos (OCDE).

Las políticas de austeridad en el poder ejecutivo del país ha permeado las instituciones de educación superior, obligando a replantear proyectos, suspender actividades, buscar alternativas de subsidios, entro otras actividades para mantener los niveles de calidad, equidad y cobertura. Ante la interacción de estos escenarios poco favorables de desarrollo, las instituciones de educación deben encaminar sus esfuerzos a determinar acciones diferentes, comenzando con un cambio de actitud, compromiso, dinamismo e innovación que permite establecer y operar estrategias que conlleven a la eficiencia de los recursos, la participación del personal directivo, administrativo, académico y operativos será la principal fortaleza para lograr los resultados deseados.

La implementación de la filosofía en Seis Sigmas para la generación de proyectos de mejora permitirá orientar los esfuerzos de las Universidades hacia un ambiente de eficiencia y productividad en la utilización de los recursos para lograr o superar los resultados esperados. Las ventajas de implementar seis sigma es alcanzar y analizar la información disponible, plasmar un proyecto y tomar decisiones en mediciones y análisis de datos para determinar la causa raíz de los problemas, Esta metodología nos aporta una filosofía para optimizar los insumos y resultados de los procesos bajo diferentes ópticas que considera como principal fundamento el ahorro de costos o incrementos de ingresos. Para fines de este trabajo, esta metodología se observará aplicada en la Universidad Estatal de Sonora, institución que actualmente tiene un Sistema de Gestión de la Calidad, acreditaciones de programas educativos y una gestión estratégica que permite con facilidad lograr la implementación de estas buenas prácticas administrativas.

## REVISIÓN LITERARIA

Determinación y Administración de los Recursos en las Universidades Públicas en México

Las instituciones de educación superior públicas dependiendo su tipo y subsistema operan con subsidios ordinarios o extraordinarios tanto federales como estatales, en ambos casos tienen diferentes políticas de austeridad: Ley del Presupuesto Egresos de la Federación, Capítulo II, de las disposiciones de austeridad, ajuste del gasto corriente, mejora y modernización de la gestión pública. Artículo 16. Las dependencias y entidades se sujetarán a las disposiciones de austeridad, ajuste del gasto corriente, mejora y modernización de la gestión pública que se establezcan en los términos del Título Tercero, Capítulo IV, de la Ley Federal de Presupuesto y Responsabilidad Hacendaria, las cuales son de manera general: a) incremento de plazas, b) aumentos de sueldos, c) adquisición y los arrendamientos de inmuebles, d) la remodelación de oficinas, no procederá la adquisición de vehículos, e) la contratación consolidada de materiales y suministros; servicios, incluyendo telefonía, mantenimiento de bienes muebles e inmuebles, fotocopiado, vigilancia, boletos de avión, vales de despensa, medicamentos, seguros sobre personas y bienes entre otros, siempre y cuando se asegure la obtención de ahorros y de las mejores condiciones para el Estado en cuanto a calidad, precio y oportunidad disponibles.

Las políticas de presupuestación y programación del gobierno del Estado de Sonora, Ante las previsible limitaciones fiscales que condicionan la integración del Proyecto del Presupuesto de Egresos para el ejercicio fiscal, la Secretaría, da a conocer a las dependencias y entidades de la Administración Pública Estatal, las siguientes disposiciones que habrán de contribuir en la conformación de un presupuesto que haga énfasis en la austeridad y disciplina fiscal, lo cual supone un esfuerzo que se realiza desde las instituciones de gobierno, para mantener el equilibrio de las variables económicas y financieras del Estado, a fin de que sobre esa base continuemos el crecimiento económico sostenido. Las normas presupuestales que rigen la aplicación de los recursos públicos, se han diseñado para el ejercicio del presupuesto en condiciones que se consideran como “normales”, dentro de un marco de austeridad, por lo cual hemos de suponer que su estricta aplicación no incide mayormente en la eficiencia y eficacia del gasto público. Los lineamientos estatales y federales de racionalidad y austeridad tienen como base establecer las disposiciones y medidas administrativas dictadas por los órganos de gobierno, con el objeto de racionalizar el gasto destinado a las actividades administrativas, los lineamientos de racionalidad y austeridad presupuestaria deberán garantizar que los recursos se privilegien para lograr las actividades prioritarias de las entidades públicas.

Según fuente de información del Periódico la Jornada, México, El Secretario General Ejecutivo de la Asociación Nacional de Universidades e Instituciones de Educación Superior (ANUIES), Enrique Fernández Fassnacht, mencionó “el monto destinado en el proyecto de Presupuesto de Egresos de la Federación (PEF) 2014 está bien, a secas, pues implica un crecimiento real de 3.3 por ciento respecto de 2013. No obstante, la verdadera preocupación reside en los fondos extraordinarios, donde hay una importante diferencia a la baja, pues son mil 800 millones de pesos menos en relación con el año anterior”. Esto nos lleva a reflexionar que los recursos para las universidades cada vez son escasos y se requiere determinar nuevas formas para el aprovechamiento de los recursos disponibles.

### Seis Sigma una Estrategia Idónea Para Aprovechar los Recursos

Seis Sigma es una herramienta que proviene del uso complejo de la estadística aplicado a problemas o proyectos de eficiencia y productividad, para muchas empresas transnacionales se convierte en la mejor herramienta competitiva en el mercado, principalmente cuando las empresas se encuentran en la necesidad aprovechar los recursos disponibles para lograr los resultados esperados. Seis Sigma es una métrica que representa una forma de medir el comportamiento de un proceso con relación a su nivel de productos o servicios fuera de

especificación, como meta para tener un nivel de clases mundial al lograr no producir servicios o productos defectuosos (hasta 3.4 parte por millón), y como una filosofía de mejoramiento continuo de procesos y productos apoyado de herramientas estadísticas.

Seis Sigma es “un sistema de calidad destinado a mejorar la satisfacción del cliente y, reducir tanto los niveles de defecto como el tiempo total del ciclo. De tal forma se hace factible cumplir con los objetivos organizacionales, logrando una ventaja competitiva sostenible y mejores niveles de rendimientos sobre la inversión” (Lefcovich, 2009). La importancia de seis Sigma es la implementación en todos los niveles de la organización con apoyo del liderazgo, organización y trabajo en equipo. Por otra parte, seis sigma es “una herramienta que articula diversos enfoques como son la utilización de un estándar que permite medir el proceso analizado en relación con 3.4 partes por millón, y una serie de herramientas propias de la gestión de la calidad, el control estadístico y el diseño de experimentos; que combinadas con la medición del grado de desempeño facilita centrarse en mejoras focalizadas y puntuales sobre los procesos o en toda la organización; lo que se evidencia en mejoras económicas en el contexto donde se implemente” (Fontalvo, 2010). La técnica de seis sigmas tiene un enfoque especialista en el sentido de aplicar herramientas estadísticas, mediciones, recolección y análisis de la información sobre los productos, procesos y el cliente. Los esfuerzos de seis sigmas se dirigen a tres áreas principales: Mejorar la satisfacción del cliente; Reducir el tiempo de ciclo; y Reducir los defectos. Las mejoras en estas áreas representan grandes ahorros de costos para las empresas, incluyendo las oportunidades para conservar a los clientes, absorber nuevos mercados y consolidar una reputación de empresa por productos y servicios de alta calidad. La aplicación de seis sigmas es tan compleja como el área de oportunidad detectada, lo importante es desarrollar una cultura de análisis y determinación de acciones concretas de contención y solución de problemas. Sin embargo es necesario considerar algunos elementos antes de implementar seis sigmas (Fontalvo, 2010):

*Definir previamente el proceso y los resultados esperados al aplicar este tipo de programas, de igual forma se requieren: Verificar con claridad el impacto que generarían los resultados en relación con los objetivos esperados.*

*Determinar si la aplicación del programa Seis Sigma se realizará sobre toda la organización, en un proceso o en diversos procesos.*

*Evaluar previamente los beneficios generados por la implementación de un programa o proyecto de Seis Sigma.*

Las características para desarrollar un proyecto de seis sigmas debe estar relacionado a las prioridades de la empresa y al cliente, a la razón de empresa, a su alcance y límites, la empatía entre los miembros de una organización hacia el logro de los objetivos, métricas adecuadas, apoyo de las autoridades y la validación del impacto en la situación de la empresa. Algunos ejemplos que pueden aplicarse seis sigmas: Horas extras; Reclamos; Reducción de tiempos de ciclos; Reducción de tiempo de contratación; Procesos o equipos con tiempos “muertos”; Reducción de ausentismo; Reducción costos de consumo energético; Reducción de tiempo para introducir órdenes de compra; entre otros.

Podemos observar que la metodología de seis sigmas se encuentra relacionado al ciclo administrativo, ciclo de calidad por Deming o ciclo de control por Shewart, la metodología seis sigma “permite centrarse sobre una o varias variables de un proceso para que a través de la consolidación de un grupo de trabajo, se puedan generar mejoras por proyectos en la organización propendiendo por el cero defecto; lo anterior se logra con el enfoque de Definir Medir, Analizar, Mejorar y Controlar, desarrollando lo anterior con una fuerte fundamentación estadística y

paralelamente se trabaja con un enfoque gerencial que permita generar resultados y beneficios económicos con un enfoque estratégico y focalizado, apoyándose en herramientas y enfoques de calidad existentes.

En cierta medida es una herramienta semejante al Enfoque Sistémico Convergente de la calidad con la limitación de que las cinco macro actividades sobre las que se centran (Definir, Medir, Analizar, Mejorar y Controlar), limitan su aplicación a enfoques de mejoramiento que no tengan que ver con la medición, de igual forma su enfoque es bastante general” (Fontalvo, 2010). La metodología es compatible con muchas filosofías de calidad, como Kaizen, Administración Total de la Calidad, ISO 9001:2008, Lean Manufacturing, entre otros, su grado de especialización y su determinación puntual de acciones la hace una metodología precisa y con resultados muy tangibles con el involucramiento de todo el personal, “esta forma de pensar y actuar no es privativa de gerentes e ingenieros, sino que incluye a los supervisores y empleados jerarquizados o no. Además de poner el sentido común en práctica, se trata de la necesidad de desarrollar una organización de aprendizaje que permita lograr cada día metas más elevadas” (Garza, 2006). Seis sigmas es una metodología general que puede considerar diferentes técnicas, herramientas, métodos, entre otros mecanismos para las etapas de definición, medición, análisis, mejora y control. Entre ellas podemos mencionar (Lefcovich, 2009):

*La tormenta de ideas, diagrama de afinidad, estructura en árbol, mapa de proceso a primer nivel, diagrama de flujo de proceso y diagramas de causa-efecto (espina de pez).*

*En cuanto a las herramientas para la obtención de datos tenemos: el muestreo estadístico, VDC (métodos para obtener la voz del cliente), hojas y gráficos de control, análisis del sistema de medida. Si de herramientas para el análisis del proceso y de los datos se trata, podemos mencionar entre las más utilizadas: el análisis del flujo del proceso, análisis del valor añadido, diagrama y gráficos, diagrama de Pareto, histogramas, gráfico de tendencias y diagrama de dispersión. Luego tenemos las herramientas para el análisis estadístico, y las herramientas para la implementación y gestión de los procesos. Entre éstas últimas herramientas se encuentran: los Métodos de Gestión de Proyectos, el Análisis de Problemas Potenciales, el Análisis del Modo de Fallo y sus Efectos (AMFE), Análisis de los grupos afectados, Diagramas de Campo de Fuerzas, Documentación del proceso, Cuadro de Mando Integral e indicadores del proceso.*

#### Condiciones de la Universidad Estatal de Sonora Ante la Implementación de Seis Sigmas.

En el 2005, Rectoría recibe su certificado de conformidad con la Norma ISO 9001:2000 avalados por la casa certificadora Det Norske Veritas de México. En el 2008 recibe el refrendo de su certificado con tres sitios, Rectoría, DES Hermosillo y DES Magdalena. Durante el 2009 se trabaja en la transición a la nueva versión de la norma la ISO 9001:2008. En el 2010 se certifican las DES San Luis Río Colorado, Navojoa y Benito Juárez. Las características principales de mantener certificado nuestro Sistema de Gestión de Calidad (SGC) radica en incorporar los criterios establecidos por las organizaciones de acreditación avaladas por el COPAES, con el objetivo de generar un impacto en las actividades administrativas y académicas relevantes de la institución en cuanto al aseguramiento de servicios de calidad de los PE. Actualmente la certificación representa una de las estrategias más importantes para lograr y mantener la competitividad académica. La UES en el 2012 mantiene y refrenda el distintivo de ISO 9001 hasta el 2014, al certificar Rectoría y la totalidad de las DES, representa 60 procesos y 150 procedimientos. En las dos últimas revisiones la casa de certificación Det Norske Veritas de México reconoce en su informe como un esfuerzo sobresaliente los logros del Modelo

Educativo y el impacto del Sistema de Gestión de Calidad hacia la competitividad académica en la acreditación y evaluación de los PE. Como se describe en el impacto de la certificación en la competitividad académica, el costo beneficio es alto, las mejoras detectadas en los ejercicios internos y externos, así como en las buenas prácticas que realizan los responsables de procesos durante el desarrollo sus actividades han generado un ambiente participativo y activo hacia un enfoque de mejora que se ve reflejado en el mantenimiento y en compromiso para elevar la calidad en los servicios académicos y administrativos. El reto que presenta el sistema de gestión de la calidad es continuar con los refrendos del certificado de conformidad con la Norma ISO 9001 por medio del seguimiento oportuno, auditorías, formación, la implementación de buenas prácticas, y el impacto de los procesos y procedimientos en aquellas recomendaciones e indicadores tanto de los CIEES como de los organismos del COPAES con apoyo de la formulación de procesos estratégicos. Con apoyo del Sistema de Gestión de la Calidad se han desarrollado diferentes buenas prácticas, Con referencia a los ejes de sustentabilidad que tienen la UES y para fines de la aplicación de la metodología de seis sigmas se han definido los siguientes costos:

Tabla 1: el Impacto de la Certificación en la Competitividad Académica

Año	Conceptos					
	No. Proceso	No. DES	Énfasis de Sistema de gestión de calidad	Nivel de madurez del SGC	% PE con calidad Reconocida	Principales beneficios
2005	8	1	Gestión administrativa; Atención al estudiante en control escolar; Biblioteca, Carga académicas de los profesores; Servicio Social, y Centro de cómputo.	1 de 4	28 (5 PE)	Se formalizan las actividades por medio de documento oficial para el desarrollo de las actividades.
2006	16	3	No existió variación en el énfasis con respecto al año anterior.	1 de 4	44 (4 PE)	Se agilizan los servicios de atención de los estudiantes y se mejora su infraestructura.
2007-2009	29	3	Adicionalmente a lo mencionado en los años anteriores, se incluye las actividades tutorías. Se priorizan los esfuerzos para lograr con éxito la transición de la norma ISO a la versión 2008.	3 de 4	89 (16 PE)	Se fortalece el seguimiento de la operación del programa institucional de tutorías.
2010	5	5	No existió variación en el énfasis con respecto al año anterior.	3 de 4	100 (18 PE)	Se consolida el Sistema de gestión de la calidad bajo un enfoque integral hacia la gestión académica y administrativa.
2011	57	5	Adicionalmente a lo mencionado en los años anteriores, se incluye el seguimiento a las actividades de los profesores y académicas; las prácticas de laboratorio; soporte de tecnología de la información; y actualización de acervo bibliográfico.	3 de 4	100 (18 PE)	La satisfacción del estudiante se mantiene favorable en el 81%, al brindar mejor seguimiento en las condiciones académicas y administrativas.
Ambito de la planeación						

2012	58	Será prioritario incluir procesos que refuercen la actividad de investigación, extensión y vinculación de las DES, y sea congruente en desarrollo de la capacidad académica institucional.	4 de 4	100 (18 PE)	Se deberá medir el impacto del SGC para mejorar la capacidad académica de la institución.
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*Tabla de auditoría propia que ordena la cronología del avance de los procesos certificados.*

**Tabla 2: Costos Definidos Para Intervención con la Metodología Seis Sigma**

Descripción del rubro	2011	2012	2013
Papel para impresión tipo Bond	147,135	238,125	208,235
Materiales para impresión y reproducción (Tintas, tóner, entre otros)	374,041	295,832	232,930
Combustibles, lubricantes, aditivos, carbón y sus derivados adquiridos	2,034,386	1,747,753	1,822,149
Energía eléctrica	5,801,276	5,123,336	5,175,328
Agua	533,115	292,645	565,489
Total	8,889,953	7,697,691	8,004,131

*Tabla de auditoría propia, fuente Presupuesto Institucional de la UES*

Esta información son los gastos ejercicios en los diferentes rubros, para la determinación del número de sigma en que se encuentra operando el aprovechamiento de los recursos en estos rubros, se comparó con el cumplimiento en la programación presupuestal, dando los siguientes resultados:

**Tabla 3: Cumplimiento Presupuestal en los Rubros Para Determinar la Sigma**

Descripción del rubro	2011	2012	2013
Papel para impresión tipo Bond	Cumple	Cumple	Cumple
Materiales para impresión y reproducción (Tintas, tóner, entre otros)	No cumple	Cumple	Cumple
Combustibles, lubricantes, aditivos, carbón y sus derivados adquiridos	Cumple	No cumple	Cumple
Energía eléctrica	Cumple	Cumple	No cumple
Agua	Cumple	Cumple	Cumple

*Tabla de auditoría propia, fuente Presupuesto Institucional de la UES*

Con la información de la tabla 2, conocemos los rubros en que efectivamente no existió un sobre paso presupuestal con relación al recurso otorgado originalmente. Al calcular el estimado de la sigma del comportamiento de estos costos podemos ver que es el 4 sigmas ( $([3 \text{ No cumple} / 15] * 100)$ ), lo que equivale trabajar a un 96% de eficiencia en el ejercicio presupuestal. Si lo comparamos a la suma del presupuesto de estos 3 años (\$24, 591,774 pesos mexicanos) podemos ver que representa a 400,000 pesos (mexicanos). Los recursos no aprovechados o administrados acorde a lo programado representan 80 libros en biblioteca, 1,282 licencias para el sistema de aprendizaje de inglés de los estudiantes o 31 computadoras para los estudiantes. El alcance del proyecto de seis sigmas buscará impactar adicionalmente a otros rubros presupuestales conforme se madure la aplicación de la metodología con apoyo de la estructura del sistema de gestión de la calidad. La Universidad Estatal de Sonora al aplicar estas herramientas buscará alinearse de forma eficiente a las políticas de racionalidad y austeridad en el presupuesto general de la Universidad Estatal de Sonora.

**Tabla 4: Presupuesto Ejercido en el Gasto Corriente de la Institución (Millones De Pesos)**

Concepto	2007	2008	2009	2010	2011
	Monto	Monto	Monto	Monto	Monto
Servicios básicos (Energía, Agua, Teléfono, Internet)	5.75	6.50	5.76	6.44	8.21
Gastos de Operación (sin incluir servicios básicos)	50.35	47.96	72.93	69.56	90.15

*Tabla de auditoría propia, fuente Presupuesto Institucional de la UES*

Considerando una aplicación en todos los gastos de operación de la Universidad Estatal de Sonora, la metodología puede buscar alcanzar un ahorro de más de 4 millones de pesos en un año, lo que impacta en la consolidación de las prioridades institucionales presentadas a continuación:

1. Pago de servicios básicos (luz, agua, teléfono, entre otros)
2. Reparaciones y pintura a paredes de salones, laboratorios y espacios comunes para los estudiantes.
3. Reparación de mobiliario de aulas.
4. Reparación de instalaciones eléctricas de aulas, laboratorios y espacios comunes para los estudiantes.
5. Adquisición de pintarrones y materiales para los docentes en el aula.
6. Reparación de puertas de acceso a las aulas, laboratorios y espacios comunes para los estudiantes.
7. Limpieza de las aulas, laboratorios y espacios comunes para los estudiantes.
8. Iluminación y ventilación de las aulas, laboratorios y espacios comunes para los estudiantes.
- 9- Practicas de campo y viajes de estudios.
10. Eventos académicos de los programas educativos.
11. Promoción del programa educativo.

Para la implementación se necesitan varios factores como el compromiso, concientización, enfoque al cliente, apoyo de la dirección, entusiasmo del personal, cambio de cultura y un clima de organizacional adecuado, dichos factores se encuentran favorables para aplicación del proyecto seis sigmas en la Universidad Estatal de Sonora.

## **METODOLOGIA**

La metodología utilizada para la realización de esta Investigación es Six Sigma con un enfoque cuantitativo y cualitativo, tiene el carácter de ser explicativa debido a que abarca las causas del problema y las condiciones que se encuentra actualmente. Los métodos de investigación que se consideran son: el análisis documental sobre la información de la institución sobre la mejora continua, los documentos de programación y ejercicio presupuestal, manual de calidad, interrelación de procesos, procedimientos documentos, proyectos de mejora aplicados, normatividad aplicable, entre otros, otro método es la observación directa que buscar conocer el comportamiento de los procesos con relación a los costos seleccionados en el proyecto, también se incorporan técnicas y herramientas de la administración de la calidad y productividad como son el análisis de costos, diagrama de pescado, paretos, histogramas, diagrama de Gantt, entre otros.

Planteamiento del problema: La Universidad Estatal de Sonora es una Institución de Educación Superior de carácter público que se considera una Universidad de Apoyo Solidario. A partir del 2012, los costos operativos comienzan a incrementarse y los ingresos se disminuyen por las políticas de racionalidad y austeridad de los gobiernos federal y estatal, actualmente se tiene un sistema de gestión de la calidad que se enfoca hacia la competitividad y capacidad académica, su alcance no contempla en gran escala el impacto en el aprovechamiento de los recursos. Por tal motivo se requiere incorporar metodologías de mejora continua que permitan a los procesos generar productividad y eficiencia en las actividades con el propósito de reducir desperdicios, aprovechar los recursos y redistribuir los recursos a las prioridades institucionales.

Investigación de camp: Por medio de la observación directa y al análisis documental de la situación bajo estudio.

Análisis de datos y creación del producto final: Analizar los datos que componen el caso de estudio de la UES con respecto al comportamiento de los procesos en materia de aprovechamiento de recursos, generación de desperdicios, detección de buenas prácticas administrativas y eficiencia en la aplicación del presupuesto.

Contribución del estudio: El ahorro del presupuesto de egreso de la institución a nivel del 6 sigma, logrando alcanzar una eficiencia del cumplimiento de las prioridades de la institución al 99.999%.

Diseño de la investigación: La metodología Six Sigma tiene 5 pasos, Definir, Medir, Analizar, Mejorar y Controlar. Esta metodología mide el desempeño histórico de una situación específica, analiza las principales áreas de oportunidad para mejorar cada métrico, hace mejoras por medio de proyectos formalmente establecidos.

Los pasos (Lefcovich, 2009) se mencionan a continuación: Definir el problema: ¿Debe definirse claramente en que problema se ha de trabajar?, ¿Por qué se trabaja en ese problema en particular?, ¿Quién es el cliente?, ¿Cuáles son los requerimientos del cliente?, ¿Cómo se lleva a cabo el trabajo en la actualidad?, ¿Cuáles son los beneficios de realizar una mejora?, Siempre debe tenerse en cuenta que definir correctamente un problema implica tener un 50% de su solución. Un problema mal definido llevará a desarrollar soluciones para falsos problemas.

Medir: El medir persigue dos objetivos fundamentales: 1. Tomar datos para validar y cuantificar el problema o la oportunidad. Esta es una información crítica para refinar y completar el desarrollo del plan de mejora. 2. Nos permiten y facilitan identificar las causas reales del problema. El conocimiento de estadística se hace fundamental. “La calidad no se mejora, a no ser que se la mida”.

Analizar: El análisis nos permite descubrir la causa raíz. Para ello se hará uso de las distintas herramientas de gestión de la calidad. Ellas son las siete herramientas estadísticas clásicas y las nuevas siete herramientas. Las herramientas de análisis deben emplearse para determinar dónde estamos, no para justificar los errores. Al respecto cabe acotar que el Diagrama de Pareto es a los efectos de darle prioridad a los factores que mayor importancia tienen en la generación de fallos o errores, pero no debe significar dejar de atender las demás causas. Al respecto Crosby señala que “a los numerosos pero triviales ni siguiera les hacen caso; les dejan que envenenen el producto o servicio para el consumidor. Consideran que no vale la pena dedicar tiempo a solucionarlos. En cambio para un auténtico enfoque de cero defectos, todos los elementos son importantes”.

Mejorar: En esta etapa asume una preponderancia fundamental la participación de todos los participantes del proceso, como así también la capacidad creativa, entre los cuales se encuentran el uso de nuevas herramientas como el Pensamiento Lateral y la Programación Neuro-Lingüística (PNL). La fase de mejora implica tanto el diseño como la implementación. En esta fase de diseño es muy importante la actividad de benchmarking a los efectos de detectar en otras unidades de la misma empresa o en otras empresas (competidoras o no) formas más efectivas de llevar a cabo un proceso.

Controlar: Es necesario confirmar los resultados de las mejoras realizadas. Debe por tanto definirse claramente unos indicadores que permitan visualizar la evolución del proyecto. Los

indicadores son necesarios pues no podemos basar nuestras decisiones en la simple intuición. Los indicadores nos mostrarán los puntos problemáticos de nuestro negocio y nos ayudarán a caracterizar, comprender y confirmar nuestros procesos. Mediante el control de resultados lograremos saber si estamos cubriendo las necesidades y expectativas de nuestros clientes. Es además primordial verificar mediante el control la estabilidad de los procesos. Distintos indicadores vinculados a Seis Sigma pueden y deben ser articulados en los Tableros de Comandos o Cuadros de Mando Integral a los efectos de permitir un monitoreo constante en la evolución de los mismos por parte de los diferentes funcionarios y responsables de los procesos productivos y de mejoras.

## RESULTADOS OBTENIDOS

La metodología aplicable a la Universidad Estatal de Sonora se puede describir de manera general de la siguiente manera:

Se clarificó la situación actual y se identificó las necesidades de mejora en los procesos relacionados al consumo de papel para impresión tipo Bond, materiales para impresión y reproducción (tintas, tóner, entre otros), combustibles, lubricantes, aditivos, carbón y sus derivados adquiridos, utilización de energía eléctrica y agua. Por medio del análisis del programa operativo anual, manual de calidad, diagrama de procesos, procedimientos y normatividad aplicable en el ámbito presupuestal. Se realizaron cursos para promover esta herramienta en beneficio de la de comunicación, ayudando a vender la idea y obtener el apoyo de otras personas. Se analizaron los diagramas de cascada  $Y=f(x)$ , diagrama de flujo, mapa del Proceso, diagrama Causa Efecto y diagrama de Pareto sobre la situación de la reducción de desperdicios y aprovechamiento de los recursos. Por medio de las metas del programa operativo anual, los informes de los avances presupuestales, los documentos contables y financieros, y la información de los procedimientos operativos se pudo recolectar los datos de interés del caso de estudios. El análisis de información por medio de la estadísticas descriptiva como la media, moda, mediana y desviación estándar para conocer situaciones específicas del fenómeno de estudio. Estandarizar en el Sistema de Gestión de la Calidad de la institución como una metodología continua que promueva la utilización efectiva de las acciones correctivas y preventivas detectas en los procesos.

## CONCLUSIONES

La estrategia de algunas empresas comprometidas con la satisfacción del cliente es implementar Seis Sigma como filosofía de mejora continua y como subsistencia de negocio. La competitividad no solo se basa en ser eficaces (cumplimiento de lo planeado), se traslada a que tan dinámico puedes atender las necesidades presentes y futuras de los clientes considerando las barreras presupuestales y la escasez de recursos. Con la aplicación de Seis Sigma en la Universidad se encamina el sistema de gestión hacia mejoras que representan grandes ahorros de costos, así como oportunidades para retener a nuestros estudiantes, mejorar la cobertura y atención a nuestros estudiantes, y construirse como una universidad con excelente nivel académico. Por otra parte, otro impacto que nos brinda la aplicación de seis sigma en la Universidad Estatal a fortalecer la intención de la norma ISO 9001:2008 en materia de planificación para implementar los procesos de seguimiento, medición, análisis y mejora necesarios que demuestren la conformidad con los requisitos del estudiante, asegurarse de la conformidad del sistema de gestión de la calidad, mejorar continuamente la eficacia del sistema de gestión de la calidad. Esto debe comprender la determinación de los métodos aplicables, incluyendo las técnicas estadísticas, y el alcance de su utilización. Así como la Mejora continua

que busca eficacia del sistema de gestión de la calidad mediante el uso de la política de la calidad, los objetivos de la calidad, los resultados de las auditorías, el análisis de datos, las acciones correctivas y preventivas y la revisión por la dirección.

Por otro lado, estas buenas prácticas administrativas contribuyen al eje de la gestión educativa de calidad del programa de desarrollo institucional de la Universidad Estatal de Sonora, su intención es lograr sistemas de planeación y programación estrictamente centrados en la mejora y aseguramiento de la calidad, los que permitan fortalecer los planes institucionales de acreditación de los programas que integran la oferta educativa. Igualmente busca consolidar la práctica de la planeación y evaluación institucionales, privilegiando su carácter constructivo para acceder a los propósitos educativos definidos. Los proyectos que son consolidados son: La certificación de procesos académicos y administrativos; Actualización de la normatividad; Planeación y evaluación operativa institucional; Planeación y organización institucional; Consolidar el sistema de información institucional; Rendición de cuentas.

Por último, la implementación de la metodología Seis Sigmas contribuye al cumplimiento de la normatividad de racionalidad y austeridad que marca el Gobierno del Estado de Sonora y el Gobierno Federal.

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# ASPECTOS FISCALES EN MÉXICO, DEL DERECHO A LA SALUD COMO DERECHO HUMANO

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## RESUMEN

*Este trabajo, examina el aspecto fiscal del derecho a la salud, como derecho humano. Consideramos como aspecto fiscal en México, los gastos directos presupuestados para el año 2013, para atenderlo que incluye, entre otros pago de honorarios a médicos, enfermeras, investigadores y personal relacionado con el sector salud y como indirectos (gastos fiscales), los consistentes en las erogaciones realizadas para cubrir los beneficios fiscales que se otorgan a los contribuyentes, relacionados con el derecho a la salud, así como las deducciones o exenciones o impuestos especiales que las leyes fiscales mexicanas prevén, para hacer posible y viable, el referido derecho.*

**PALABRAS CLAVES:** Derechos Humanos, Derecho a la Salud, Aspectos Fiscales, Enfermedades, Gastos Fiscales, Tratados Internacionales

## TAX ISSUES IN MEXICO, THE RIGHT TO HEALTH AS A HUMAN RIGHT

### ABSTRACT

*This paper examines the fiscal aspect of the right to health as a human right. We consider fiscal aspect in Mexico, direct expenditures budgeted for 2013, to serve you including; payment of fees to physicians, nurses, researchers and staff involved in the health sector, the indirect (tax expenditures), consisting of the expenditures made to cover the tax benefits granted to taxpayers regarding the right to health, well as tax deductions or exemptions or special Mexican tax laws provide, to make possible and feasible that right.*

**JEL:** I1, I18, I31, I38

**KEYWORDS:** Human Rights, Right to Health, Fiscal Aspects, Diseases, Tax Expenditures, International Treaties

### INTRODUCCIÓN

En la presente investigación analizamos el aspecto fiscal del derecho a la salud, como derecho humano, partiendo de la premisa que en México existe un problema grave de salud pública por la obesidad y el sobrepeso y que debe tomarse en cuenta que “el costo total de tratamiento de enfermedades relacionadas al sobrepeso y la obesidad se duplicó entre 2000 al 2008, de \$35,000 millones de pesos, a \$67,000 millones de pesos, este gasto aumentará a \$150,000 millones de pesos en 2017, cifra equivalente a 5 veces el presupuesto de la UNAM en 2012 (\$32,000 millones de pesos). (Alianza para la salud, 2013). Para el “Acuerdo Nacional para la Salud Alimentaria: Estrategia contra el sobrepeso y la obesidad”, “el costo directo estimado que representa la atención médica de las enfermedades atribuibles al sobrepeso y la obesidad asciende a por lo menos 42,246 millones de pesos”. (Gaceta Parlamentaria 3887-IX)

Además de que no toda la población tiene acceso a los servicios de salud de las instituciones gubernamentales y para ello destacamos que según el Instituto Nacional de Estadística y Geografía e Informática (INEGI) el XII Censo General de Población y Vivienda 2000 y el Censo de Población y Vivienda 2010, en el año 2010, el 64.6 por ciento de la población es derecho habiente en los sistemas de salud del gobierno mexicano, mientras que el 33.8 por ciento, no lo es. ( INEGI aclara que estos porcentajes no suman el 100% porque hay rubros no especificados). (INEGI, 2010)

En otro segmento del derecho a la salud, encontramos que en México, el año 2010, existían 5 739 270 de personas con discapacidad física o mental. El mayor porcentaje de discapacidad, como lo es el 58.3 por ciento se refiere a la dificultad o imposibilidad para caminar o moverse y en segundo lugar, en un 27.2 por ciento es la incapacidad para ver. (INEGI, 2010). Otras de las complicaciones para dar plenitud al derecho a la salud “se refiere a la necesidad de mejorar el surtimiento de medicamentos de los afiliados al Sistema de Protección Social en Salud. El mayor problema en este sentido se encuentra en los hospitales. Este hallazgo obliga a revisar la política de medicamentos del Sistema de Protección Social en Salud, siendo asimismo pertinente impulsar las reformas legales necesarias que permitan hacer eficiente la compra y distribución de insumos para la salud, aprovechando la experiencia federal y la obtención de mejores condiciones por volúmenes de compras a nivel nacional”. (Gaceta Parlamentaria 3857-M, 2013)

Por ello ello destacamos que el concepto de Derecho a la Salud de la Organización Mundial de la Salud (OMS), en el sentido de que constituye “el estado completo de bienestar físico, mental y social y no solamente la ausencia de afecciones o enfermedades; y el logro del grado más alto posible de salud es un objetivo social de la mayor importancia”, (Roccatti, M., s.f.), no es recogido por el artículo 12, del Pacto Internacional de los Derechos Económicos, Sociales y Culturales (PIDESC), sino que “se reconoce que el derecho a la salud abarca una amplia gama de factores socioeconómicos que promueven las condiciones merced a las cuales las personas pueden llevar una vida sana, y hace ese derecho extensivo a los factores determinantes básicos de la salud, como a la alimentación y la nutrición, la vivienda, el acceso a agua limpia potables y a condiciones sanitarias adecuadas, condiciones de trabajo seguras y sanas y un medio ambiente sano”. (Comisión de Derechos Económicos Sociales y Culturales, 2000). En complemento al derecho a la salud, existe la propuesta de crear “mecanismos de protección que les permitan contar con un nivel de vida digno y puedan cubrir sus necesidades durante la vejez o ante la eventualidad del desempleo” y para ello se propone reformar los artículos 4o., 73 y 123 de la Constitución Política de los Estados Unidos Mexicanos, en materia de seguridad social universal. (Gaceta Parlamentaria 3857-H, 2013)

Bajo estas connotaciones, en este trabajo, estamos considerando los gastos directos y los indirectos (gastos fiscales,) (SHCP, 2012) que realiza el Estado Mexicano para atender el derecho a la salud. En el aspecto directo acudimos al Presupuesto de Egresos de la Federación 2013 (PEF, 2013) y lo comparamos con el proyecto de Presupuesto de Egresos de la Federación para el año 2014, con el fin de señalar los montos que se destinan para atender y fortalecer el derecho a la salud en México. En el apartado de gastos indirectos o gastos fiscales, examinamos, entre otras cuestiones, las exenciones o tasas especiales referidas al tema del derecho a la salud, en el impuesto sobre la renta (ISR) y en el impuesto al valor agregado (IVA), así como las tasas específicas del impuesto especial sobre producción y servicios (IEPS) para combatir adicciones que provocan enfermedades físicas o mentales, como son los casos de las bebidas alcohólicas y cerveza, el tabaco y el cigarro y el juego con apuestas y sorteos.

Hemos incluido también en este documento, la propuesta en México, de crear para el 2014, nuevas tasas en el IEPS, para combatir la obesidad y el sobrepeso a través de gravar la enajenación de alimentos no básicos con alta densidad calórica y de las bebidas saborizadas. (Gaceta Parlamentaria 3887-IX, 2013).

Ambas tasas especiales en el IEPS, seguramente tienen como origen que según la Organización Panamericana de la Salud (OPS), el mayor número de muertes por enfermedad en el período 2000-2010, se deriva de la diabetes mellitus, tipo 2, cuyo origen preponderante es el sobrepeso y la obesidad. (OPS, 2012)

## REVISIÓN DE LITERATURA

### El Marco Jurídico Internacional y Nacional Del Derecho a la Salud

Como literatura jurídica obligatoria para el estudio del derecho a la salud, en la categoría de los derechos sociales, consideramos los textos de los artículos 1 y 4, de la Constitución Política de los Estados Unidos Mexicanos (CPEUM), el artículo 12 del PIDESC, así como el artículo 10 del Protocolo Adicional a la Convención Americana sobre Derechos Humanos en Materia de Derechos Económicos, Sociales y Culturales, (Protocolo De San Salvador). Complementariamente también se reconoce en el inciso iv) del apartado e) del artículo 5 de la Convención Internacional sobre la Eliminación de todas las Formas de Discriminación Racial, de 1965; en el apartado f) del párrafo 1 del artículo 11 y el artículo 12 de la Convención sobre la eliminación de todas las formas de discriminación contra la mujer, de 1979; así como en el artículo 24 de la Convención sobre los Derechos del Niño, de 1989. Comisión de Derechos Económicos Sociales y Culturales, Observación General N° 14, (2000), CUESTIONES SUSTANTIVAS QUE SE PLANTEAN EN LA APLICACIÓN DEL PACTO INTERNACIONAL DE DERECHOS ECONÓMICOS, SOCIALES Y CULTURALES. El artículo 10 del Protocolo de San Salvador, señala los siguientes lineamientos del Derecho a la Salud:

#### Artículo 10 Derecho a la Salud

1. *Toda persona tiene derecho a la salud, entendida como el disfrute del más alto nivel de bienestar físico, mental y social.*
2. *Con el fin de hacer efectivo el derecho a la salud los Estados partes se comprometen a reconocer la salud como un bien público y particularmente a adoptar las siguientes medidas para garantizar este derecho:*
  - a. *la atención primaria de la salud, entendiendo como tal la asistencia sanitaria esencial puesta al alcance de todos los individuos y familiares de la comunidad;*
  - b. *la extensión de los beneficios de los servicios de salud a todos los individuos sujetos a la jurisdicción del Estado;*
  - c. *la total inmunización contra las principales enfermedades infecciosas;*
  - d. *la prevención y el tratamiento de las enfermedades endémicas, profesionales y de otra índole;*
  - e. *la educación de la población sobre la prevención y tratamiento de los problemas de salud, y*
  - f. *la satisfacción de las necesidades de salud de los grupos de más alto riesgo y que por sus condiciones de pobreza sean más vulnerables.*

Mientras que el artículo 4, párrafo quinto, CPEUM, sólo establece el marco regulatorio del derecho a la salud, al señalar que “Toda persona tiene derecho a la protección de la salud. La Ley definirá las bases y modalidades para el acceso a los servicios de salud y establecerá la concurrencia de la Federación y las entidades federativas en materia de salubridad general, conforme a lo que dispone la fracción XVI del artículo 73 de esta Constitución”.

Es decir, para una regulación integral del derecho a la salud tendríamos que acudir a los tratados internacionales que es más completa frente al artículo 4, CPEUM. En efecto la Segunda Sala de la Suprema Corte de Justicia de la Nación (SCJN) determina que no es necesario acudir a los tratados internacionales si la regulación es integral en la CPEUM, pero es el caso, como ya lo dijimos que precisamente son los tratados internacionales los que establecen un panorama más integral del derecho a la salud. la tesis que comentamos tiene el título “derechos humanos. su estudio a partir de la reforma al artículo 1o. constitucional, publicada en el diario oficial de la federación el 10 de junio de 2011, no implica necesariamente que se acuda a los previstos en instrumentos internacionales, si resulta suficiente la previsión que sobre éstos contenga la constitución política de los estados unidos mexicanos. (scjn, 2012). décima época, semanario judicial de la federación y su gaceta, tomo: libro viii, mayo de 2012, página: 1348 Una vez ubicado el derecho a la salud como integrante de los derechos sociales consagrados en la CPEUM, en el PIDESC y en el “Protocolo De San Salvador” nos abocamos al examen de los gastos directos y gastos fiscales que el gobierno federal mexicano ha destinado para cumplir con el mandato de hacer posible y viable el Derecho a la salud.

#### Los Ordenamientos Presupuestales y las Leyes Fiscales y su Incidencia en el Derecho a la Salud

En materia de gasto directo para atender el derecho a la salud, examinamos el Presupuesto de Egresos de la Federación de los años 2013 (PEF, 2012) y el proyecto de Presupuesto de Egresos de la Federación para el año 2014. (Gaceta Parlamentaria 3857-B, 2013). Referente a los gastos indirectos o gastos fiscales, estamos revisando a la Ley del Impuesto sobre la Renta (LISR), en cuanto a las deducciones que permite aplicar por las donaciones que se realicen a instituciones autorizadas y que atiendan al sector salud (artículo 31, fracción XXII, LISR) y la deducción por los pagos de honorarios médicos y dentales, así como gastos hospitalarios (artículo 176, fracción I, LISR). Tratándose de la ley del Impuesto al Valor Agregado (LIVA), analizamos: la tasa del 0% por la enajenación de medicinas de patente (artículo 2-A, fracción I, inciso b), LIVA) y la exención por la prestación de servicios profesionales de medicina, así como los hospitalarios, de radiología, de laboratorios y estudios clínicos. (artículo 15, fracción XIV y XV, LIVA). Como medidas impositivas para atender problemas específicos de salud pública, analizamos a la Ley del Impuesto Especial Sobre Producción y Servicios (LIEPS), que establece tasas especiales para combatir la adicción a bebidas alcohólicas y cerveza, al tabaco y al cigarro (artículo 2, fracción I, incisos A y C, LIEPS), así como la adicción al juego con apuestas y sorteos (artículo 2, fracción II, inciso B, LIEPS) Incluimos, en esta investigación, la propuesta en México, de crear para el año 2014, una tasa especial en el IEPS, que pretende combatir la obesidad y el sobrepeso, para gravar la enajenación de alimentos no básicos con alta densidad calórica, así como las bebidas saborizadas. (Gaceta Parlamentaria 3897-X, 2013).

#### **METODOLOGÍA**

Utilizamos la investigación cuantitativa y cualitativa para determinar los montos de los recursos económicos que se destinan a los gastos directos e indirectos (gastos fiscales) en el estado mexicano, así como cuáles son los instrumentos jurídicos que las leyes fiscales aplican para tal fin. En materia cuantitativa, para conocer en millones de pesos, los gastos directos que el

gobierno mexicano realizó tomando en cuenta el PEF, 2013, comparado con el proyecto de presupuesto de egresos para el año 2014, (Gaceta Parlamentaria 3857-B, 2013), consultamos los referidos ordenamientos y para determinar a que rubro o concepto se destina el mayor número de recursos económicos, se presenta el esquema siguiente:

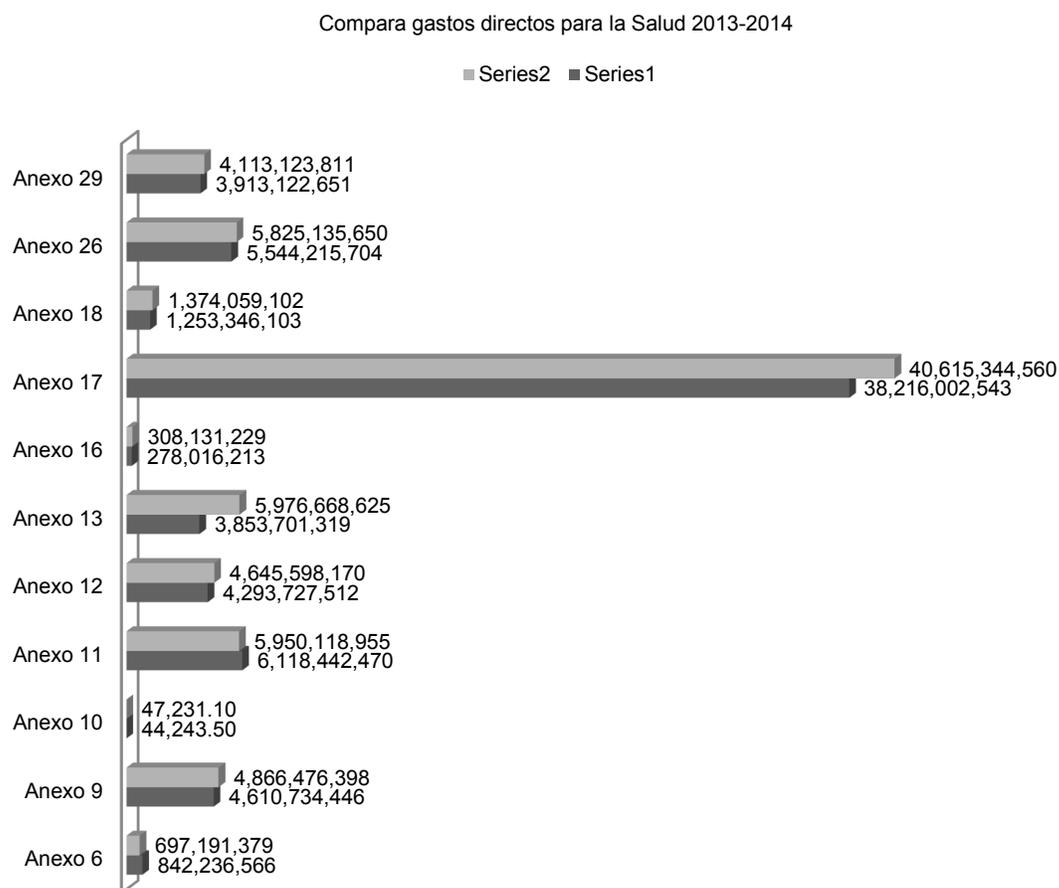


Figura de elaboración propia. En este se refleja que el rubro que mayor recursos recibe es para la atención de niñas, niños y adolescentes (Anexo 17), le sigue la atención para grupos vulnerables (Anexo 13), después se ubica el programa de ciencia, tecnología e innovación, y el cuarto en importancia es el relativo al programa de desarrollo humano.

Tratándose de gastos indirectos, en materia de exenciones o tasas especiales en el ISR e IVA, en millones de pesos, tenemos los resultados siguientes: (SHCP, 2012)

GASTOS FISCALES PARA ATENDER EL DERECHO A LA SALUD				
Concepto	Año 2012	Año 2013	PIB 2012	PIB 2013
Exenciones en gastos de honorarios médicos, dentales y otros gastos hospitalarios (ISR)	3,967,	4,113	0.0258	0.0249,
Exenciones en primas de seguros de gastos médicos (ISR)	1,507	1,569	0.0098	0.0095
Tasa 0% en enajenación de medicinas (IVA)	14,222	15,279	0.0925	0.0925
Exención el pago del IVA por servicios profesionales de medicina	2,491	2,676	0.0162	0.0162

Tabla de diseño propio. En ésta encontramos que el mayor gasto fiscal se refiere al subsidio a la tasa del 0% (en el IVA la tasa general es del 16%) que corresponde a la enajenación de medicinas.

Respecto a tasas especiales impositivas para combatir adicciones, encontramos que en la Ley de Ingresos de la Federación para el ejercicio fiscal del 2013 (LIF, 2012), en comparación con el

proyecto de la LIF para el año 2014, (Gaceta Parlamentaria 3897-X) se estimaron recaudar en millones de pesos, las cantidades siguientes:

INGRESOS A RECAUDAR POR TASAS ESPECIALES EN EL IEPS PARA COMBATIR ADICCIONES		
Concepto	Año 2013	Año 2014
Por enajenar bebidas con contenido alcohólico y cervezas	33,143.0,	36,752.0
Por enajenar Tabacos labrados	35,379.1	37,208.4
Por juegos con apuestas y sorteos	2,360.6.	3,012.2

Por lo que se refiere a la propuesta de crear para el año 2014, una tasa especial del 8% en el IEPS, para gravar la enajenación de alimentos no básicos con alta densidad calórica, se tiene programado recaudar, la cifra de 5,600.0., mientras que por las denominadas bebidas saborizadas se proyecta la cantidad de 12,455.0, ambas en millones de pesos. (Gaceta Parlamentaria 3897-X, 2013) Por la investigación cualitativa, descubrimos que el gobierno federal a través de los denominados gastos fiscales, establece instrumentos financieros en materia fiscal para fortalecer el derecho a la salud, que consisten en exenciones, tasas especiales y hasta impuestos específicos para tal fin. La explicación de éstos se plasma en los resultados.

## RESULTADOS

### Deducciones en el Impuesto Sobre la Renta (ISR) en Materia Del Derecho a la Salud

La regulación normativa se encuentra en los artículos 31, fracción XXII y en el 176, fracción I, LISR. Estos gastos fiscales apoyan y fortalecen el derecho a la salud de los contribuyentes que realicen pagos por prestación de servicios médicos y dentales, incluyendo prótesis y lentes ópticos graduados para corregir defectos visuales, o bien, que donen mercancías a instituciones autorizadas para atender requerimientos de salud.

*Tasa 0% y exención en el IVA, en materia del derecho a la salud:* Tratándose de este tributo, como se verá enseguida, son dos instrumentos que se utilizan para fortalecer el derecho a la salud, la enajenación de medicina que está sujeta a tasa 0% (la tasa general es del 16%) y la exención en su pago, tratándose de servicios profesionales de medicina .

*Tasas especiales para combatir adicciones en el IEPS:* Su regulación es el artículo 2, fracción I, inciso A y C y fracción II, LIEPS. Las tasas específicas se refiere al combate a las adicciones a las bebidas alcohólicas y cerveza (que van del 25 al 50%) , tabacos y cigarros (que van del 30.4 al 160%) y al juego con apuestas y sorteos (con una tasa del 30%)

Propuestas De Tasas Especiales Para El Año 2014, Para Combatir La Obesidad Y El Sobrepeso. (Gaceta Parlamentaria 3897-X, 2013).\_Para el año 2014, existen las propuestas de crear tasas especiales en los productos siguientes:

A.- Bebidas saborizadas, (artículo 2, fracción I, apartado G, LIEPS) que propone una cuota de \$1.00 por litro. Dentro de dicho concepto se contemplan a “*concentrados, polvos, jarabes, esencias o extractos de sabores, que al diluirse permitan obtener bebidas saborizadas; y jarabes o concentrados para preparar bebidas saborizadas*”.

B.- Alimentos no básicos con alto contenido calórica, con una tasa del 8%, (artículo 2, fracción I, apartado J, LIEPS), entre éstos se incluyen a las *Botanas, productos de confitería, Chocolate y demás productos derivados del cacao, Flanes y pudines, Dulces de frutas y hortalizas, cremas de*

*cacahuates y avellanas, Dulces de leche, alimentos preparados a base de cereales y Helados, nieves y paletas de hielo.*

Aspectos negativos de algunos programas de gobierno en materia tributaria que consideramos como obstáculos para el pleno desarrollo del derecho a la salud. Contrario a las políticas públicas del gobierno mexicano, de fortalecer el derecho a la salud y procurar una vida digna para los trabajadores a través de gastos fiscales, existen medidas tributarias que entran en contradicción con las antes analizadas, como es el caso de no establecer exenciones en el pago del IVA a la enajenación de artículos o productos para personas con discapacidad, como pueden ser sillas de ruedas, andaderas, prótesis y aparatos ortopédicos.

Igualmente el artículo 15, fracción XV, LIVA, si bien considera exentas, la prestación de servicios profesionales de medicina, hospitalarios, de radiología, de laboratorios y estudios clínicos, también existe como obstáculo que impide la plena realización del derecho a la salud, que no están exentos los servicios hospitalarios, de radiología, de laboratorios y estudios clínicos que presten los particulares.

## CONCLUSIONES

Regulación jurídica en Tratados Internacionales y en la CPEUM del Derecho a la Salud Estimamos que para una regulación integral del derecho a la salud tendríamos que acudir a los tratados internacionales frente a la contenida en el artículo 4, CPEUM, bajo los lineamientos de la Segunda Sala (SCJN) que determina que no es necesario acudir a los referidos instrumentos internacionales si la regulación es más completa en la CPEUM, pero es el caso, como ya lo dijimos que precisamente son los tratados internacionales los que establecen un panorama más integral del derecho a la salud.

Los ordenamientos fiscales que inciden en fortalecer y proteger el derecho a la salud La legislación fiscal mexicana, tales como la LISR y LIVA, establecen deducciones, exenciones y tasas especiales, para apoyar a los contribuyentes cuando realicen gastos médicos, hospitalarios, de radiología o para la compra de medicinas los cuales fortalecen el derecho a la salud entre la población.

Así también las políticas públicas en este ámbito persiguen erradicar adicciones como aspectos negativos del derecho a la salud y para ello se crearon tasas especiales, en el IEPS. Estas adicciones van referidas al consumo de bebidas alcohólicas y cervezas, tabaco y cigarros y al juego con apuestas y sorteos. La preocupación del gobierno mexicano de combatir la obesidad y el sobrepeso, para el año 2014, a través de instrumentos fiscales. Efectivamente, para el año 2014, (Gaceta Parlamentaria 3897-X, 2013), existe la propuesta de establecer nuevas tasas en el IEPS para combatir la obesidad y el sobrepeso, a través de gravar los alimentos no básicos con alta densidad calórica y las bebidas saborizadas.

En el primer rubro se proyecta recaudar la cifra de 5, 600.0., mientras que por el segundo, se estima la cantidad de 12, 455.0, ambas en millones de pesos. (Gaceta Parlamentaria 3897-X, 2013) La propuesta puede ser muy positiva para atender el derecho a la salud, siempre que estos ingresos tributarios se destinen directamente para atender estas enfermedades. Lo anterior es importante destacar, ya que tratándose de las tasas especiales en el IEPS para combatir, por ejemplo, la adicción al tabaco y al cigarro, no existen evidencias que así haya sido.

*El gasto público en salud como porcentaje del gasto público total:* A decir de la OPS, (2012), el gasto público en salud como porcentaje del gasto público total, en el año 2010, fue del 15.3 y en porcentaje del Producto Interno Bruto (PIB) del 3.1. Este gasto público total, suponemos que incluyen los gastos directos y los gastos fiscales que el gobierno mexicano destina para atender al derecho a la salud.

### Los Rezagos en el Derecho a la Salud en México

Según cifras oficiales, (INEGI, 2010), en el año 2010, el 64.6 por ciento de la población es derecho habiente en los sistemas de salud del gobierno mexicano, mientras que el 33.8 por ciento, no lo es, lo que implica que existe un porcentaje considerable de la población mexicana que no encuentra amparo para atender sus enfermedades en centros hospitalarios y de que existe desabasto en medicinas, por lo que existe una propuesta de reforma a la ley general de salud, para corregir estas desviaciones, existe la propuesta de reformar la Ley General de Salud en México. (Gaceta Parlamentaria 3857-M, 2013) Como claroscuros de las herramientas fiscales para fortalecer el derecho a la salud, tenemos que no se prevén incentivos o exenciones para la compra de artículos destinados a la población que tiene discapacidad y que los servicios hospitalarios, de radiología, de laboratorios y estudios clínicos, no están exentos cuando los prestan los particulares, por lo cual se impide la plena realización del aludido derecho humano.

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# TURISMO, ACTIVIDAD ECONÓMICA QUE COADYUVA A ELEVAR LA CALIDAD DE VIDA DE LOS SONORENSES

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## RESUMEN

*El bienestar es el proceso tendiente a mejorar la calidad de vida de una población en un espacio territorial determinado, que comprende los aspectos económicos y sociales ligados al desarrollo de las capacidades de los individuos y a la expansión creciente de sus libertades. El objetivo de este artículo es evidenciar la importante participación del turismo como fuente generadora de desarrollo económico para el estado de Sonora, así como poner de manifiesto el impacto que dicha actividad puede tener sobre el bienestar económico y social de los sonorenses, si fuera sustentablemente maximizada su explotación.*

**PALABRAS CLAVES:** Turismo, Bienestar Económico, Bienestar Social, Turismo En Favor De Los Pobres

## TOURISM, ECONOMIC ACTIVITY WHICH HELPS TO RAISE THE QUALITY OF LIFE OF SONORENSES

### ABSTRACT

*Wellness is the process to improve the quality of life of a population on a given territory, which includes economic and social aspects related to the development of the capacities of individuals and the growing expansion of their liberties. The aim of this paper is to demonstrate the important role of tourism as a source of economic development for the state of Sonora, as well as to highlight the impact that the activity may have on the economic and social welfare of Sonora, if sustainably maximized their exploitation.*

**JEL:** 130, 131, 138

**KEYWORD:** Tourism, economic welfare, social welfare, tourism for the poor

### INTRODUCCIÓN

La prioridad para los gobiernos del mundo y específicamente de los países latinoamericanos ha sido que sus gestiones como líderes, contribuyan a mejorar el bienestar económico y social de sus ciudadanos, situación que no es ajena a México ya que sus gobernantes tienen como principal responsabilidad garantizar el pleno ejercicio de los derechos sociales consagrados en la Constitución Política de los Estados Unidos Mexicanos, asegurando el acceso de toda la población al desarrollo social". Considerando la importancia económica del turismo en la economía del país, es conveniente señalar que el impacto del turismo se mide, no sólo por la satisfacción de los turistas con los distintos servicios, calidad total, sino también por la contribución del turismo al bienestar económico y social de las regiones; ya que como señala

Camberos, (2011), la búsqueda de la satisfacción de las necesidades materiales y sociales crecientes de los individuos, las familias y los hogares para lograr el máximo bienestar ha sido el objetivo perseguido por todas las naciones a lo largo del desarrollo económico.

Por ello es necesario conceptualizar el termino bienestar, al respecto Huesca, Camberos, y Calderón, (2011) refieren el bienestar como un proceso tendiente a mejorar la calidad de vida de una población en un espacio territorial determinado, que comprende los aspectos económicos y sociales ligados al desarrollo de las capacidades de los individuos y a la expansión creciente de sus libertades. En este sentido, en el presente artículo se sustenta la idea de que el turismo puede contribuir a elevar el nivel de vida de los sonorenses, el desafío que se plantea es vincular el desarrollo del turismo en la lucha contra la pobreza, considerada esta como la ausencia de bienestar, en particular la pobreza extrema (pobreza alimentaria), a partir de estrategias integrales, incluyentes, sostenibles y participativas, mediante la construcción de una nueva ruta estratégica del turismo en Sonora.

### Panorama del Turismo a Nivel Mundial y Nacional

Según la Organización Mundial del Turismo, el turismo comprende las actividades que realizan las personas durante sus viajes y estancias en lugares distintos al de su entorno habitual, por un período consecutivo inferior a un año y mayor a un día, con fines de ocio, por negocios o por otros motivos. (wikipedia, 2011)

### Panorama Mundial del Turismo

La Secretaria de Turismo, SECTUR, (2013) señala que el turismo representa el 9% del Producto Interno Bruto (PIB) mundial con más de 1 millón de millones de turistas en 2012 y generó ingresos por un billón 75 mil millones de dólares en el mismo año. Según un comunicado de prensa de la OMT (2013), *en la ciudad de Madrid, la demanda turística internacional supero las expectativas en la primera mitad del 2013 llegando a un 5% durante la primera mitad de 2013, en comparación con el mismo periodo de 2012, llegándose a los casi 500 millones.* Los destinos turísticos del mundo recibieron en los seis primeros meses de 2013 alrededor de 494 millones de visitantes que pernoctaron, según la edición preliminar del *Barómetro OMT del Turismo Mundial*. Estas cifras significan un crecimiento del 5% o 25 millones de turistas internacionales más que en el mismo periodo de 2012. El crecimiento fue más significativo en los destinos de economías emergentes (+6%) que en las avanzadas (+4%), una tendencia que ha caracterizado al sector durante muchos años.

La Organización Mundial del Turismo (2013) en su libro llamado Panorama OMT del Turismo Internacional, señala lo siguiente:

- Las llegadas de turistas internacionales (visitantes que pernoctan) en todo el mundo superaron por primera vez en su historia los mil millones en 2012, 1.035 millones de turistas cruzaron fronteras frente a los 995 millones de 2011.
- La región de Asia y el Pacífico registró el mayor crecimiento de todas las regiones de la OMT con un incremento del 7% o, lo que es lo mismo, 16 millones de llegadas de turistas internacionales más. África obtuvo un aumento del 6%, equivalente a tres millones de turistas más, alcanzando por primera vez en su historia los 50 millones. Las Américas también experimentaron un crecimiento sostenido con un 5% de aumento en las llegadas, es decir 7 millones de llegadas más.

- En Europa, la región más visitada del mundo, que representa más de la mitad del total mundial, logró un aumento del 3% o 18 millones de llegadas. Oriente Medio (-5%) todavía no ha logrado retornar al crecimiento, a pesar de que algunos destinos tuvieron, de hecho, unos resultados bastante buenos y otros consiguieron una recuperación moderada.
- El crecimiento de los ingresos por turismo internacional, creció un 4% en términos reales, es similar al crecimiento de las llegadas.
- En 2012, los ingresos por turismo internacional alcanzaron 1 billón 75 mil millones de dólares de los EE.UU.
- En 2012 China se convirtió en el primer mercado del mundo en gastos por turismo internacional con 102.000 millones de dólares.

Se espera que el crecimiento continúe en 2013 con valores situados entre el 3% y el 4%, ligeramente por debajo del resultado de 2012 y en consonancia con las previsiones de la OMT a largo plazo. Por regiones de la OMT, las mejores perspectivas en 2013 son para Asia y el Pacífico (entre el 5% y el 6%), seguida de África (entre el 4% y el 6%), las Américas (entre el 3% y el 4%), Europa (entre el 2% y el 3%) y Oriente Medio (entre el 0% y el 5%). (UNWTO, 2013) La OMT, (2013) estima que para el 2020, Las llegadas de los turistas internacionales alcanzarán los 1000 millones, La industria turística generará uno de cada 12 empleos y que las llegadas internacionales puedan alcanzar los 1.600 millones, de estas llegadas en todo el mundo, 1.2 millones serán intrarregionales y 378 millones serán viajeros de largo recorrido.

En cuanto a las llegadas totales de turistas por regiones para el 2020, se estima que las tres primeras regiones receptoras serán Europa (717 millones, Asia Oriental y el Pacífico (379 millones) y las Américas (282 millones), seguidas por África, Oriente Medio y el Sur de Asia. Leclercq & Buchner, (2011) señalan en su escrito titulado “Turismo en favor de los pobres: Ampliación de oportunidades, reducción de la pobreza de los países en desarrollo a través del turismo”, que el Consejo Mundial de Viajes y Turismo prevé que el sector será uno de los que registre más rápido crecimiento a escala mundial entre 2011 y 2021, creando unos 66 millones de puestos de trabajo y contabilizando el 9,6% del PIB (a partir del 9,1%).

### Panorama Nacional del Turismo

Para muchos países del mundo, como España o Italia, el turismo se encuentra entre las primeras actividades económicas de importancia por su aportación al PIB y a la generación de empleo de dichas naciones; en especial en aquellos países ricos en recursos naturales y culturales, tal es el caso de México, donde el turismo significa uno de los sectores de la economía más importantes, ubicándose solo detrás de los ingresos petroleros y de las remesas de los mexicanos en el exterior. (Enríquez & Méndez, 2012) Datos del primer informe de actividades de la SECTUR (2013), describen, que de acuerdo a información publicada en junio de 2013, por la OMT correspondiente al cierre de 2012, que con excepción de Estados Unidos, México es el país más visitado del continente americano (23.4 millones de visitantes), al recibir 43% más turistas que Canadá, así como un 48% más turistas que los que llegan conjuntamente a Brasil, Argentina y República Dominicana.

México es uno de los tres países de la OCDE que mayores beneficios económicos obtiene de su actividad turística. La Industria turística en México emplea 2 millones 420 mil personas, lo que lo sitúa como el 8vo país de la OCDE cuya actividad turística emplea al mayor número de personas respecto de la ocupación total de cada nación. (International social Tourism Organisation, 2011).

Datos de la importancia del turismo para el 2012 nos indican que el sector turístico es la tercera fuente de ingresos para el país, México es el octavo país más visitado a nivel mundial; recibe más de 20 millones de turistas al año. (Actividades Económicas, 2011), y el primero más visitado en América Latina (C.C., 2012) El turismo contribuyó en el 2012 con el 8.5% del PIB nacional, su aportación al PIB generó 2.5 millones de empleos directos y 5.0 millones de indirectos. El porcentaje de participación del PIB turístico en el total nacional en México, es mayor al de países como Austria y Nueva Zelanda. (notimex, 2013).

En lo referente a estadísticas de la participación del turismo en la economía nacional para el 2013, el Instituto Nacional de Estadística y Geografía (INEGI) presento los resultados de los indicadores Trimestrales de la Actividad Turística (ITAT) para el trimestre de enero-marzo del 2013. En los resultados se pueden apreciar que el PIB Turístico creció 2.1% en términos reales respecto al mismo periodo de un año antes, producto del aumento en la demanda de los servicios turísticos. (Tabla 1)

En cuanto al Indicador Trimestral del Consumo Turístico Interior avanzó 2.2% comparado con el mismo trimestre del 2012. El consumo del turismo interno se incrementó 2.7%, en tanto que el del turismo receptivo disminuyó (-) 0.8 por ciento. (Tabla 1)

Tabla 6: Indicador Trimestral del PIB Turístico y Consumo Turístico Interior, Durante el Primer Trimestre de 2013. (Variación Porcentual Real Respecto al Mismo Trimestre de un Año Antes)

PIB Turístico			Consumo Turístico Interno		
Total	Bienes	Servicios	Total	Interno	Receptivo
2.1	(-2.6)	2.8	2.2	2.7	(-0.8)

(INEGI, 2013)

Según datos de SECTUR, (2013), entre enero y junio de 2013 la captación de ingresos por visitantes internacionales a México sumó 7 mil 119 millones de dólares. El gasto medio de los visitantes internacionales ascendió a 185.7 dólares durante los primeros seis meses de 2013. El mismo autor señala, que durante los primeros seis meses de 2013, el superávit de la balanza turística se ubicó en 3 mil 130 millones de dólares, como resultado de los ingresos generados que sumaron 7 mil 119 millones de dólares, y de egresos que alcanzaron un monto de 3 mil 989 millones dólares. Dicha cifra representó un incremento de 9.7% en comparación con el saldo de 2 mil 854 millones de dólares observado durante el primer semestre de 2012. (SECTUR, 2013)

#### Turismo, Actividad Económica Alternativa Que Coadyuva a Elevar la Calidad de Vida de los Sonorenses

La industria turística está adquiriendo un papel cada vez más importante en la economía mundial y en la particular de cada país. En el mundo desarrollado uno de sus principales atractivos radica en su gran potencial de generación de empleo, mientras que en los subdesarrollados, se le pudiera considerar como una solución rápida a su problema de atraso económico; de ahí que el enfoque de este artículo sea en pro de considerar al turismo como actividad económica complementaria que contribuya a mejorar la calidad de vida de los sonorenses. Brida, Pereyra, Such, & Pulina, (2012), señalan que uno de los temas más ampliamente estudiados y discutidos en la economía del turismo es la relación entre este sector y el crecimiento de una economía, tanto mundial, nacional como estatal. En la actualidad es ampliamente aceptado que el turismo tiene un efecto positivo en el desarrollo económico de largo plazo a través de distintos canales. Los mismos autores señalan, que el turismo es un sector que estimula otras actividades económicas industriales a través de efectos directos e indirectos.

Un incremento en el gasto turístico produce un aumento en la actividad de las industrias relacionadas, y la variación global será mayor que la inyección de gasto inicial. Considerando la importancia económica del turismo, es conveniente señalar que el impacto del turismo se mide, no sólo por la satisfacción de los turistas con los distintos servicios, calidad total, sino también la contribución del turismo al bienestar económico y social regional. El desarrollo del turismo sostenible es uno de los desafíos que actualmente enfrentan muchos países en el Hemisferio Occidental, para quienes puede constituir una herramienta eficaz para el combate a la pobreza, aunque si bien se reconoce que el turismo, como actividad generadora de riqueza, contribuye significativamente al crecimiento económico de muchos países, el crecimiento económico no necesariamente aumenta el bienestar.

Para la Organización de los Estados Americanos, OEA, el éxito en el mantenimiento de los beneficios de turismo para contribuir a la mitigación de la pobreza, sólo se puede lograr a través de la continua diversificación, innovación y actualización del producto de turismo, así como el fortalecimiento de capacidades e instituciones. (OEA, 2012) La Organización de las Naciones Unidas, (2012), establece que el concepto turismo a favor de los pobres es reciente; el Departamento para el Desarrollo Internacional (DFID) del Reino Unido acuñó la frase en los años noventa y varios Organismos de las Naciones Unidas la adoptaron en este siglo. (ONU, 2012)

Si bien hay algunas pruebas empíricas que apoyan el nexo entre crecimiento del turismo, la expansión económica y en general la reducción de la pobreza, la evidencia de esta relación en América Latina y el Caribe, en el mejor de los casos, es escasa. (OEA, 2012). En este contexto el pasado 14 de octubre del 2013, Sánchez Estrada, subsecretario de Planeación Turística de México, afirmó que el turismo es un poderoso instrumento para generar crecimiento económico y fortalecer el desarrollo de las regiones, Sánchez Estrada, destacó, que este sector es también un factor de igualdad que fomenta la inclusión y el desarrollo de grupos sociales en condiciones menos favorables. Estrada, manifestó que la Política Nacional Turística, instrumentada por el Gobierno de la República, tiene la finalidad de aprovechar el potencial turístico de México, generar una mayor derrama económica en el país, y hacer del turismo una verdadera palanca de desarrollo y bienestar social. (Notimex, 2013)

En este sentido, la finalidad del presente artículo es poner de manifiesto que Sonora cuenta con los elementos necesarios, para que a través de un adecuado aprovechamiento de sus recursos naturales, culturales, humanos, materiales; mediante el turismo, pueda contribuir a disminuir la pobreza que aqueja al estado, es decir, el desafío del artículo, es poner de manifiesto vínculos que evidencien el potencial que el turismo puede tener en la lucha contra la pobreza en Sonora, entendida esta como la pérdida de bienestar, en particular la pobreza extrema (pobreza alimentaria). En referencia al tema de la pobreza, Sonora ocupa el lugar número 30 a nivel nacional, (selección de más pobre a menos pobre), el 29.1 % de su población vive en pobreza, lo que equivale a decir que 821 mil personas sufren este mal social, por otro lado el 5.0% de los sonorenses viven en pobreza extrema, es decir, que 139 mil sonorenses no tienen ni siquiera para comer. Si analizamos estos números y los comparamos con los de Chiapas, estado que presenta el mayor número de pobres (74.7%. (3,782.3), las cifras no son tan alarmantes, pero el solo hecho de que aun exista en nuestra sociedad personas que mueren de hambre, debe de preocupar y ocupar a nuestras autoridades; en este sentido, el sector servicios, específicamente la actividad económica del turismo presenta una alternativa viable y real, mediante la cual el Estado puede contribuir a disminuir la pobreza. (INEGI, 2013). Desde esta perspectiva, la importancia del turismo en la generación de bienestar económico y social para los sonorenses no puede ni debe sobreestimarse.

Por otro lado, según datos del Informe sobre la pobreza rural 2011 del Fondo Internacional de Desarrollo Agrícola, (IFAD, 2011) dos tercios de quienes sufren pobreza o pobreza extrema viven en zonas rurales; en este sentido, Sonora tiene áreas de oportunidad para el desarrollo del turismo como fuente generadora de bienestar, ya que según datos del INEGI (2013), el 14% de la población del estado vive en áreas rurales, es decir 372,607 sonorenses, aunado a lo anterior, la Organización Mundial del Turismo, (2012), puntualizó, que las preferencias y gustos de los turistas han sufrido cambios, en la actualidad los turistas buscan atracciones culturales y naturales en zonas rurales, prefieren un turismo de contacto, basado en experiencias, lo que amplía el alcance de reducción de la pobreza en zonas con población menor a 2500 habitantes (áreas rurales). Por otro lado es importante mencionar que el turismo requiere un alto coeficiente de mano de obra y ofrece posibilidades de empleo incluso a personas poco calificadas, en este sentido, Sonora, presenta áreas de oportunidad que pueden ser utilizadas en pro de la población menos favorecida o vulnerable a pobreza de capacidades (Sen,1995) ya que el 3.04% de la población según datos del INEGI para el 2010, son analfabetas, el 33.51% de la población masculina esta en rezago educativo, así como, el 31.66% de la población femenina.

Además, la OMT, (2012) sostiene que, proporcionalmente, más mujeres desfavorecidas encuentran trabajo en el sector turismo, en este sentido, según datos del INEGI, (2013) en Sonora, el 49.7% de la población son mujeres, lo que representa un total de 1,322,868 fémias, de esas 447, 352 se encuentran laborando y el 74.73% lo hacen dentro del sector terciario. Por otro lado 41,791 mujeres sonorenses están desocupadas, ya sea porque no desean trabajar o por que buscan trabajo y no encuentran o bien porque, no existen oportunidades laborales acorde a sus capacidades, sea cual sea la situación, sin lugar a duda, las facilidades que ofrece el turismo para incorporar a este segmento tan discriminado en nuestra sociedad, son relevantes y deben de ser consideradas. (Rodriguez & Castro, 2004)

Esta dimensión de género puede ser particularmente importante: según el PNUD, los datos empíricos señalan que los países en desarrollo con menor desigualdad de género tienden a tener tasas de pobreza más bajas. El trabajo remunerado de las mujeres disminuye la desigualdad y la pobreza total. De hecho, la eliminación de obstáculos en la participación de la mujer en el empleo remunerado (como es típico en el sector del turismo) tiene un efecto mucho más fuerte sobre la pobreza y el crecimiento económico que la erradicación de la discriminación salarial. (International Labour Organization, 2013) Por otro lado, es bien sabido que Sonora tiene un gran potencial turístico, que de explotarse adecuadamente proveería de oportunidades excepcionales para la expansión del sector, con efectos multiplicadores en la economía y el bienestar regional. Pese a ello, es reconocido que esta industria está siendo subutilizada en el Estado y en consecuencia, no aporta todo el potencial que posee en generación riqueza y bienestar.

Sonora, es uno de los 31 estados que junto con el Distrito Federal conforman las 32 Entidades Federativas de México, colinda con los estados de Chihuahua al este, Sinaloa al sur y Baja California al noroeste; al norte comparte una extensa frontera con el estado de Arizona y una más pequeña con el de Nuevo México de Estados Unidos y hacia el oeste colinda con el Mar de Cortés o Golfo de California. El estado se divide en 72 municipios y ocupa el segundo lugar nacional en extensión (el primer lugar lo tiene Chihuahua), con un 9.2% del total del territorio mexicano. La población de Sonora representa el 2.4% de la población total nacional en el 2012. Sus principales actividades económicas son: minería, agricultura, ganadería y pesca. (Instituto Tecnológico de Estudios Superiores de Monterrey, 2010).

Gracias a su privilegiada ubicación geográfica, Sonora es considerado un gran destino turístico por su diversidad de paisajes, etnias, cultura y el color de sus hermosas playas que contrastan con

la majestuosidad del desierto, combinación difícil de encontrar en México, situación que privilegia áreas de oportunidad para posicionar a Sonora como uno de los destino turístico favorito de México para el mundo. Según datos de PROMEXICO, (2013), el turismo en Sonora, representa un motor de crecimiento económico y fuentes permanentes de empleo para sus habitantes. En el estado el servicio turístico es demandado principalmente por turistas de origen nacional, los cuales representaron el 89.8% de las visitas del 2012; siendo su estancia promedio de 1.7 días, similar a la de los visitantes extranjeros. Por su parte, los turistas extranjeros que visitan la entidad, tienen una estancia promedio de 1.59 días. En cuanto a la visita de turismo extranjero a Sonora, el estado tiene una evidente ventaja competitiva debido a que el estado cuenta al norte con una extensa frontera con los estados de Arizona y Nuevo México, Estados pertenecientes al territorio Estadounidense, país que según datos de la sector, (2011), es de donde provienen el mayor número de turistas extranjeros que visitan México (57.4%).

Según datos de la secretaria de egresos de Sonora, (2011), el turismo contribuyo con el 17.56% del PIB, lo que representa \$13,333.4 millones de pesos y genero un total de 55,616 empleos. Por mencionar algunos indicadores turísticos, se señala, que el gasto promedio de turistas nacionales en el 2011 fue de 789.50 pesos, por otro lado el gasto promedio de los extranjeros fue de 1,168.50 pesos. En el análisis de la afluencia turística para el mismo año, la secretaria de egresos de sonora, (2011), señala que fue de 3,304, 539 turistas nacionales en contra de 1, 188,965 internacionales; la estancia promedio de los turistas nacionales fue de 3.3 días y de los extranjeros de 3.4. La derrama económica generada por los turistas nacionales para el año en cuestión fue de \$8,609.7 millones de pesos, mientras que la generada por los turistas extranjeros alcanzo la cantidad de \$4,723.7 millones de pesos. En los siguientes párrafos se enlistan algunas de las razones por las cuales en Sonora, el turismo debe de ser considerado como un motor importante para contribuir a la reducción de la pobreza y por ende aumentar el bienestar, que se verá reflejada en una mejor calidad de vida de los sonorenses.

- *La Organización Internacional del Trabajo ha concluido que un empleo en el sector del turismo principal crea cerca de un puesto y medio de trabajo adicional (indirecto) en la economía asociada al turismo. (OIT, 2013).*
- *La mitad de los trabajadores del sector tienen 25 años o menos. Las mujeres constituyen entre el 60 y el 70 por ciento de la mano de obra del sector. (OIT, 2013).*
- *En el segmento de hotelería del sector a nivel mundial, hay en promedio un empleado por habitación de hotel. Asimismo, hay tres trabajadores que dependen indirectamente de cada trabajador de hotel. (International Labour Organization, 2013).*
- *Según un estudio realizado por el Foro Económico Mundial (FEM) sobre viajes y turismo, el sector del turismo genera la mayoría de los nuevos puestos de trabajo en los países en desarrollo, como es el caso de México. El turismo también es el principal exportador de servicios para varios países en desarrollo y tiene un gran potencial para brindarles ventajas competitivas. (Blanke & Thea, 2013)*
- *Los mismos autores señalan, que el turismo en los países en desarrollo está creciendo rápidamente, para un tercio de estos países, el turismo ya es la fuente de ingresos principal, así como también la principal fuente de divisas extranjeras en 46 de los 49 países menos adelantados. Asimismo, en más de 50 de los países más pobres del mundo, es el primero, segundo o tercer sector de la economía más importante. En comparación, el turismo representa entre el 3 y el 10 por ciento del PIB de las economías desarrolladas y hasta el 40 por ciento de la economía en los países en desarrollo.*
- *El turismo es una fuente básica de empleo y un eje importante de la economía, el mismo dispone de un gran potencial para contribuir aún más a la calidad de vida de las*

*personas de escasos recursos, sobre todo de aquellas que viven en los alrededores de los complejos turísticos. Al hacerlo, las empresas turísticas pueden contribuir con las metas económicas nacionales sin comprometer sus intereses comerciales. Lo que ayudaría al sector a mejorar su propia seguridad y su entorno operativo, y potenciar las opciones de actualización del producto y optimización de la calidad de la vivencia turística. (Ashley, Goodwin, Scott, & Chaves, 2006)*

- *Los mismos autores comentan, que el desarrollo turístico genera una mejor infraestructura: agua potable, mejores vías de acceso, drenaje, electricidad, telecomunicaciones, etc. El turismo puede contribuir a fomentar que las autoridades den acceso a las comunidades locales a estas facilidades.*

Como se puede ver, el estado de Sonora cuenta con los recursos, que lo potencializan como destino turístico de calidad, por lo que es importante considerar al turismo, cada vez más, como una fuente importante de crecimiento económico y generador de bienestar para la entidad, para ello se requiera que los tomadores de decisiones del estado y del país contribuyan en la generación de estrategias integrales, incluyentes, sostenibles y participativas, mediante la construcción de una nueva ruta estratégica del turismo en Sonora. Por último, es pertinente mencionar, que aun cuando los gobernantes están conscientes de la significativa contribución del turismo al crecimiento económico, hasta la fecha, el vínculo entre el turismo y la lucha contra la pobreza no ha sido bien enfocado en los planes de desarrollo de nuestro país. No obstante, como ya se mencionó anteriormente, el crecimiento económico no necesariamente reduce la pobreza. Del mismo modo, mientras que se han desarrollado muchos proyectos a pequeña escala para vincular a la lucha contra la pobreza con el turismo, la reducción de la pobreza a gran escala a partir del turismo depende de estrategias claras, consultadas, articuladas y supervisadas mediante planes estratégicos de reducción de la pobreza nacional.

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# CARACTERIZACIÓN DE LAS PRÁCTICAS DE TALENTO HUMANO EN EMPRESAS DEL VALLE DEL CAUCA

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## RESUMEN

*Las organizaciones de este siglo deben caracterizarse por su adaptación al medio en el que compiten, gracias a las habilidades que su talento humano coloca en práctica en el ejercicio de sus funciones. De allí la importancia de conocer a través de esta investigación, de tipo descriptivo, cómo la organización realiza los procesos de gestión de su talento humano, con el fin de definir acciones de mejoramiento tendientes a que ésta cumpla un rol verdaderamente estratégico. Al aplicar entonces el cuestionario a 25 empresas del Valle del Cauca se obtuvieron entre otros hallazgos, que la mayoría de las empresas cuentan con un plan estratégico formal pero no con uno de gestión humana; el rol del área de gestión humana sigue siendo operativo; no existe una cultura de atracción y retención de buenos talentos; y por tanto se hace necesario que las empresas adopten una visión más holística respecto a la forma de gestionar el talento.*

**PALABRAS CLAVES:** Talento humano, gestión, prácticas, desarrollo de personas.

## CHARACTERIZATION OF HUMAN TALENT PRACTICES IN COMPANIES OF VALLE DEL CAUCA

### ABSTRACT

*This century's organizations must be characterized for their adaptation to the field in which they compete, thanks to the skills that their human talent put into practice when exercising its functions. Hence the importance of knowing, through this descriptive-type research, how the organization carries out the management processes of human talent, in order to define improvement actions with the purpose for the latter to fulfill a strategic role. Then, when applying the questionnaire to 25 companies in Valle del Cauca, the result was that most of the companies count on a formal strategic plan but not one on human management; the role of human management area is still operational; a culture of attracting and retaining new top talents, doesn't exist; therefore it is necessary that the companies adopt a holistic vision in regards to the way of managing the human talent.*

**JEL:** M12, M53.

**KEYWORDS:** human talent, management, practices, development of people.

### INTRODUCCIÓN

El desarrollo histórico de la humanidad ha conllevado a cambios en todos los ámbitos: sociales, económicos, tecnológicos, culturales, entre otros; lo que directamente ha afectado a las organizaciones y su dinámica interna, pero sobre todo en lo relacionado con una de las áreas estratégicas de la organización, que es la de talento humano; pues de su gestión depende la sostenibilidad y competitividad de las organizaciones, pues en últimas son las personas, las que

hacen posible el logro de los objetivos organizacionales. A partir de allí, se identifican varios elementos que clarifican el rol estratégico del área de talento humano: la consideración de las personas como elementos decisivos en la competitividad de las organizaciones, la visión sistémica de la gestión del talento humano y la necesidad de que exista coherencia entre la gestión del talento humano y la estrategia organizacional. Surge así la necesidad de indagar acerca de cómo algunas organizaciones, en este caso 25 empresas ubicadas en el departamento del Valle del Cauca, pertenecientes a diferentes sectores económicos, llevan a cabo sus procesos de gestión del talento humano; además de la forma cómo su cultura está alineada con la estrategia del negocio, para así identificar aspectos de mejora que permitan, que el área de gestión humana deje su énfasis en lo operativo y asuma el rol estratégico que le corresponde.

Dentro de los hallazgos encontrados aparece que, las organizaciones objeto de estudio desarrollan la mayoría de actividades inherentes a los procesos de gestión del talento humano, como la permanencia y contratación de nuevos empleados; el reclutamiento a través de recomendaciones y referencias; la selección de los aspirantes preponderando sus capacidades para el puesto; la existencia de un plan estratégico de capacitación; y la utilización del salario fijo mensual como medio de pago. Sin embargo, se evidencia la necesidad de mejorar en algunos aspectos, entre los cuales se encuentran el establecimiento de programas de inducción formales; de niveles salariales acordes con las labores realizadas y el mercado; y el fortalecimiento de la capacitación del personal a través de convenios con entidades externas.

## **REVISIÓN LITERARIA**

Los referentes conceptuales de esta investigación se centran en la evolución de la gestión del talento humano y los aspectos relevantes del departamento del Valle del Cauca, ubicación de las empresas objeto de estudio.

### Evolución de la Gestión del Talento Humano

La evolución de la humanidad ha conllevado a cambios en la forma como las organizaciones de todo tipo conciben y gestionan el talento humano; a partir de modificaciones en la estructura organizacional y su manera de funcionar, como son la reducción, el outsourcing, las fusiones, el trabajo en red, el trabajo por procesos, los sitios alternativos de trabajo, los equipos autónomos y la flexibilidad laboral; que han permitido que las personas sean más autónomas, proactivas, automotivadas y con gran capacidad de logro. Esta nueva forma de trabajo ha sido el fruto del surgimiento de un sinnúmero de teorías organizacionales basadas en paradigmas que hacen énfasis en la tarea como en el caso de las teorías clásicas, especialmente la teoría de la organización científica de Frederick Taylor y la teoría de la organización industrial de Henry Fayol (Aktouf, 2002), en las que la racionalidad de la persona se concibe como el elemento dominante de la actividad humana, y por tanto como básico para la organización del trabajo, reduciendo en buena parte la concepción del hombre a la de homo economicus (Concepción consistente en plantear como hipótesis sobre la naturaleza humana, la simple creencia de que el ser humano solo está motivado e interesado por el deseo de maximizar racionalmente sus ganancias materiales (Aktouf, 2002, p.63)). Estas teorías se inclinaron por la organización formal, mecanizada, cerrada, que debía funcionar en forma estandarizada a partir de la definición estricta de tiempos, movimientos y herramientas de trabajo para lograr los objetivos sobre todo de productividad a partir de la gestión eficiente de las diferentes áreas organizacionales. Esta visión de lo formal no consiguió dar un trato sistémico al comportamiento humano y a la interacción de grupos y personas y mucho menos a la comprensión de los conflictos intraorganizacionales.

Dada la necesidad de volver a lo humano, es decir a entender a la persona en la organización como un ser social, surge la teoría de las relaciones humanas, a partir del experimento de Hawthorne, realizado por Elton Mayo entre 1928 y 1932, que ratifica que el ser humano es productivo según las relaciones que establezca éste con el grupo al cual pertenece y no tanto a las condiciones físicas de trabajo (Dávila, 2001). Así, inicia el surgimiento de una serie de teorías que dignifican al ser humano en las organizaciones, como individuo pensante que puede aportar al logro de los objetivos organizacionales y que necesita para dar su máximo rendimiento, de la motivación y el cuidado de la organización a la que pertenece (Chiavenato, 2006; Dávila, 2001 & Certo, 2001).

Sin embargo, las anteriores teorías fueron criticadas en parte por su excesivo romanticismo, colocando demasiado énfasis en la persona y dejando de lado el logro de los objetivos de la organización y surge entonces un nuevo paradigma “el enfoque sistémico”, gracias a las consideraciones de Ludwig Von Bertalanffy que plantea que “la organización es un sistema compuesto de partes que se interrelacionan para lograr un propósito y que sostiene una relación dual con el ambiente” (Chiavenato, 2006, p.37), es decir que es un sistema abierto y como tal, debe mantenerse en equilibrio para sobrevivir a través de la adaptación y cambio continuos. La convergencia de estas teorías desde el homo economicus de la escuela clásica, el homo social de la escuela de las relaciones humanas y finalmente el hombre complejo de la escuela sistémica y los enfoques modernos, lleva a considerar la importancia del talento humano en los diferentes escenarios y prácticas de la organización. Actualmente el talento humano se ha convertido en el valor diferencial por excelencia en las organizaciones. Lo que sabe una organización y cómo lo usa constituye la única ventaja competitiva. Es por ello que cada vez más las organizaciones giran en torno a las personas con talento y sus necesidades; porque lo que diferencia a una empresa de otra es su capital humano y lo fundamental es saber gestionar ese talento, a través de prácticas que permitan atraerlo, desarrollarlo y retenerlo.

### Estrategia Organizacional

La gestión del talento humano debe cumplir un rol estratégico en la organización con miras a aportar al direccionamiento estratégico de la misma, a partir del monitoreo de una serie de factores claves de éxito, que según Wheelen y Hunger (2007) “son variables que afectan significativamente la posición competitiva general de las empresas en una industria específica” (p.91). Estos factores son decisivos para determinar la capacidad de una empresa para tener éxito en esa industria; los cuales dependen usualmente de las características económicas del sector, así como de las armas competitivas sobre las cuales las empresas de la industria han desarrollado sus estrategias. Jean Paul Sallenave en su libro gerencia y planeación estratégica (2002), plantea que existen seis factores fundamentales que determinan la permanencia de toda organización (p. 58 – 59):

*El producto:* si una empresa nace y crece con un solo producto, lo más seguro es que ésta muera con él; es decir que una empresa que dedica sus esfuerzos a un solo producto, tiene menos probabilidad de supervivencia que una empresa que se diversifica (Sallenave, 2002).

*El mercado:* cualquier cambio en la demanda amenaza la supervivencia de la organización. Un aumento en la demanda, hace que la competencia incremente su capacidad, por ende su oferta, lo que exige a la organización igualar a sus pares a través de un incremento en el capital de trabajo; por el contrario, una disminución de la demanda, implica menores ventas y por tanto un decremento de ingresos para la organización (Sallenave, 2002).

*La tecnología:* un atraso tecnológico puede llevar a una organización a perder posición en el mercado frente a sus competidores, posiblemente debido a que no cuenta con el capital suficiente para adquirir nueva tecnología o implementar nuevos procesos; un adelanto tecnológico, puede tener también un efecto negativo, si el mercado no estaba preparado para asumir dicha innovación (Sallenave, 2002).

*La competencia:* una organización no puede asegurar su supervivencia a menos que la estrategia industrial nacional frente a la competencia extranjera se lo permita. Por tal razón, es importante que la organización identifique claramente tanto su competencia más directa, es decir quienes producen sus mismos bienes, como su competencia indirecta, es decir aquellas organizaciones que producen bienes sustitutos del suyo (Sallenave, 2002).

*El capital:* algunos factores colocan en peligro la supervivencia de la organización, como son el sobre endeudarse, financiando activos con deuda a corto plazo; la falta de capital de trabajo, especialmente en los sectores en crecimiento; el costo de capital demasiado elevado; y los conflictos entre accionistas que pueden afectar la inversión (Sallenave, 2002).

*El personal:* determinante de la supervivencia de la organización, quienes pueden ponerla en peligro, ya sea porque no se adaptan a los cambios, convirtiéndola en lenta y con poca capacidad de reacción; o porque sus exigencias en cuanto al mejoramiento de condiciones sociales y económicas, destruyen la viabilidad económica de la organización (Sallenave, 2002).

#### Aspectos Generales del Departamento del Valle del Cauca

El departamento del Valle del Cauca cuenta con una extensión territorial de 22.140 Km<sup>2</sup>. Está ubicado al suroccidente del país. Limita por el norte con Chocó, Caldas y Quindío; por el este con Quindío y Tolima; por el sur con Cauca y por el oeste con el océano Pacífico y Chocó; cuenta con una población, según datos reportados por el censo 2005 de 4.161.425 personas. Según la Oficina de estudios económicos del Ministerio de Comercio, Industria y Turismo (2010) la base económica del departamento está sustentada en la prestación de servicios, seguida por industria y por las actividades agropecuarias. Entre los servicios más importantes se encuentran: comerciales, transporte, banca y comunicaciones. La agricultura por su parte es tecnificada, siendo el producto más relevante la caña de azúcar; y otros como: caña panelera, sorgo, yuca, algodón, soya, maíz, café, palma africana y cacao. La ganadería es principalmente vacuna.

En lo referente al sector industrial (Ministerio de Comercio, Industria y Turismo, 2010) se destacan alimentos, particularmente el procesamiento de azúcar, la producción de químicos, farmacéuticos, plásticos y editoriales. Entre los principales productos de exportación se encuentran: el azúcar de caña o de remolacha; oro en bruto, semilabrado o en polvo; artículos de confitería sin cacao; neumáticos nuevos de caucho; papel y cartón para escribir sin estucar ni recubrir; café; medicamentos; coques y semicoques de hulla; acumuladores eléctricos; ácidos carboxílicos, halogenuros, peróxidos y sus derivados; hilos, cables y otros conductores aislados para electricidad; productos usados como jabón; preparaciones y productos de higiene bucal o dental; papel y cartón de uso doméstico o higiénico y papel y cartón kraft, sin estucar ni recubrir en bobinas o en hojas.

En cuanto a las importaciones (Ministerio de Comercio, Industria y Turismo, 2010) se tiene que los principales productos que se traen al departamento, son, en su orden: aparatos receptores de televisión; automóviles de turismo para transporte de personas; neumáticos nuevos de caucho; alambre de cobre; maíz; abonos minerales o químicos nitrogenados; azúcar de caña o de

remolacha; conservas de pescado, caviar y sucedáneos preparados; trigo y morcajo; vehículos para transporte de mercancías; aparatos para producción de frío y bombas de calor; sangre para usos terapéuticos; polímeros de etileno en formas primarias; motocicletas y ciclos con motor auxiliar; manzanas, peras y membrillos frescos.

## **METODOLOGÍA**

El proyecto se desarrolló aplicando tanto la metodología cualitativa como la cuantitativa. El estudio cualitativo permitió obtener información en profundidad sobre la situación de las empresas objeto de estudio, en materia de gestión del talento humano, y orientar así el diseño del cuestionario aplicable en el estudio cuantitativo. El estudio cuantitativo posibilitó a su vez, identificar el nivel de las prácticas de gestión del talento humano en dichas empresas, para definir las problemáticas presentes cuando se realiza dicha gestión. El tipo de estudio fue descriptivo y se utilizó técnica estadística de muestreo aleatorio simple. La información se obtuvo por medio de un cuestionario aplicado a una población de 25 empresas de diferentes sectores de la economía, siendo un 60% empresas de la ciudad de Cali. El cuestionario contenía información respecto al rol del área de talento humano como socio estratégico del negocio, y los retos y procesos en la gestión del talento humano; que fue aplicado a jefes de recursos humanos, asistentes de recursos humanos y directores administrativos.

### Proceso Metodológico

La metodología utilizada para conocer cómo las organizaciones objeto de estudio realizan los procesos de gestión de su talento humano contiene las siguientes fases:

Objetivo 1. Caracterizar las empresas objeto de estudio.

Revisión de documentos institucionales

Diseño de cuestionario, formatos de sistematización y entrevistas.

Objetivo 2. Establecer como se realizan los procesos de gestión del talento humano en las empresas objeto de estudio.

Aplicación del cuestionario.

Tabulación de la información.

Objetivo 3. Proponer mejoras en los procesos de gestión del talento humano con miras al cumplimiento de su rol estratégico dentro de la organización.

Análisis de la información.

Sistematización de la información.

Informe y conclusiones finales.

## **RESULTADOS**

La investigación realizada se obtuvo gracias a la participación de 25 empresas pertenecientes a los sectores: producción de baldosas, cerámicas, mármol y pisos industriales; comercialización, construcción y mantenimiento de redes de gas natural; producción de papel; servicio y equipos de aire comprimido; productos químicos para la industria y aseo general; fabricación de carrocerías para vehículos; servicios públicos; producción y comercialización de azúcar; servicio de alarmas

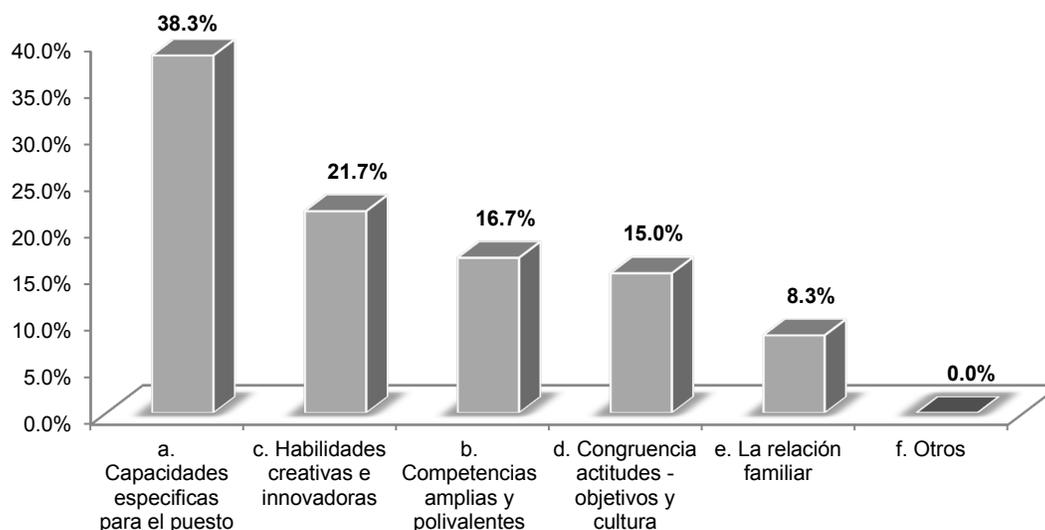
y sistemas de seguridad; supermercados; producción de grasas y productos; servicios de investigaciones de mercado; servicio de transporte; productos farmacéuticos para uso personal y hogar; y producción y comercialización de alimentos. Se presentan los hallazgos respecto a la forma como se llevan a cabo los procesos básicos del área de talento humano como son la incorporación, el desarrollo y la compensación.

### Incorporación

Pese a la situación económica de algunos sectores en la región, el flujo de empleados en las empresas encuestadas presentó el siguiente comportamiento durante los últimos tres años: en el 44% de las empresas permaneció igual, en un 35% de ellas aumentó y solo disminuyó en el 4% de las mismas.

Antes de hablar de reclutamiento es necesario abordar lo relacionado con el **diseño de cargos**, encontrándose que el 41.4% de las empresas participantes cuentan con un manual de funciones; que permite definir claramente las responsabilidades de cada puesto de trabajo. Al abordar el proceso de **reclutamiento** se encuentra que alrededor del 20% de las empresas utilizan las recomendaciones y referencias para cubrir tanto las vacantes de nivel directivo como las de otro tipo de profesionales. Una vez que se ha llevado a cabo el proceso de reclutamiento, se procede a la **selección** del personal, encontrándose que para el 38.3% de las empresas, los aspectos más relevantes a considerar en este proceso son las capacidades específicas para el puesto y que para el 21.7% son las habilidades creativas e innovadoras.

Figura 1: Aspectos Relevantes a Tener En Cuenta en la Selección de Personal



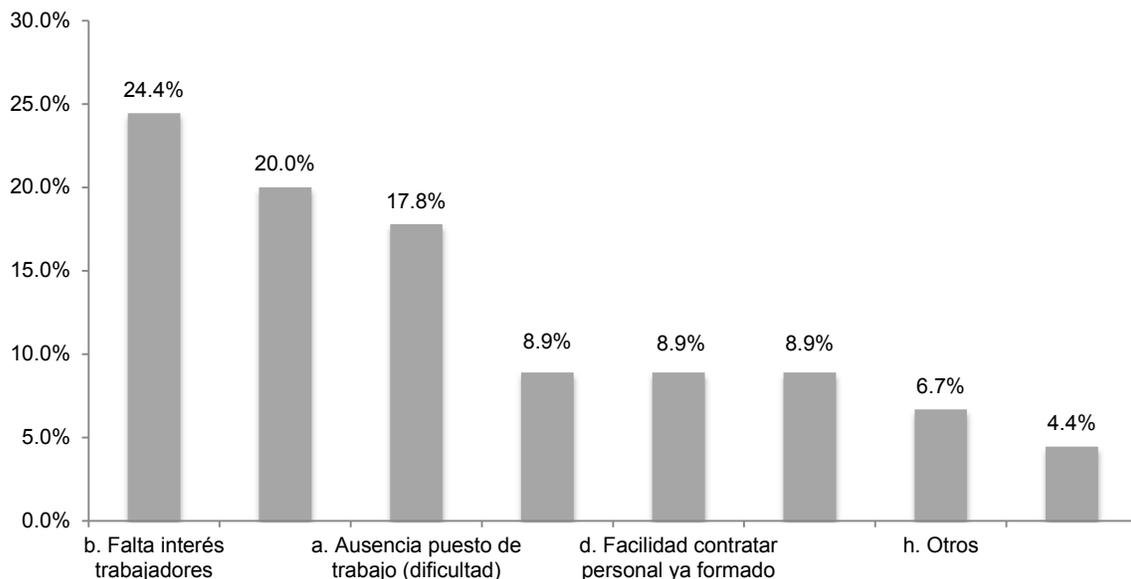
En esta figura se muestra qué aspectos son importantes en la selección del personal para las áreas de talento humano de las empresas objeto de estudio. La intención es evidenciar que es prioritario para estas empresas, al momento de seleccionar un candidato para un puesto determinado; dado que de dicha selección depende que se elija la persona idónea y que su desempeño sea el esperado, superando las expectativas. Se encuentra que para estas empresas, los aspectos más relevantes para seleccionar el personal, son en su orden: las capacidades específicas para el puesto, las habilidades creativas e innovadoras, las competencias amplias y polivalentes, la congruencia actitudes – objetivos y cultura, y la relación familiar. Fuente: Elaboración propia con base en los datos recolectados.

Una vez seleccionado y contratado el personal, se procede a realizar el proceso de **inducción**, hallando que el 64% de las empresas tienen un programa de inducción definido, mientras que el 16% carecen de éste.

### Desarrollo

Un 56% (15) de las empresas encuestadas manifestó tener un plan estratégico de capacitación, que orienta los esfuerzos en este aspecto, y de éstas solo el 21.4% tienen a su vez un plan de carrera y un plan de formación. Respecto al análisis de las herramientas utilizadas por las empresas participantes para el desarrollo del talento, se tiene que solo el 44% de las empresas cuenta con programas de formadores internos. En lo referente a los temas predominantes en las capacitaciones, se encontró que el 47.6% de las empresas forman en conocimientos técnicos y el 31% en lo relacionado con los comportamientos y competencias deseadas. Al averiguar acerca de los obstáculos que existen para llevar a cabo dicha formación, el 24.4% de las empresas consideran que es la falta de interés de los trabajadores y el 20% de las empresas, los costos elevados de la formación.

Figura 2: Obstáculos Existentes Para Realizar la Formación en la Organización



*En esta figura se muestra qué obstáculos se presentan en cada una de las empresas objeto de estudio para realizar la formación del personal; encontrándose que entre los principales están: la falta de interés de los trabajadores, los costos elevados de la formación, la ausencia o no existencia del puesto de trabajo, la dificultad en el desplazamiento del personal, la facilidad para contratar personal ya formado, y el no percibir resultados a corto plazo. La importancia de analizar este aspecto, radica en el*

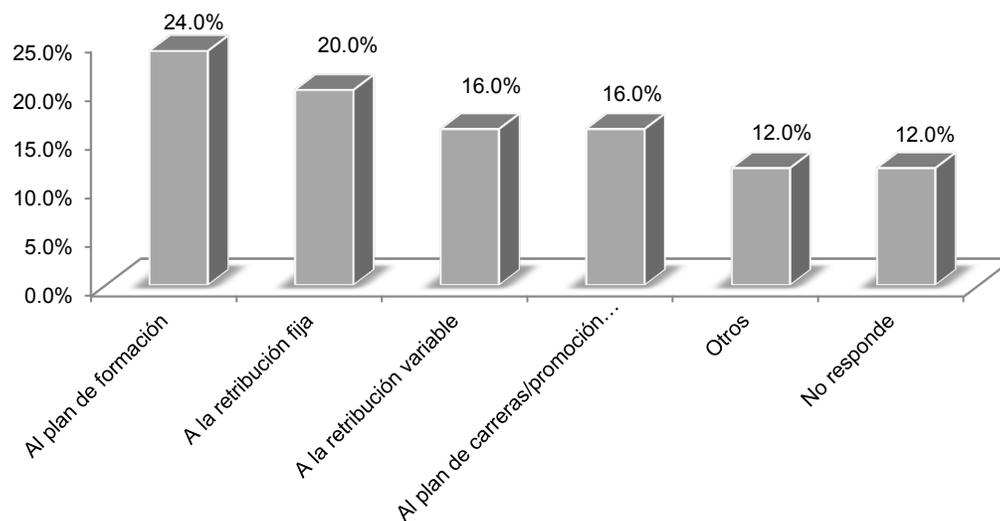
*impacto que tiene la formación del personal de una empresa en el logro de los objetivos organizacionales, y a su vez en la generación de mayor compromiso con la organización. Fuente: Elaboración propia con base en los datos recolectados.*

### Compensación

Las empresas participantes dieron cuenta de los sistemas de compensación que han implantado, destacando que el sistema más utilizado para retribuir tanto al nivel directivo, como medio y operativo es el sistema tradicional o salario fijo mensual. Así, el 36% de las organizaciones utiliza este sistema de compensación para el nivel directivo, el 16% una combinación entre el sistema tradicional y variable y el otro 16% mezcla el tradicional, variable y flexible. Se evidencia también que el sistema de compensación variable es utilizado por empresas que tienen un número considerable de empleados y un número mínimo de empleados; es decir que las empresas más propensas a establecer este tipo de incentivos son las que tienen más de 251 empleados y las que cuentan con un rango entre 10 y 50 empleados. Lo anterior se explica en el primer caso, por ser instituciones con un bagaje y experiencia que les permite adoptar formas diferentes de compensación; y en el segundo caso, porque son organizaciones pequeñas, cuya flexibilidad les permite adaptarse fácilmente a las nuevas condiciones del entorno, que incluyen nuevas formas de contratación y de remuneración.

La compensación necesariamente va de la mano con la **evaluación del desempeño**, verificando que un 68% de las empresas participantes cuentan con un método que les permite evaluar las tareas desempeñadas. El resto de las empresas lo hacen de manera informal o simplemente no cuentan con una herramienta que les permita evaluar el desempeño de los colaboradores. Sin embargo, de las empresas que si evalúan el desempeño de los colaboradores, el 60% manifiesta que utilizan indicadores de gestión objetivos mientras que el 40% plantean que no. El hecho de que la evaluación de desempeño esté ligada al sistema de recompensas o compensación de la empresa, tiene como fin reforzar los comportamientos que conducen a un buen desempeño. Como se muestra en la figura 3, la mayoría de las empresas participantes vinculan la evaluación del desempeño al plan de formación (24% de las empresas) y a una retribución fija (20%); resultados lógicos cuando se trata de utilizar la evaluación de los colaboradores para fomentar su participación y compromiso para con la organización.

Figura 3: Aspectos con los Cuales Está Vinculada la Herramienta Formal de Evaluación del Desempeño en la Organización



*En esta figura se muestra cuáles son los aspectos a los que está vinculada la herramienta formal de evaluación de desempeño en las organizaciones objeto de estudio. En la mayoría de ellas, el desempeño está vinculado al plan de formación del colaborador, seguido de la retribución, ya sea bajo la modalidad fija o variable y al plan de carrera o promoción interna existente. Se dimensionó la necesidad de indagar al respecto, dada la relación directa que existe entre formación, desempeño y retribución del personal de una organización. Fuente: Elaboración propia con base en los datos recolectados.*

## CONCLUSIONES

El reclutar personal a través de recomendaciones y referencias conlleva a un menor nivel de incertidumbre, dado el conocimiento previo que se tiene de la persona que es referenciada. Se evidenció que algunas empresas poseen programas de inducción solo para directivos o carecen de él. Aspecto que debe mejorarse dada la importancia de este proceso no solo para dar a conocer la organización sino también iniciar el lazo de conexión con el nuevo colaborador. Muchas empresas deben establecer criterios para determinar los rangos de los puestos de trabajo, así como los niveles salariales, factor determinante para la promoción del personal y la competitividad de la empresa para atraer talentos.

Las empresas participantes deben asegurar la relación directa existente entre los métodos para evaluar el desempeño y el sistema de clasificación de los puestos de trabajo; pues al estar bien definidos, se pueden determinar los niveles salariales y así mismo los criterios de evaluación de desempeño para futuras modificaciones en los puestos de trabajo y argumentos para la toma de decisiones en lo referente a capacitaciones y promociones del personal. En las empresas analizadas la formación está dejando de ser una actividad operativa para convertirse en un factor estratégico, de importancia relevante para el desarrollo organizacional, pues el 56% de ellas cuentan con un plan estratégico de capacitación. Por su parte, en lo que se refiere a las posibilidades de capacitación del personal, se encuentra que aunque existen posibilidades de convenios para desarrollar capacitaciones de diversa índole, las empresas no acuden mucho a éstos. Evidencia que permite establecer acciones conducentes a fortalecer los apoyos que brinda entidades como el SENA, y a desarrollar el talento a través de un mayor uso de los llamados “formadores internos”, colaboradores dispuestos a servir de mentores, fortaleciendo a su vez el trabajo en equipo y la promoción del personal.

Las empresas participantes reconocen la importancia de formar a los colaboradores, sin embargo, no se cuenta aún con herramientas suficientes para evaluar el impacto de la formación en las

tareas diarias de cada empleado. Cuando se evidencia que uno de los mayores obstáculos para realizar la formación del personal es la falta de interés del trabajador, se ratifica la importancia de la motivación, como factor que impacta directamente en el clima organizacional y que es reconocido por el 52% de las empresas objeto de estudio. Las empresas que más acogen el sistema de compensación variable son las que tienen un número considerable de empleados (más de 251) y un número mínimo de empleados (entre 10 y 50). Lo anterior se explica en el primer caso, por ser instituciones con un bagaje y experiencia que les permite adoptar formas diferentes de compensación; y en el segundo caso, porque son organizaciones pequeñas, cuya flexibilidad les permite adaptarse fácilmente a las nuevas condiciones del entorno, que incluyen nuevas formas de contratación y de remuneración. En suma, los resultados de la investigación permiten concluir que las empresas necesitan tener una nueva visión (estratégica) en la forma de gestionar el talento, que permita asegurar y mejorar su actual capacidad competitiva en un entorno empresarial tan cambiante.

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## RECONOCIMIENTO

Esta ponencia se escribe a partir de la investigación “Prácticas de talento humano en las empresas del sector alimentos del Valle del Cauca” realizada durante los años 2010 y 2011, donde también participaron como investigadores los profesores Juan Carlos Aguilar Joyas y María Eugenia Torres Valdivieso, de la Facultad de Ciencias Económicas y Administrativas de la Universidad Autónoma de Occidente de Cali, Colombia.

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# HISTORIA INDUSTRIAL Y EMPRESARIAL DEL OCCIDENTE DE MÉXICO: PROYECTO DE SEMINARIO PERMANENTE

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## RESUMEN

*En México y en general en América Latina se ha avanzado muy lentamente en el desarrollo de la historia económica a través de sus disciplinas la historia empresarial y de empresas, sin embargo, los pocos estudios realizados en México reflejan el interés por conocer las historias de algunas de las grandes empresas mexicanas que existen o existieron y que marcaron en gran medida el avance económico, político y social de nuestro país. Con éste propósito se propone la realización de un seminario permanente sobre Historia Industrial y Empresarial para exponer los casos exitosos de empresas visto desde diversos aspectos y enfoques; así mismo, también se analizarán los casos de fracaso empresarial los cuales aportarán importantes enseñanzas para que los participantes puedan proponer soluciones a los problemas empresariales actuales.*

**PALABRAS CLAVE:** Historia Empresarial, empresas, éxito empresarial.

## INDUSTRIAL AND BUSINESS HISTORY THE WEST OF MEXICO: PERMANENT PROJECT SEMINAR

### ABSTRACT

*In Mexico and Latin America in general has been slow progress in developing economic history through its corporate history disciplines and companies, however, the few studies reflect the interest to know the stories of some of the large companies Mexican exist or existed and that marked progress largely economic, political and social development of our country. With this purpose we propose the realization of a permanent seminar on Industrial and Business History to expose business success stories seen from various aspects and approaches, etc., and also analyze the cases of business failure which provide important lessons for participants to propose solutions to current business problems.*

**JEL:** N86, N96

**KEYWORDS:** Business History, Business, Business Success

## INTRODUCCIÓN

Desde hace bastantes años, las principales escuelas de negocios en el mundo han implementado una serie de medidas para rescatar la historia industrial y empresarial de sus países ante la certeza de que conocer las experiencias de industrias, empresas y empresarios permitirá a no solo a las Universidades, tomadores de decisiones o empresarios, analizar y realizar propuestas a partir de hechos problemáticos a los que una empresa, un industrial, un capitalista o un empresario han tenido de que enfrentarse. Para ello, estas escuelas de negocios han creado cursos, diplomados así como la edición de revistas especializadas en este tema. Quizá la más representativa o importante

de todas ellas sea la de Harvard que desde 1926 edita el Business History Review. Además tiene un centro de estudios sobre las empresas y los empresarios que publica la revista Explorations in Entrepreneurial History.

Con éste avance de iniciativas, es que se pretende realizar un Seminario Permanente sobre la Historia Industrial y Empresarial en el Occidente de México, con el objetivo de abonar al estudio de las experiencias de industrias, empresas y empresarios, acotándolo en un principio al Occidente de México y continuando quizá a largo plazo con las demás regiones, con el que se propone transmitir el conocimiento de éstas experiencias a los participantes y que se genere conocimiento nuevo de innovación y de gestión empresarial para el éxito de las empresas e industrias existentes.

En los siguientes apartados se expondrán algunos de los antecedentes de la historia empresarial y, posteriormente se presentan argumentos que sustentan la propuesta. También se mostrarán algunos de los temas ya seleccionados organizados del tal forma que se puedan cubrir los campos del conocimiento que se ofertan en el Centro Universitario de Ciencias Económico Administrativas de la Universidad de Guadalajara, tratando de cumplir con el principio de la vinculación Universidad-Empresa. Finalmente se mencionarán algunos de los resultados esperados.

#### Antecedentes del Estudio Empresarial

En la segunda mitad del siglo XX este campo de investigación se desarrolló con más profundidad en países como Inglaterra, Alemania, Francia, Italia y España. Posteriormente en Latinoamérica tomó auge este tipo de trabajos, destacando en particular el caso de Argentina. En México este proceso ha sido más lento aunque en los últimos años han aparecido importantes trabajos de investigadores como Carlos Marichal y Mario Cerutti que han influido en otros historiadores por lo que este campo de investigación se ha fortalecido de manera notable y ejemplo de ello son algunas asociaciones de investigadores especializados en el tema. Para el caso de Jalisco a pesar de la relevancia de muchas de sus industrias y empresas, los estudios respecto a estos temas son muy escasos y no se vislumbra desafortunadamente, un cambio en esta tendencia. En este sentido y como bien menciona Marichal (2007) en las universidades públicas y privadas debe promoverse la investigación sistemática sobre la historia de las empresas mexicanas y utilizar la valiosa bibliografía existente para la docencia.

Estamos ciertos del potencial de temas que se pueden investigar respecto a la historia de la industria y las empresas en Jalisco. Por ejemplo, a la fecha no se tiene registrado algún estudio sobre la industria azucarera del estado o de la industria lechera, del trigo, del transporte, de la construcción, de la cervecera, de la maquila, telefónica, etc. etc. etc. En Jalisco han existido y existen una gran cantidad de empresas que han dejado profunda huella en la vida de muchos de los habitantes pero desconocemos su historia como Embotelladora la Favorita, Chocolatera Ibarra, Calzado Canadá, Motorola, Grupo Urrea, Dulces de la Rosa, Albarrán, Euzkadi, panificadora El Panqué, Farmacias Guadalajara, etc., etc., etc. Y qué decir de empresarios e industriales? La lista quizá sea más grande que las dos anteriores.

Es aquí, donde surge la necesidad, de estudiar a profundidad desde diferentes perspectivas el éxito o fracaso empresarial, analizando si la planeación administrativa, la planificación fiscal, el entorno económico, la gestión política del momento o el uso de la ley aplicable en su momento, fueron factores que le permitieron acceder a mercados más competitivos y contar con un lugar privilegiado en la historia.

No así, los casos de empresarios y empresas que no fueron prósperos tendrán también su enseñanza y su experiencia, la cual fortalecerá el aprendizaje de las buenas o malas prácticas empresariales que contribuyan a forjar nuevas generaciones exitosas de empresas. Es por ello, que reviste de especial importancia llevar a cabo la presentación de estos estudios de caso y darlos a conocer, al menos dentro de la comunidad de alumnos de CUCEA, que les permita reforzar su aprendizaje y formación profesional.

### Objetivos de Crear un Seminario Permanente de Historia Industrial y Empresarial

La creación de un Seminario Permanente de Historia Industrial y Empresarial podrá generar la difusión de las investigaciones sobre las historias de empresas, empresarios e industrias con el propósito de que los interesados, sean alumnos del CUCEA, investigadores o tomadores de decisiones de las empresas, encuentren en ellas numerosos ejemplos ya sea de éxito o de fracaso y con ello analizar a través de la metodología del estudio de caso las circunstancias particulares que vivieron cada uno de ellos para que de esta forma tengan diferentes perspectivas al momento de realizar su investigación o proyecto de investigación contribuyan con propuestas y planteamientos que resuelvan los problemas empresariales actuales. Con la realización de este Seminario se propiciará la investigación pues se crearán centros de investigación, se promoverá la extensión del conocimiento en todas sus áreas, se publicarán libros con los trabajos desarrollados y se ampliará la gama de bibliografía en la materia.

### Temática

Los temas generales con los que se propone abordar este seminario permanente serán aquellos relacionados con la gran empresa y de sus empresarios, de la industria, de las Pymes y de aquellos casos de éxito empresarial que han sido importante influencia de la región, de la economía o que han propiciado la innovación en donde no existía; aquellas que han generado un impacto ambiental positivo, aquellas que han sabido incluir la Responsabilidad Social Empresarial en su quehacer diario y hasta aquellas que han sido influenciadas políticamente pero que han impactado económicamente en su región.

### **METODOLOGÍA**

Se iniciará convocando a un encuentro nacional sobre La Historia de la Empresa y la Industria en México para reunir a los investigadores más destacados en el tema y a través de sus ponencias conozcamos los avances que se han logrado en los últimos años en este campo de investigación. Se buscaría traer como invitados a dos de los más destacados profesores nacionales que han sido iniciadores o pilares en este tipo de estudios para que impartan una conferencia magistral de inauguración y de clausura del evento. (Carlos Marichal, Mario Ceruti, Leonor Ludlow, Manuel Miño, Sandra Kuntz).

En las reuniones mensuales del Seminario, se tiene contemplado combinar para una sesión a un investigador consolidado y en la siguiente a otro que va iniciando con ideas y propuestas novedosas pues este seminario tiene como objetivo también, el de cobijar y dar oportunidad a nuestros jóvenes estudiantes de posgrado. Hasta el momento, tenemos a cinco investigadores que han aceptado presentar sus estudios de caso con temas sobre la industria azucarera en Ameca, la textil en Tepic, sobre la minería en el estado de Jalisco, la historia actual de un exitoso empresario

del diseño de modas del vestir y otro más sobre las Pymes en Jalisco desde la perspectiva del pago de impuestos. Cada estudio de caso se publicará como libro con una extensión de 70 a 80 cuartillas. Se pretende que haya una publicación constante que con el tiempo llegue a formar una colección titulada “Historia Industrial y Empresarial del Occidente de México”. Las obras podrían ser editadas exclusivamente por CUCEA o bien, coeditadas con una o varias instituciones.

### Colaboración Interinstitucional

Este proyecto puede ser llevado a cabo exclusivamente por CUCEA pero en términos cualitativos su impacto y difusión se incrementará considerablemente si se establece un convenio de colaboración con otras instituciones como la Cámara de Comercio de Guadalajara, la Secretaría de Cultura del Estado de Jalisco y con otras Universidades.

### **RESULTADOS ESPERADOS**

*Aportación a la ciencia con trabajos originales de investigación en el área de la historia industrial y empresarial. Participación de investigadores reconocidos en el ámbito académico, aportando sus experiencias en el estudio de la historia empresarial, lo cual será de gran utilidad a los estudiantes sobre todo a nivel posgrado que preparan sus tesis de investigación. Publicación de los trabajos presentados que integrarán una colección titulada “Historia Industrial y Empresarial del Occidente de México”. Difusión a través de entrevistas en estaciones de radio, televisión Fomentar en los estudiantes de las carreras afines a los negocios a incursionar en los procesos de investigación. Establecer relaciones de trabajos interinstitucionales e interdisciplinarios entre los distintos académicos que participen en los seminarios.*

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# EXPORTACIONES HORTOFRUTÍCOLAS MEXICANAS EN EL TLCAN: ¿VENTAJA COMPARATIVA?

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## RESUMEN

*Este artículo observa algunos de los obstáculos que el subsector exportador Mexicano de frutas y verduras enfrenta en el marco Tratado de Libre Comercio de América del Norte. Los beneficios y dificultades que la política comercial norteamericana genera en el desempeño del sector exportador agrícola mexicano son analizados bajo el argumento de que la ventaja comparativa por dotación de factores no es la explicación al comportamiento de las exportaciones agrícolas mexicanas hacia Estados Unidos, éste depende en mayor medida de la economía política del sector que de las condiciones de mercado, la productividad y la competitividad de los productores de ambos países.*

**PALABRAS CLAVE:** ventaja comparativa, comercio de frutas y verduras, TLCAN

## Mexican horticultural exports in NAFTA: comparative advantage?

### ABSTRACT

*This article analyzes some of the problems faced by the Mexican fruit and vegetable exports sub-sector under the NAFTA. The American trade policy generates a series of advantages as well as difficulties to the Mexican agricultural exporting sector; these are analyzed based on the argument that comparative advantages do not explain the behavior of Mexican agricultural exports to the United States. Such behavior depends largely on the political economy of the sector and not so much on market conditions or producers' productivity and competitiveness in both countries.*

**JEL:** L11, L17, M11, M21, M31

**KEYWORDS:** comparative advantage, fruit.

### INTRODUCCION

El supuesto de que los subsectores exportadores no competitivos frente a su símil de un país distinto deben desaparecer para abaratar costos internos, atender a la demanda y disminuir precios locales parece no Cumplirse en procesos de intercambio de algunas mercancías agrícolas entre México y Estados Unidos. Como explicaremos más adelante, la ventaja comparativa que México puede explotar gracias a su dotación de factores, su ubicación geográfica, la productividad de los cultivos de exportación y la rentabilidad de los mismos no está siendo suficientemente aprovechada gracias a las reglas de intercambio entre ambos países en el marco del TLCAN. Algunos de los productos que Estados Unidos produce no tienen ventaja comparativa capaz de limitar el flujo de entrada de los productos mexicanos, y sin embargo, las Exportaciones mexicanas se enfrentan a múltiples restricciones que desvanecen sus posibilidades de incrementar

tanto el flujo de mercancías como la ganancia derivada del libre comercio. La situación del comercio agrícola mexicano no es particular, se desarrolla dentro de la lógica de funcionamiento del comercio mundial de este sector. Una de las principales características del actual comercio mundial de frutas y legumbres es la contra estacionalidad de país a país. and vegetable trade, NAFTA.

### **REVISIÓN DE LITERATURA**

El concepto tradicional de ventaja comparativa implica que la dotación natural de factores para la producción de ciertas frutas y legumbres en Estados Unidos genera altos costos de producción durante todo el año, razón por la que México presentaría una ventaja comparativa sobre tales productos. Sin embargo, aún cuando en México los costos de producción tiendan a ser menores e incluso similares (sin contar los costos de transporte), la organización del mercado hortícola, en el marco del Tratado de Libre de Comercio de América del Norte (TLACAN), impiden que esto se cumpla. México exporta los mismos productos en otra época del año y pueden resultar de igual precio, e inclusive con menor valor agregado. Las externalidades (la tecnología principalmente) juegan aquí un papel importante, puesto que el comercio se realiza con base en condiciones exógenas al mercado.

Estas condiciones se refieren a que el flujo de intercambio de mercancías no depende del todo de la cantidad demandada y ofertada, las determinaciones de la política para el sector exportador de los países participantes pueden afectar el proceso de intercambio. Si observamos la composición del comercio mundial hortofrutícola se explican las tendencias mencionadas en cuanto a que las ventajas comparativas no son las que rigen totalmente este segmento. Lo más destacable es la contraestacionalidad del comercio, en el sentido de la asignación de factores y dotación de tecnología. Son precisamente estas contratendencias las que han motivado la amplia gama de controversias dentro del comercio agrícola regulado, entendiéndolo el problema dentro de la determinación de las ventajas comparativas por dotación de factores naturales. Es decir, los países pueden ser productores, consumidores, exportadores e importadores de un mismo producto en distinta época del año, a pesar de que “naturalmente” no estén dotados para generar la oferta suficiente e inclusive excedente exportable.

Una forma de protección de estos subsectores no competitivos, que generalmente se refieren a hortalizas, es la legalización de las barreras no relacionadas directamente con la productividad de la actividad. Al existir una clara y amplia brecha de ésta entre exportaciones e importaciones, la política tributaria de “gravar la calidad” del producto es un instrumento que en el pasado salía de las reglas del comercio mundial, pero que desde la Ronda de Uruguay de 1994 se ha discutido como forma de “legalizar” esta baja competitividad. Con relación al tema de la arancelización, abordado en el apartado anterior, encontramos que la Organización Mundial de Comercio trata de legalizar estas prácticas de las barreras no arancelarias que se deben, en palabras de COOK (1998) “a los diferentes niveles de relativa competencia entre productores de un producto similar o igual durante la misma estación” .

En este contexto, las principales características del comercio hortícola México-Estados Unidos, son resultado de los problemas derivados de la tendencia mundial a la contra estacionalidad. Esta última es responsable de la modificación de la ventaja comparativa de ambos países basada en la tecnología disponible y, el control de los mecanismos de comercialización. La ventaja comparativa El concepto tradicional de ventaja comparativa implica que la dotación natural de factores para la producción de ciertas frutas y legumbres en Estados Unidos genera altos costos de producción durante todo el año, razón por la que México presentaría una ventaja comparativa sobre tales productos. Sin embargo, aún cuando en México los costos de producción tiendan a ser

menores e incluso similares (sin contar los costos de transporte), la organización del mercado hortícola, en el marco del Tratado de Libre de Comercio de América del Norte (TLACAN), impiden que esto se cumpla. México exporta los mismos productos en otra época del año y pueden resultar de igual precio, e inclusive con menor valor agregado. Las externalidades (la tecnología principalmente) juegan aquí un papel importante, puesto que el comercio se realiza con base en condiciones exógenas al mercado. Estas condiciones se refieren a que el flujo de intercambio de mercancías no depende del todo de la cantidad demandada y ofertada, las determinaciones de la política para el sector exportador de los países participantes pueden afectar el proceso de intercambio. Si observamos la composición del comercio mundial hortofrutícola se explican las tendencias mencionadas en cuanto a que las ventajas comparativas no son las que rigen totalmente este segmento. Lo más destacable es la contra estacionalidad del comercio, en el sentido de la asignación de factores y dotación de tecnología. Son precisamente estas contra tendencias las que han motivado la amplia gama de controversias dentro del comercio agrícola regulado, entendiendo el problema dentro de la determinación de las ventajas comparativas por dotación de factores naturales. Es decir, los países pueden ser productores, consumidores, exportadores e importadores de un mismo producto en distinta época del año, a pesar de que “naturalmente” no estén dotados para generar la oferta suficiente e inclusive excedente exportable. Uno de los temas de mayor conflicto en el intercambio agrícola entre México y Estados Unidos es el comercio de hortalizas de invierno. Históricamente, el destino de las exportaciones hortícolas mexicanas ha sido el mercado de Estados Unidos.

Concentradas en los llamados vegetales de invierno por sus ventajas comparativas, las exportaciones mexicanas han sido una de las principales proveedoras de frutas y verduras en fresco. Antes de 1961 Cuba era el principal proveedor de frutas y verduras frescas (tomates y pepinos). A partir de la imposición del embargo norteamericano hacia la isla en ese año, México se convirtió en el proveedor de más de la mitad del consumo total de vegetales y melones, la mayoría en fresco y en segundo lugar en forma congelada. (LUCIER, POLLACK y PÉREZ, 1997). El mayor empuje a la importación desde México inicia en la década de 1980 debido al incremento del consumo norteamericano de vegetales. Contrario a la tendencia, ante las perspectivas de mejora de la demanda norteamericana, los productores mexicanos no pudieron hacer frente a la demanda creciente en los Estados Unidos, principalmente por razones climáticas, las importaciones de Estados Unidos desde otros países crecieron junto con las ventas al mayoreo y menudeo. (CALVIN y LUCIER, 1997). Al mismo tiempo el inicio, en algunos países, y la consolidación en otros de los procesos de apertura comercial, permitió que otras naciones accedieran al mercado norteamericano. Durante la década de 1980 e inicio de 1990, China, Suecia y Costa Rica se han consolidado dentro de los 5 mayores proveedores de productos en fresco para Estados Unidos, después de México y Canadá. (LUCIER, POLLACK y PÉREZ, 1997).

Desagregando por tipo de verduras y frutas se encuentra otra clasificación. En 1996, México exportó a Estados Unidos 67% de sus importaciones de vegetales, incluyendo melones y 22% de fruta fresca. En plátano, Costa Rica, Ecuador y Honduras contribuyeron con el 67% del total de importaciones. Chile aporta cerca del 29% de importaciones de uvas, kiwi y otras frutas (COOK, 1998). Aún cuando, México es el primer proveedor de frutas y verduras hacia Estados Unidos en fresco, se enfrenta a otros países competidores, como Chile, Israel o Perú, principalmente en uvas de mesa, espárrago y aguacate fresco. Las exportaciones norteamericanas están dirigidas hacia Canadá, UE-15, Japón y Hong Kong, abarcando el 75% de ellas diversificadas en lechugas, cebolla, tomate, brócoli, manzanas, naranjas y uvas. Sin embargo, Estados Unidos es importador neto de frutas y verduras debido al incremento del consumo interno de vegetales frescos. El

United States Department of Agricultural reporta, para 1997, un consumo per cápita de 72 kg de frutas frescas y 79 kg si se incluye el consumo de jugo de naranja (COOK, 1998).

De acuerdo con el Sistema Económico Latino Americano (SELA) la base de negociación del comercio agrícola norteamericano para con sus distintos socios comerciales es una división que obedece a las ventajas comparativas que sus cultivos tienen. La división es la siguiente: 1. Grupo de productos básicos: que conforman las cosechas de la zona templada, renglones en los que Estados Unidos es un productor y exportador altamente competitivo. Ejemplos relevantes son el trigo, el maíz, la soya y el arroz, la carne de cerdo, los productos avícolas, el algodón y los alimentos procesados. La mayoría de estos productos tienen ventajas comparativas absolutas frente a los importadores y, por tanto, no significan un problema en las negociaciones para Estados Unidos, pero sí para la Unión Europea, puesto que son el grupo en el que ésta tiene un alto grado de protección de sus productores frente a las importaciones norteamericanas. 2. Productos tropicales o semi tropicales: café, cacao, plátano, piñas, mangos y nueces. Estos productos son objeto de pocas barreras en el mercado estadounidense y constituyen una parte considerable de las exportaciones de productos agrícolas de Centroamérica, el Caribe y parte de América del Sur. 3. Productos de los cuales Estados Unidos es a la vez productor e importador: flores, jugos de frutas, cacahuete, azúcar, tabaco y ciertas frutas y vegetales como tomates y pimientos). Este grupo puede ser considerado como el más protegido de la producción agrícola y del total de productos, exceptuando la industria textil y del vestido. Las barreras que enfrentan los exportadores, principalmente latinos, son más bien altas y se incluyen aranceles, cuotas, “tariff-rate quotas” y medidas de salvaguarda. En 1997, Estados Unidos importó, desde México \$1.7 billones de dólares, 70% de ellos corresponden a vegetales, y exportó hacia México \$146.4 millones de dólares concentradas en frutas. (COOK, 1998). Esta magnitud del comercio explica el interés de la política comercial norteamericana en el comercio con México. Situación que no se deriva directamente de la firma del TLCAN. Según GARY WILLIAMS (1998), existen 3 razones por las que se han incrementado los flujos de exportaciones hacia México: A. Entre los últimos 5 y 10 años, México abrió unilateralmente sus mercados. Antes de mediados de los ochenta, México cobraba aranceles aduaneros de hasta 100% sobre muchas importaciones agrícolas, como parte de una estrategia general de desarrollo económico basada en la sustitución de importaciones. B.

Las barreras comerciales se están eliminando poco a poco a lo largo de cinco, diez o quince años, dependiendo del producto. Además, el TLCAN contempla salvaguardas especiales en contra de irrupciones en la importación, para proteger algunos de los productos más importantes del comercio entre los dos países. C. Muchas de las barreras no arancelarias que restringen el comercio agrícola entre Estados Unidos y México no se contemplan explícitamente en el TLCAN. Las políticas que pudieran distorsionar el comercio incluyen los apoyos para los precios al productor y los subsidios, diferencias entre clasificaciones y estándares en productos de ambos países, reglamentos sobre el uso de químicos, reglamentos sobre residuos en los alimentos, estándares sobre el control de insectos y enfermedades, reglamentos sanitarios y fitosanitarios, y reglamentos similares, así como medidas para su cumplimiento. En términos generales el análisis del comportamiento del comercio exterior en cualquiera de los subsectores de exportación de cultivos en fresco existen cuatro elementos centrales de los cuales dependen los flujos de exportaciones hacia Estados Unidos en cada temporada:

- a. los movimientos del tipo de cambio;
- b. la demanda en el país de destino;
- c. la producción interna en el mercado de destino; y
- d. el grado de competitividad de los bienes exportables, con relación a otros países

exportadores.

El mercado de hortalizas en fresco es especialmente sensible a los dos primeros factores. Los productos en fresco son altamente elásticos, por lo que un movimiento brusco en el tipo de cambio favorece la exportación. Durante los períodos de grandes devaluaciones del peso mexicano en 1982, 1987 y 1994, la cantidad de frutas y hortalizas que Estados Unidos importó desde México creció casi en el doble; tomando en cuenta que es una industria altamente protegida y que la reglamentación de comercio bilateral establece cuotas de entrada y un impuesto extra si se sobrepasan éstas. Después de la devaluación de 1994, las importaciones norteamericanas desde México pasaron de 12.2% en 1993 a 13.6% en 1996 (LUCIER, POLLACK y Pérez, 1997). Aunado a los movimientos del tipo de cambio se encuentran las consecuencias de éste al interior de la economía mexicana. La contracción de la demanda interna por la crisis económica en 1995, fueron determinantes para que durante los primeros tres años del TLCAN la exportación de vegetales creciera. Con la devaluación y la contracción del mercado interno, los precios en Estados Unidos se hacen más atractivos para los productores mexicanos. El ejemplo más representativo se encuentra en los productores de Sinaloa, quienes producen para el mercado interno y externo. Al momento de la devaluación, el mercado norteamericano supera las expectativas de ganancia de la comercialización interna (CALVIN y LUCIER, 1997). El segundo factor, la demanda en el país de destino, se caracteriza por el cambio en los patrones de consumo que se ha modificado en los últimos 15 años.

## METODOLOGÍA

Para la elaboración del presente estudio se tomaron en consideración datos e información de diversas fuentes estadísticas y bibliográficas. Se utilizaron datos de Bancomext, FAO, FAOSTAT, SAGARPA, Secretaria de Economía y USDA. Este análisis se realiza por medio de una medición empírica de la competitividad, el cual mide indirectamente la competitividad en este caso de productos hortícolas y su tendencia en el tiempo a través de estadísticas corrientes de comercio. Lo cual permite analizar las dificultades a la exportación a Estados Unidos. La selección de estos cultivos se debe a que del universo de productos en fresco que México exporta al mercado norteamericano, los tres representan casos distintos en el manejo de la política comercial dentro del mercado regional expresado en el TLCAN. Las hortalizas analizadas están dentro de la clasificación de productos de invierno. Por definición los flujos de comercio se incrementan o disminuyen dependiendo de la época del año en la que varía la producción norteamericana. Estos tres cultivos son representativos de algunos de los problemas que presenta la exportación de hortalizas. Identificamos 3 características del comercio correspondientes a cada uno de los cultivos:

1. Complementario estacional: chile bell que se exporta a Estados Unidos para complementar la oferta doméstica. Los períodos del año en los que México incrementa sus flujos reflejan la baja en la producción de Florida.
2. Abastecedor parcial: el espárrago verde importado desde México cubre casi el 60% de la oferta total durante todo el año.
3. Complementario parcial: la sandía exportada a Estados Unidos representa menos del 10% de su oferta doméstica total anual de dicho país.

Como vemos, se abarcan los principales puntos de resolución en los que México tuvo poco que ver frente a las condiciones productivas de Estados Unidos. Con excepción del espárrago, el factor común en ellos es, en primer lugar, que las condiciones de producción interna han sido, en algún momento, obstáculo para entrar al mercado de exportación. Para el chile bell, la problemática ha sido manejada, y como se ve más adelante, se han logrado superar las condiciones de la producción norteamericana. La sandía tiene graves problemas de financiamiento que se acrecentaron con la crisis económica 1994. Asimismo, la estructura de mercado corresponde al oligopsonio en todos los casos, lo que prácticamente elimina la expansión de las zonas productoras en el territorio nacional. Para explicar la demanda de exportaciones norteamericanas desde México, se realizó una medición por medio de un análisis econométrico bajo el método de mínimos cuadrados ordinarios. El cálculo muestra la elasticidad precio de cada cultivo.

A continuación se explica la metodología y organización de los datos para los tres cultivos al realizar la medición. Tomando la información disponible de los tres cultivos seleccionados se formuló una ecuación de demanda de las exportaciones de México hacia el mercado de Estados Unidos para cada uno de ellos. El objetivo fue correr una regresión aplicando logaritmos para medir la elasticidad precio de la demanda de dichos cultivos en el mercado de estadounidense. La medición se realizó en los mismos términos para todos los cultivos esto debido a la falta de información serial referente a los costos de producción en ambos países. De existir una desagregación para series de tiempo sería posible armar una ecuación distinta para cada cultivo, dependiendo de sus particularidades tanto, del comportamiento del mercado como de las condiciones de producción en ambos países. Pese a esta limitante, el cálculo de los valores estimados nos proporciona una visión general útil al establecer las señales por las que las exportaciones mexicanas hacia Estados Unidos se han comportado a lo largo de 26 años. Por un lado, al correr la regresión, para el caso del espárrago, se obtuvieron estimadores estadísticamente significativos. Las regresiones correspondientes al chile bell y la sandía no arrojaron estimadores confiables. Como veremos más adelante, la explicación acerca de los factores determinantes de las exportaciones de ambos cultivos hacia los Estados Unidos tienen que ver más con las variables cuantificables utilizadas son: cantidad exportada desde México hacia Estados Unidos, diferencia de precios entre México y Estados Unidos, volumen de la producción en Estados Unidos, consumo per cápita en ese mismo mercado y el tipo de cambio del peso mexicano frente al dólar. Las series de datos utilizadas corresponden a las publicadas por el Departamento de Agricultura de los Estados Unidos (USDA) y para las exportaciones mexicanas hacia Estados Unidos se utilizó la información publicada por el INEGI. Ambas fuentes cubren el período 1973-1997. El método utilizado fue el de Mínimos Cuadrados Ordinarios; las pruebas aplicadas para comprobar la veracidad de los valores estimados fueron la F y la Durbin-Watson. La ecuación para los tres cultivos es:

$$QXM = \alpha (Y_{EU} + PMex-EE.UU + CEE.UU + T + e)$$

Donde:

QXM = Cantidad exportada hacia Estados Unidos

YEE.UU = Cantidad producida en Estados Unidos

PMex-EE.UU = Diferencia de precios México-Estados Unidos

CEE.UU = Cantidad consumida en Estados Unidos

T = Tipo de cambio (peso/dólar)

Los precios están dados en dólares, el consumo en kilogramos, y la cantidad exportada y producida en toneladas.

$$Qxm = a + b1 YEE.UU + b2 PMex-EE.UU + b3 CEE.UU + b4T + e$$

Para el análisis de los valores estimados se consideraron también algunas condiciones específicas tales como la estacionalidad, tan importante en el comercio exterior de productos en fresco, y a partir de ésta el que cada cultivo está sujeto a distintas reglamentaciones que limitan o incrementan el flujo de comercio entre los dos países en el manejo de la política comercial, que con las variables que aquí se proponen como determinantes Dentro de este panorama general del comportamiento de cada cultivo, algunas consideraciones, al establecer dicha ecuación, valen para los tres cultivos y son las siguientes:

Por definición, las exportaciones hortofrutícolas mexicanas hacia Estados Unidos tienen un mercado estacional establecido. En este sentido, la dificultad de consultar series de información de las variables seleccionadas con periodicidad mensual impide medir la variación exacta del volumen exportado durante todo el año. Es por esto, que se utilizó la información anual disponible, lo que permite conocer las determinantes del total de la oferta norteamericana y en particular el papel de las importaciones mexicanas en ésta.

Para los tres cultivos, el papel que cumplen en la oferta dentro del mercado norteamericano no incide en el nivel de abasto del mercado mexicano, es decir, que los niveles de consumo se vean disminuidos por el incremento de las exportaciones hacia Estados Unidos. Así, la medición de la elasticidad precio de la demanda es válida para períodos anuales en el sentido de que la cantidad demandada por los consumidores norteamericanos está compuesta, en alguna proporción, por las importaciones provenientes de México. Con base a los cálculos realizados, a continuación explicamos la posición dentro del comercio exterior mexicano para cada cultivo.

## RESULTADOS

Estados Unidos tiene una competitividad importante a nivel mundial en sus exportaciones hortícolas comparado con México. Sin embargo, durante el periodo analizado, México presenta menor competitividad sobre Estados Unidos en cuanto a la producción y exportación de espárrago. El consumo per cápita de naranja en Estados Unidos y México disminuyó durante el periodo de estudio. Sin embargo, el aumento de la demanda en ambos países se debe a la creciente demanda a nivel mundial. Consecuencia de la gran popularidad que éste producto a tenido en los últimos años. Por esta razón, Estados Unidos ha incrementado sus exportaciones para abastecer el mercado mundial, principalmente el mercado . Esto se refleja en el aumento de producción y exportación de espárrago por parte de México hacia Estados Unidos. Los resultados obtenidos de las regresiones aplicadas a los tres cultivos seleccionados permiten concluir que:

Las exportaciones mexicanas de chile bell, espárrago, sandía hacia Estados Unidos están determinadas, en mayor medida, por la producción interna de los Estados Unidos, ya sea porque es insuficiente o inexistente para cubrir la demanda interna, o porque sus productores no son competitivos frente a la producción mexicana.

La liberación del comercio agrícola para México no significó, al menos en el subsector exportador de verduras, el cumplimiento de las reglas naturales de intercambio asociadas a las ventajas comparativas por dotación de factores. El libre comercio regulado, es decir, el establecimiento de reglas de funcionamiento que pueden llegar a ser restrictivas a los flujos de intercambio dependiendo de los acuerdos que los países involucrados tomen en el proceso de negociación atendiendo a las necesidades de sus productores y no de sus consumidores, impide

que estas ventajas, cuando existen, funcionen por sí solas. Esto queda evidenciado especialmente en los casos del chile bell, espárrago y sandía

## CONCLUSIONES

La firma del TLCAN ha sido un catalizador de las diferencias existentes. Dado que las ventajas comparativas de México en el Los cultivos de exportación analizados, están dentro del grupo que la política comercial norteamericana considera como estratégica para el desarrollo y crecimiento de sus productores, de tal manera que las negociaciones del TLCAN favorecieron las condiciones bajo las cuales los productores norteamericanos se desarrollan independientemente de la estacionalidad, la productividad y la ventaja comparativa, estas condiciones pueden ser contraproducentes para los productores exportadores mexicanos. En los tres casos aquí presentados, la producción mexicana de exportación está dirigida al mercado de invierno, situación que incrementa la concentración de la producción interna en aquellos productores que cuentan con capital suficiente para reconvertir sus cultivos con tecnología avanzada, o se integran a mecanismos de producción y comercialización con empresas norteamericanas. En ese sentido, los efectos multiplicadores de la apertura comercial para este subsector exportador mexicano son localizados y limitados. Los productores aprovechan su ventaja comparativa en la medida que la política comercial norteamericana lo permite a través de las reglas de funcionamiento del TLCAN. Los resultados obtenidos de las regresiones aplicadas a los tres cultivos seleccionados permiten concluir que:

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La reglamentación por cuotas y estacionalidad ya existía, sin embargo, lo que el TLCAN otorga a Estados Unidos es un plazo para reconvertir a sus sectores no competitivos frente a su símil mexicano.

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# ENTRE LA FORMACIÓN RACIONAL Y EL APRENDER A APRENDER

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## RESUMEN

*Cuando las decisiones que se toman a diario no resultan como se esperaban o las cosas toman otro cauce, comienza a tomar fuerza la idea de que otros elementos no considerados se posicionan con características propias y mayor peso que aquellos incluidos en los modelos clásicos a la hora de tomar decisiones sobre consumo, ahorro, inversión y financiación. Es entonces cuando los estudiosos de la teoría de la decisión abordan teorías relacionadas con la conducta y la psicología del decidor, su educación y la formación, teorías que otorgan un peso relativo distinto a cada variable de acuerdo al tipo de decisión llevada a cabo en el momento de decidir; influenciado por el modelo de decisión psicológico, las características propias de cada decidor, las condiciones ambientales, los sesgos y heurísticas. El trabajo indaga sobre las diversas teorías y los mecanismos psicológicos sobre cognición, la teoría de aprender a aprender que proviene del campo de la docencia y que se considera pieza fundamental para lograr la satisfacción del ser humano y se ponen en ejecución cuando el ámbito deja de ser el cotidiano, el de todos los días, para tomar decisiones que requieren de la creación y se desarrollan en condiciones de riesgo e incertidumbre.*

**PALABRAS CLAVE:** Psicología cognoscitiva, psicología económica, aprender a aprender, racionalidad, problemas de decisión

## BETWEEN RATIONAL TRAINING AND LEARNING TO LEARN

### ABSTRACT

*When actions that we take daily do not have the expected results, the idea that certain items not properly accounted for in the classical decision making models used to make decisions on sensitive issues such as consumption, saving, investing and financing. This is when the scholars of decision theory address issues such as the behavior and psychology of the decider or his education and training. This theories give different relative weights to each variable according to the type of decision required, influenced by the psychological decision making model, the characteristics of the people involved, environmental conditions and biases. This work explores the various theories and psychological mechanisms of cognition, the theory of "learning to learn" that originated in the field of teaching and which is considered a cornerstone in the path of human beings development. They are implemented when the field in question behaves unexpectedly to make decisions that require creativity and are executed in conditions of risk and uncertainty.*

**J.E.L.:** I20, I21

**KEY WORDS:** Cognitive psychology, economic psychology, learning to learn, rationality, decision problems

## INTRODUCCIÓN

La forma en que el ser humano aprende ha sido tema de debate e investigación desde los albores mismos de la humanidad, y debido a que los grandes avances en la ciencia y la tecnología han producido un enorme caudal de conocimiento e información que –como ha señalado Edgar Morín–, la lógica disciplinar ha fragmentado tanto los conocimientos, resulta dificultoso comprender la complejidad de los fenómenos que ocurren. De allí la importancia de lograr que el ser humano adquiera la capacidad de aprender a aprender, como herramienta válida para su desarrollo presente y futuro. Según Díaz Barriga (s/d) se ha conseguido identificar la posibilidad de obtener resultados satisfactorios, a partir de las situaciones didácticas a las que se han enfrentado las personas; y que muchas veces han aprendido a aprender porque quienes desarrollan ciertos procesos cognitivos.

Hay consenso que los trabajos relativos a la teoría clásica se inician en forma sustantiva con el trabajo pionero de Bernoulli (Plata y Mejía, 2012; Pascale y Pascale, 2007) con la idea de maximizar la riqueza como medida de racionalidad en la decisión, para continuar luego mediante las extensiones de la obra de John von Neumann y Oskar Morgenstern de 1944, quienes propusieron una teoría axiomática de la decisión bajo riesgo e incertidumbre, denominada Teoría de la Utilidad Esperada (TUES) que enfatizó sensiblemente la interpretación normativa (Plata y Mejía, 2012; Scarano, 2008; Vidal de la Rosa, 2008; Pascale y Pascale, 2007) y la interpretación de la maximización de la ganancia –no ya de la riqueza según Bernoulli– como objetivo de racionalidad.

Más tarde, con la incorporación de los psicólogos cognitivos, se incorporan las variables subjetivas al análisis en la toma de decisiones; Daniel Kahneman y Amos Tversky presentan su aporte, consecuencia de años de trabajo, orientados en tres líneas de investigación, en la primera de ellas tuvo por objeto de estudio las heurísticas y los sesgos; el segundo sobre la teoría prospectiva como modelo de elección ante situaciones de riesgo y por último sobre el estudio sobre los efectos marco para los modelos de agente racional (Kahneman, 2003).

## REVISIÓN LITERARIA

El trabajo investiga sobre dos vértices bien definidos, por un lado la educación desde la visión del aprender a aprender (Díaz Barriga, s/d; gov. vasco, 2012) y por el otro lado la psicología económica utilizada en la toma de decisiones, analizada esta última en las críticas que los autores de origen latino realizan sobre los trabajos de investigadores anglosajones que trabajaron en la construcción de la teoría clásica de decisión y sus extensiones hasta los trabajos de Kahneman y Tversky, sumado a las teorías cognitivas más importantes de la psicología económica (Alcalá Villarreal, 2011; Becerra et al, 2011; Hernández Ramírez, 2009; Zuluaga Montaña y Ramírez Maya, 2006; Cortada de Kohan, 2008) y en la visión que aporta la docencia desde la perspectiva del aprender a aprender (Díaz barriga, s/d; gov. Vasco, 2012). Se recupera para la investigación de la psicología de la economía y los procesos de cognición, decisión y racionalidad el legado del psicólogo francés Gabriel Tarde quien presentó una teoría sobre la forma en que los individuos realizan los procesos de cognición basado en la imitación y la creación, siendo esta última propia del ser humano (López y Sánchez-Criado, 2006; Nocera 2006; Denegri Coria, s/d). El análisis del modelo conductual de Tarde (Latour, Lépinay, 2008; López y Sánchez-Criado, 2006; Denegri Coria, s/d) tiene relación con el modelo de los dos sistemas, denominados S1 y S2 por Stanovich y West (2000), respaldado en modelos de racionalidad que se validan con la justificación que les otorga el sustento correspondiente. (García Campos, 2008, 2009; Stanovich y West, 2000, 2003; Vieira Cano, 2008; Estrada Gallego, 2006) y se complementan con distintas visiones y objetivos del aprender a aprender.

## METODOLOGIA

De acuerdo a las características de un trabajo de investigación teórica, el marco metodológico utilizado principalmente es la recopilación de *papers* de psicólogos que han trabajado en el comportamiento económico y de académicos de las ciencias económicas realizando investigaciones en economía conductual. Es en esencia un trabajo descriptivo que intenta ofrecer respuestas en el marco de la exploración académica, dentro de los mapas conceptuales propios de la cultura latina. La búsqueda bibliográfica fue conducida en el ámbito de revistas académicas de prestigiosas universidades Latinoamericanas en especial, mediante la técnica de búsqueda ciega, orientada en palabras clave. Si bien es una investigación cualitativa desde el punto de vista del estudio del hecho puntual, dichos hechos no nacen de la empírea sino que son producto de observaciones de trabajos primigenios luego desarrollados a través del filtro de la visión cultural de los autores latinos.

## RESULTADOS

### El Modelo del Comportamiento de Gabriel Tarde

Según Denegri Coria (s/d., p. 10), “para Tarde, el comportamiento social se explica mediante los conceptos complementarios de imitación e invención. La imitación es el fenómeno crucial para explicar, partiendo de los individuos, las relaciones humanas. Es una especie de estado hipnótico que lleva a los individuos a repetir en forma automática, las conductas desarrolladas previamente por modelos. La imitación es el procedimiento psicológico por el cual las ideas se repiten y propagan en la sociedad y comienza a partir de estados internos como las creencias y los deseos”.

La imitación se interpreta como la situación que le permite a Tarde afirmar que la realidad social es el resultado de estados psicológicos, que se dan como resultado de la asociación de los individuos permitiendo construir una representación psicológica grupal, entonces el nivel de realidad son los individuos agrupados y el efecto colectivo sobre la conciencia individual (López Parra, 2008). Por lo tanto, la construcción grupal de la realidad psicológica condiciona a los integrantes de cada grupo en un marco de referencia actitudinal y sentimental dentro del cual toman decisiones individuales. El concepto de invención es mucho más importante para el desarrollo del ser humano, ya que permite evolucionar desde una situación dada y conocida (por la imitación) hacia una realización (invención) nueva, permitiendo de este modo a las sociedades avanzar. No solo crecer a nivel sociedad sino también grupal, para cada actividad o disciplina en particular.

### El Modelo Didáctico de Aprender a Aprender

Los nuevos retos originados en la sociedad del conocimiento y de la información –en el contexto de la globalización– requieren desarrollar cierta capacidad de adaptación que en el plano personal, exige a cada individuo la característica de seguir aprendiendo a lo largo de la vida, con el objetivo de mantener su empleo y el acceso a consumos básicos, garantizar la participación ciudadana en la sociedad y evitar la exclusión social. Es en este contexto que aprender a aprender se convierte en la herramienta fundamental que garantiza la educación y la capacitación a lo largo de la vida para toda la ciudadanía, incluyendo a las personas con pocas oportunidades, en cualquier ámbito, y para todos los escenarios posibles de aprendizaje. Aprender a aprender implica la capacidad de reflexionar en la forma en que se aprende para luego actuar en consecuencia, autorregulando de esta manera el propio proceso de aprendizaje –autoaprendizaje-

mediante el uso de estrategias flexibles y adaptativas apropiadas que se transfieren y se adaptan para enfrentar nuevas situaciones (Diaz Barriga, s/d).

#### El Modelo de Racionalidad Limitada de Herbert Simon

Simon se dedicó al estudio de la teoría de las organizaciones de los procesos de toma de decisiones y de solución de problemas y las implicaciones de los procesos para las instituciones humanas, permitiendo un acercamiento desde la economía a la psicología a partir de los años cincuenta. Partiendo de la observación empírica del funcionamiento de las organizaciones, se revelan las pruebas de los límites de la racionalidad individual completa. Sus investigaciones lo llevaron a proponer el famoso concepto de racionalidad limitada (*bounded rationality*) en oposición al concepto neoclásico del hombre racional, dando lugar de esta forma a un comportamiento satisfaciente y no maximizante (Vieira Cano, 2008; Pascale y Pascale 2007; Estrada Gallego, 2006). Para Simon el principal objetivo es interpretar la racionalidad humana, entendida ésta como determinados niveles de satisfacción individual más que organizacional, destacando que el método utilizado para su estudio fue la observación experimental de los fenómenos psicológicos en los individuos y la forma en que éstos resuelven sus problemas. Algunas veces la gente responde preguntas difíciles por analogía a través de otras más simples, donde la percepción, la intuición y la experiencia juegan un papel más importante que la utilización de modelos racionales de maximización.

#### El Modelo de Razonamiento Dual (o de los dos Sistemas)

En el campo de la psicología cognitiva se desarrolló una teoría denominada dual de sistemas que logró captar la atención de un grupo importante de psicólogos, y se desarrolló con fuerza especialmente a partir de la década del noventa del siglo pasado. Esta teoría postula el supuesto de dos procesos de razonamiento distintos que conviven dentro del cerebro humano, denominados S1 y S2 por Stanovich y West (2000, 2003). Estos autores adjudican al sistema S1 una capacidad de rápida respuesta, gran capacidad operativa (capacidad computacional), que permite dar una respuesta inmediata incluso a complejos problemas de razonamientos, el inconveniente es que no siempre las respuestas son correctas. Se considera que este sistema es innato en el ser humano y antiguo en términos de evolución (García Campos, 2008, 2009). Por otra parte, S2 es, siguiendo a Stanovich y West (2000, 2003), un sistema de razonamiento más lento pero capaz de cumplir con determinados requisitos normativos que llevan a una respuesta más acertada en términos de racionalidad. Según García Campos (2008) S2 está gobernado por reglas explícitas, es más moderno en términos evolutivos y requiere para su funcionamiento de una mayor capacidad cognitiva, además este sistema tiene la capacidad –hasta cierto punto– de controlar los outputs de S1 e incluso inhibirlos.

Una definición importante llegada a este punto es el concepto de racionalidad, para el cual se asume la postura de Stein, quien citado por García Campos (2009) la ha llamado la “visión estándar de la racionalidad”. “De acuerdo a esta visión, ser racional es razonar en concordancia con los principios del razonamiento fundados en las reglas de la lógica, la probabilidad y así sucesivamente. Si la visión estándar del razonamiento es correcta, los principios normativos de razonamiento, esto es, son los principios con los que debemos razonar” (Stein, citado por García Campos, 2009, p. 66).

#### El Modelo de Racionalidad Limitada de Kahneman y Tversky y la Teoría Prospectiva

Daniel Kahneman y Amos Tversky adhieren al modelo de razonamiento dual y su aporte fue la consecuencia de años de trabajo orientados en tres líneas de investigación, la primera de ellas tuvo por objeto el estudio de las heurísticas y los sesgos; la segunda línea sobre la teoría prospectiva como modelo de elección ante situaciones de riesgo y por último la investigación orientada sobre los efectos marco para los modelos de agente racional (Kahneman, 2003). Estos autores consideran un tercer elemento: la intuición, que significa tener “acceso directo” a interpretaciones mentales que de otra manera deberíamos descifrar mediante el uso de algún modelo de razonamiento que sea justificado epistemológicamente, del tipo de racionalidad limitada de Simon (Vieira Cano, 2008; Pascale y Pascale 2007; Estrada Gallego, 2006) o la visión estándar de la racionalidad de Stein (García Campos, 2009, p. 66). Un modelo de tres sistemas:

Kahneman observa un modelo constituido por tres sistemas cognitivos, integrados por 1) la percepción que se vincula directamente con la respuesta a los estímulos, 2) la intuición o sistema1 (S1), asociado a representaciones conceptuales y 3) el razonamiento o sistema2 (S2), también asociado a representaciones mentales. Las diferencias entre la intuición y el razonamiento, también obedece a las diferencias halladas en S1 y S2, la intuición es un sistema de respuestas rápido, automático, sin esfuerzo, trabaja por asociación y tiene contenido emocional, mientras que el razonamiento es trabajoso, lento, controlado, regido por normas (Kahneman, 2003, pp. 184/6). Uno de los principales aportes de Kahneman y Tversky a la teoría de la decisión se deben a la crítica que hacen del modelo de decisión de Bernoulli –al que Kahneman denominó “el error de Bernoulli”- y hace referencia a que los agentes no toman decisiones tratando de maximizar su riqueza (aumentar sus activos), sino que la principal fuerza impulsora está dada por los resultados que obtienen (Kahneman, 2003). Esta afirmación la sustentan en una serie de ejercicios psicológicos que llevaron adelante y les sirvió para demostrar que si bien el modelo bernoulliano es compatible con la hipótesis económica que lo racional es la maximización de la riqueza, ellos descubrieron que los agentes económicos anteponen el corto plazo y las ganancias al aumento de la riqueza. En la escolaridad se inicia el ciclo de educación formal, a través de la adquisición de nuevos conocimientos que requieren el esfuerzo del intelecto; por ejemplo para la lectura, S2 debe participar activamente para traer a la mente un conjunto de símbolos y comenzar a armar el rompecabezas de sus conjunciones, y es allí cuando los niños comienzan a palabrear pero no entienden ni saben que han leído, pues aún no han pasado a S1 el proceso de lectura y por lo tanto, siguiendo a Kahneman (2003) al no tener capacidad suficiente para realizar dos actividades cognitivas a la vez que requieren esfuerzo, como la lectura y la comprensión, entonces no pueden entender lo leído; solo cuando el procedimiento de lectura haya pasado a S1 y el niño realice este proceso sin esfuerzo podrá comenzar el camino de la comprensión del contenido. Idéntica vía para las siguientes etapas de escolarización y contenidos de la educación formal y aprendizaje de los oficios.

En niveles elevados de educación –especialización y máster- se instruye a los estudiantes, ya profesionales prácticos, a trabajar con modelos que tienen su justificación en programas que responden a su entendimiento de racionalidad, tal como lo pregonan el modelo estándar. El ámbito de excelencia de los claustros académicos facilita las creencias en niveles de S1 de los modelos cuando resulta complejo interpretar conceptualmente sus desarrollos, entonces es cuando la fuerza de la imitación permite aplicar modelos complejos aprehendidos y alojados en S1 para solucionar problemas de otra índole pero se observan elementos que justifican su uso, ya sea por la alta notabilidad o por su accesibilidad (Kahneman, 2003). Es de alguna manera el *animal spirit* de Keynes llevado por los practicantes al mercado financiero: ante señales del mercado operan rápidamente (S1) para ganarle al mismo mercado, ya que son las respuestas que asimilaron, aprendieron y aprehendieron ante la ocurrencia de determinados eventos observados en función de su notabilidad. De alguna manera la aplicación del stop loss es un ejemplo del animal spirit en

los programas de computación que operan en los mercados de capitales: determinada la tasa máxima aceptable de pérdida, cuando ésta ocurre se acciona un mecanismo (como el S1 en el ser humano) que opera automáticamente en los inversores del mercado, acentuando bajas y pronunciando subidas para el caso de las alzas. Solo unos pocos podrán separarse del resto para observar cosas que los demás no vislumbran (Latour, Lépinay, 2008), son aquellos que a juicio de Tarde marcarán el camino que los demás seguirán, los líderes, los que tienen capacidad para crear con la ayuda –y no las limitaciones- de los saberes aprendidos.

## CONCLUSIONES

El ser humano nace en el seno de una determinada sociedad con ciertas costumbres que absorbe desde que nace y es muy fuerte y lo condiciona para el resto de su vida, recibiendo un marco de referencia social, económica y cultural que como un iceberg se mantendrá oculto para salir a relucir ante determinadas situaciones o cuando algún evento extraordinario así lo requiera. Está innato en él y a través de la socialización y la educación formal e informal irá sumando modelos de solución de problemas, desde S2 a S1, para dar respuestas rápidas y casi siempre correctas a problemas complejos y aprendiendo a aprender para aumentar sus respuestas y mantenerse al corriente de las nuevas tendencias y avances en ciencia y tecnología, en sociedad e inclusión. Por lo tanto, la interpretación de la realidad económica o social dará fundamento a la respuesta que será debidamente justificada por el criterio que corresponda de acuerdo al tipo de racionalidad empleada.

Durante la educación se produce el proceso de formalización del comportamiento y se adquieren herramientas apropiadas para la resolución de problemas, pero la interpretación que hagan de la realidad tomará del conjunto de creencias aquellas que respalden las soluciones justificadas en entornos complejos y desconocidos. La racionalidad acotada de Simon es una base para edificar la forma que se toman decisiones en cualquier nivel, desde un inversor hasta un político, sesgado por su sistema de creencias, valores y principios, innatos y adquiridos, y la manera que adquiera nuevas habilidades. Incluso en mercados tan formalizados como los financieros se habla del humor de los inversores y el sentimiento del mercado, para buscar que orientación puede seguir el índice bursátil cuando su evolución no respeta los cánones de la lógica, las matemáticas, la probabilidad y la teoría de la decisión.

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## LA INNOVACION DE PROCESOS COMO VENTAJA COMPETITIVA EN LA INCUBACION DE PYMES: CASO DITEMCO S.A. DE C.V.

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### RESUMEN

*Las pequeñas y medianas empresas (PyMES) en el país son una fuente de empleos así como de generación de riqueza y es a través de las incubadoras de empresas reconocidas por la Secretaría de Economía de México, quienes han sido de gran ayuda para lograr la inserción de las Pymes dentro del mercado de los negocios, generado su modelo y plan de negocios así como estrategias para posicionarse y mantenerse en el mercado de los consumidores de bienes y servicios. La empresa DITEMCO S.A de C.V, quien se encuentra en proceso de incubación en el Instituto Tecnológico de Agua Prieta, Sonora, México, ha identificado una necesidad real y actual que consiste en el diseño de un programa de modificación de conducta incluyendo una herramienta en una de sus fases o etapas que trabaja sobre los principios psicológicos conductistas del condicionamiento operante; con el objetivo de administrar contingencias ante la emisión o no de una conducta a través del tiempo. El dispositivo temporizador electrónico será de apoyo en el tratamiento del proceso de modificación de la conducta pensado principalmente para niños y jóvenes diagnosticados con TDAH (trastorno por déficit de atención e hiperactividad) a los cuales les ayudara en actividades que inciden en su desempeño académico y de autoestima, pero además podría ser utilizado por personas con problemas de terapias del habla, cuestiones farmacológicas, adultos con problemas de la memoria, por médicos especialistas como herramienta de apoyo en sus pacientes. El aporte importante de esta investigación es demostrar que la Incubadora de empresas del Instituto Tecnológico de Agua Prieta está logrando contribuir a la creación de empresas de tipo pequeñas y medianas con procesos innovadores que les dan una ventaja competitiva y que además aportan a la sociedad productos y/o servicios que cubren necesidades imperantes para nichos de mercados bien identificados como lo es el dispositivo temporizador electrónico de DITEMCO.*

**PALABRAS CLAVES:** PyMES, Ventaja Competitiva, Sector Educativo, Innovación de Procesos, Incubación de Empresas

## PROCESS INNOVATION AS COMPETITIVE ADVANTAGE IN THE INCUBATION SMEs: CASE DITEMCO SA DE CV

### ABSTRACT

*Small and medium enterprises (SMEs) in the country are a source of employment and wealth generation is through business incubators recognized by the Ministry of Economy of Mexico, who have been of great help to achieve the inclusion of SMEs in the business market, generated your model and business plan and strategies to position and stay in the market for consumer goods and services. The company DITEMCO SA de CV, who is in the process of incubation in the Technological Institute of Agua Prieta, Sonora, Mexico, has identified a real and current design*

*consists of a behavior modification program including a tool in a of the phases or stages working on behavioral psychological principles of operant conditioning, with the aim of managing the issuance contingency conduct or not over time. The electronic timer device will support the process in the treatment of behavior modification intended primarily for children and young people diagnosed with ADHD (attention deficit hyperactivity disorder) to which help them in activities that affect their academic performance and self-esteem, but also could be used by people with speech therapy, pharmacological issues, adults with memory problems, by specialists as a support tool in their patients. The important contribution of this research is to demonstrate that the business incubator of Agua Prieta Institute of Technology is making contribute to the creation of companies small and medium type with innovative processes that give them a competitive advantage and also provide products and society / or services that meet pressing needs for clearly identified niche markets such as the electronic timing device DITEMCO.*

**JEL:** M10

**KEYWORDS:** SMEs, Shared Strategy, Education Sector, Process Innovation, Business Incubation

## INTRODUCCION

Antes de identificar la importancia de la PyMES (pequeñas y medianas empresas) en México, comenzaremos por analizar su significado:” Una Unidad Económica de Producción y Decisiones que, mediante la Organización y coordinación de una serie de Factores (Capital y Trabajo), persigue obtener un beneficio produciendo y comercializando productos o prestando servicios en el mercado”. (Andersen, 1999). Desde hace mucho tiempo las PyMES han constituido los ingresos principales de muchas familias mexicanas, ya que de ellas una familia puede sostenerse, sin necesidad de realizar algún trabajo adicional, además es de considerarse que constituyen un apoyo para las siguientes generaciones de empresarios, por la transmisión de los secretos de la empresa familiar, contribuyendo al crecimiento y desarrollo de las empresas mexicanas, de una manera empírica en la mayor parte de los casos.

El mayor problema que han tenido que superar las PyMES es la Globalización, situación que de entrada provocó que muchas empresas tuvieran que cerrar por el gran número de empresas transnacionales que llegaron a nuestro país. La Pequeña y Mediana Empresa (PyME) en México tiene un gran potencial de desarrollo, ya que según las más recientes cifras que genera la Secretaría de Economía existen cerca de 4'000,000 de empresas catalogadas como PyMES, lo que representa el 99.8% del total de las empresas que operan en nuestro país, y que además dan empleo al 72% de la población económicamente activa, generando aproximadamente el 52% de participación del PIB nacional. Las empresas PyMES se catalogan tradicionalmente basándose en dos rubros principales, por el número de empleados que tiene la empresa, y/o bien por el monto total facturado en el año. Una clasificación de este tipo la podemos observar en la Tabla No. 1.

Tabla 1: Nueva Clasificación de Micro, Pequeñas y Medianas Empresas a Partir del 30 De Junio de 2009 Por Secretaria de Economía

Tipo De Industria	Personal	Ventas (En Mdp)
Micro Industria	0-15	\$30.00
Industria Pequeña	15-100	\$400.00
Industria Mediana	100-250	\$1,100.00

*Clasificación utilizada para determinar el tamaño de las empresas de acuerdo a su número de empleados y sus ventas.*

Hoy día, los gobiernos de países en desarrollo reconocen la importancia de las Pymes por su contribución al crecimiento económico, a la generación de empleo, así como al desarrollo regional y local. Es importante reconocer que la mayoría de las empresas logran con mucho esfuerzo que sus productos tengan un nivel de calidad aceptable en su mercado y cumplan con las expectativas de sus clientes, lo cual es efectuado con elevados re-procesos y desperdicios en algunos casos, aun cuando no tienen en general sistemas de aseguramiento de la calidad formales implantados, lo cual, les permite seguir operando pero con muchas oportunidades de mejora. Por lo que de manera muy general todas las pequeñas y medianas empresas (PyMES) comparten casi siempre las mismas características, por lo tanto, se podría decir, que estas son las características generales con las que cuentan las PyMES (Méndez, 1996). En general carecen de un plan de negocios formalmente definido, no se tienen establecidos objetivos de ventas, utilidades, productividad, ni enunciados de Misión, Visión, Política de Calidad, etc., lo que no les permite desarrollarse más y mejor. En algunos casos la situación de la empresa no es completamente favorable, ya que tienen problemas principalmente financieros por falta de capital de trabajo, o por una baja en la captación de clientes, lo anterior debido a una falta de planeación y de definir estrategias tanto de producción, como de ventas y recuperación de cartera entre otras.

Es una tarea de Instituciones de Educación Superior a través de las Incubadoras de Empresas, empresarios, las Cámaras, así como de la sociedad en su conjunto, contribuir con el gobierno para establecer y ejecutar políticas públicas que sienten condiciones adecuadas para alentar la competitividad de las empresas, especialmente de las PyMES. Es indispensable apoyarlas para seguir creciendo pero sobre todo para fortalecerse, tecnificarse e integrarse de mejor manera en el aparato productivo nacional, tal es el caso de la Pyme DITEMCO S.A de C.V, ubicada en Agua Prieta, Sonora, Mexico, que a través de visualizar una necesidad real y demandante para niños y jóvenes con TDAH (trastorno por déficit de atención con hiperactividad) que es el desorden neuroconductual más común en la infancia (Ahumada, 2008). Se presenta mayormente en grado escolar primaria y secundaria y bajo este indicador se crea un dispositivo electrónico temporizador como apoyo en el proceso de modificación de conducta; Consiste en el diseño de un programa de modificación de conducta incluyendo una herramienta en una de sus fases o etapas que trabaja sobre los principios psicológicos conductistas del condicionamiento operante, con el objetivo de administrar contingencias ante la emisión o no de una conducta a través del tiempo para fijarla como un hábito. El dispositivo será el estímulo generador de la conducta a desarrollar, fomentando la autonomía y la responsabilidad. El TDAH es un síndrome conductual, es un trastorno muy prevalente que, según estimaciones, afecta entre un 5 % y un 10 % de la población infanto-juvenil (Ahumada, 2008).

Se trata de un trastorno del comportamiento caracterizado por distracción moderada a grave, períodos de atención breve, inquietud motora, inestabilidad emocional y conductas impulsivas. El Trastorno por Déficit de Atención e Hiperactividad (TDAH) es una condición reconocida por la Organización Mundial de la Salud. Esta oportunidad de negocios tiene amplio mercado ya que la utilidad del producto de la empresa DITEMCO que elabora dispositivo electrónico temporizador en forma de reloj, contribuye a mejorar la estancia académica, así como la calidad de vida del niño o joven en el sector primaria y secundaria respectivamente. En la Actualidad se encuentra en trámite de registro ante el IMPI (Instituto Mexicano de la Propiedad Industrial) como modelo de utilidad.

## **REVISION LITERARIA**

En la actualidad el 99.8% de las empresas mexicanas son Micro, pequeñas y medianas, de este monto el 90% son microempresas, la totalidad de MIPYMES dan empleo al 70% de la población

económicamente activa ya que “el nuevo orden económico resulta de la acción de miles de empresas -la mayoría pequeñas- que tratan nuevas ideas, nuevos productos, nuevos servicios, nuevos procesos en un mercado cambiante” (Varela R, 2008). Agua Prieta cuenta con una población aproximada de 80,000 habitantes de los cuales cerca de 35,000 personas conforman la población económicamente activa. Por lo que una tarea de las Instituciones de Educación Superior, empresarios, las cámaras de comercio, así como de la sociedad en su conjunto, es exigir que el gobierno establezca y ejecute políticas públicas que sienten condiciones adecuadas para alentar la competitividad de las empresas, especialmente de las PyMES. La confianza en las autoridades responsables es fundamental para que las políticas públicas den lugar a mayores inversiones privadas. Es indispensable apoyarlas para seguir creciendo pero sobre todo para fortalecerse, tecnificarse e integrarse de mejor manera en el aparato productivo nacional.

La tendencia de la economía global trae como consecuencia grandes oportunidades de negocios no solo para las grandes corporaciones sino también para las pequeñas empresas que actualmente han cambiado la imagen tradicional que se tenía de ellas de negocios domésticos al considerar como sus más grandes desafíos el crecimiento de grandes comercios, el avance de las tecnologías de la información y telecomunicaciones y la misma globalización (Longenecker, 2001). Las Pymes deben destacar en al menos una ventaja competitiva para poder captar un mercado meta identificado previamente y poder mantenerse en el gusto y preferencia de sus clientes, logrando un crecimiento gradual y sostenido.

En los Estados Unidos de Norteamérica y Canadá el fomento a las PYMES se ha dado a través de incubadoras de empresas, su éxito ha sido debido a que las empresas que apoyan demandan poca infraestructura y es una barrera contra la globalización ya que paradójicamente son los países menos globalizados. En México también se ha copiado esta forma de hacer negocios y las incubadoras de Empresas son programas que actualmente llevan algunas Universidades, Institutos Tecnológicos y Fundaciones de Gobierno, que apoyan a los emprendedores a diseñar desde la constitución del plan de negocios, apoyo en asesoría para la constitución legal de la empresa y otros tantos aspectos importantes para crear, una empresa que en términos generales, minimicen el riesgo en la inversión, ya que el capital en la actualidad es demasiado escaso y bien vale la pena realizar una inversión bien planeada. La ubicación de Agua Prieta al noroeste del estado de Sonora, su ubicación fronteriza, con una gran riqueza cultural y posición cerca de un comercio emergente como lo es el de Estados Unidos de America, representa un espacio de privilegio para el trabajo y la exportación de productos, abriendo una posibilidad para la creación de PyMES con giros económicos tanto de servicios como de productos. Destacandose el estado de Sonora cómo semillero de líderes, de hombres y mujeres emprendedoras, independientes, forjados en una autonomía.

## DEMOGRAFÍA

El comportamiento de la población según los censos de 2000, 2010 elaborados por el INEGI, presenta lo siguiente:

Tabla 2: Población y Tasa de Crecimiento de Agua Prieta, Sonora

Población		Tasa de Crecimiento %)	
2000	2010	diferencia	2000-2010
61,944	79,138	17,194	No proporcionada

Fuente: INEGI Censo General de Población y Vivienda 2000-2010

### Aspectos Demográficos

En este municipio son relevantes la Agricultura, la Ganadería, la Apicultura, la Explotación Forestal en baja escala y la Industria, básicamente Maquiladora. En 1997 la infraestructura turística, constaba de 10 hoteles y moteles con 316 habitaciones. Actualmente existen 14 establecimientos que ofrecen 455 habitaciones. La localización geográfica de Agua Prieta es un punto clave para el desarrollo de la industria maquiladora, lo cual le permite tener acceso rápido a los estados del sureste y de la costa del pacífico de la Unión Americana. Se encuentra a 322 Km. de la ciudad de Phoenix, capital de Arizona y a 377 Km. De Hermosillo, capital del estado de Sonora. Al este de Agua Prieta se encuentra Ciudad Juárez, Chihuahua que a su vez es frontera con la ciudad del Paso, Texas centros urbanos que en los últimos años han tenido un crecimiento económico de primer orden. Para el logro del objetivo planteado para el desarrollo regional, las estrategias regionales que marcarán la acción del gobierno estatal son:

- Impulso a la incubación de empresas
- Reconversión y diversificación productiva.
- Incremento en la competitividad.
- Reactivación de las actividades y economías regionales.
- Especialización selectiva en áreas con ventajas competitivas.
- Desarrollo de encadenamientos productivos, especialmente en las actividades primarias.
- Impulso, transferencia y difusión de la investigación y de la tecnología.
- Programas de inversión y financiamiento a las actividades productivas.
- Impulso a las actividades turísticas.
- Vinculación y capacitación educativa para actividad económica.

Las Instituciones de educación superior como lo es el Instituto Tecnología de Agua Prieta, saben del compromiso que se tiene en contribuir con su parte al logro de metas y objetivos en beneficio de la comunidad, regios y país.

Tabla 3: Características de Agua Prieta

<b>Población</b>	<b>79,138 habitantes</b>
Agencias Aduanales	8 oficinas
Compañías de transporte de carga	6 compañías
Compañías de auto transporte	6 compañías
Puerto de altura	600 Km.
Altitud	1,402 metros sobre el nivel del mar
Derechohabientes del IMSS	18,000 personas
Economía manufacturera	208 unidades, 9,225 empleados
Economía comercio	790 unidades, 1990 empleados
Inversión en vivienda (Infonavit)	10, 660 m.n.
Alumnos inscritos	13,578
Maquiladoras	30 industrias

*Fuente: [www.ceesonora.org.mx](http://www.ceesonora.org.mx) Como se muestran en la tabla 3 Agua Prieta cuenta con todas las características relevantes para ser un gran centro de comercio así como de generación de PyMES, ya que el terreno es suficiente y los servicios de comunicación y transporte son relevantes.*

Entre los principales aspectos que inciden en la economía de Agua Prieta, están su cercanía con los Estados Unidos de Norteamérica y con ello, su importancia en el contexto internacional. La globalización de la economía ha ocasionado un importante tránsito de mercancías y personas con la economía más poderosa del mundo. Esta debe ser una de las principales motivaciones para hacer de Agua Prieta, una ciudad fronteriza moderna, conectada y comunicada. Se cuenta con tres carreteras que dan acceso a la ciudad con el resto del estado, se cuenta también con transporte ferroviario de carga y una pista local para la aviación menor, principalmente. La principal actividad industrial son las maquiladoras, cuyos giros principales son: prendas de vestir, muebles de madera, electrónica, material y equipo para hospitales, deportivos, componentes para computadoras, para radio comunicación y de televisión, entre otros.

La incubadora de empresas del Instituto Tecnológico de Agua Prieta, brinda el servicio de apoyar a los emprendedores y las Pymes con el desarrollo y seguimiento de su idea empresarial plasmada en su modelo de negocios hasta diseñar su plan de negocios, sirviéndole como instrumento para su desarrollo y gestión de recursos de diferentes fuentes y/o financiamientos en los programas de incubación y emprendimiento de carácter Federal, estatal o municipal, pudiendo ser nacionales o internacionales con la finalidad de generar empresas y empleos. La incubación de empresas se manifiesta en la puesta en marcha de una idea de negocios con potencial de generar empleos y utilidades como es el caso de la empresa DITEMCO S.A de C.V, que con la innovación de procesos en modificación de la conducta (lo que el ser humano hace, piensa y siente) crea una ventaja competitiva como parte de una visión empresarial, captando un nicho de mercado que demanda el producto emanado de su operación ya que se extiende la aplicación de la modificación de conducta a áreas como el deporte, la empresa, la educación, esto es, se extiende su uso a áreas no clínicas, y se desarrollan las técnicas aplicadas a la psicología de la salud.

DITEMCO S.A. de C.V se encuentra en etapa de preincubación, nace de una necesidad real de una madre de familia con un hijo de 9 años diagnosticado con TDAH (trastorno por déficit de atención con hiperactividad) que se manifiesta por dificultades en regular el nivel de actividad, dificultades en el control de los impulsos y requería de un dispositivo que le ayudara a controlar la enuresis diurna a través de emisiones de sonidos, imágenes o movimientos y los dispositivos electrónicos que existen en el mercado como teléfonos celulares, ipad, timbres, entre otros, no cumplían cabalmente su cometido puesto que no están diseñados para esa necesidad específica y ocasionaban la distracción del niño.

La aplicación de este dispositivo en la etapa 4 del proceso de modificación de la conducta, puede ser para: enuresis diurna, terapia del habla, administración de apoyos farmacológicos, programa de modificación de conducta, generador de hábitos y en adultos mayores en afectaciones de la memoria. El mercado que se visualiza es amplio y el aporte que brinda para los especialistas conductuales, maestros y padres de familia principalmente, tiende a facilitar en gran medida la pronta respuesta en un proceso de modificación de conducta bajo un seguimiento de monitoreo, evaluación y retroalimentación, como se muestra en la figura 1.

Figura 1: Diagrama de proceso de modificación de la conducta



*En esta figura se muestran las etapas y la secuencia que deben ser llevadas por los especialistas en la materia para la obtención de resultados acorde a la problemática identificada. En la etapa 4 se aplica el dispositivo como apoyo a este proceso.*

## METODOLOGÍA

La metodología utilizada para el desarrollo de la investigación se basó en muestreo estadístico aleatorio simple, la segmentación se hizo conforme a las variables predeterminadas para tal fin, los instrumentos utilizados fueron encuestas y entrevistas diseñadas en base a las necesidades de la información que se necesitaba para ser utilizada por los organismos involucrados en este proyecto, que son: Instituto Tecnológico de Agua Prieta y EDIA Consultores de la Cd. de Hermosillo, Sonora, México. Su aplicación se hizo a través de un despliegue de encuestadores capacitados para tal fin, dicho mecanismo fue llevado a cabo en el transcurso de ocho semanas.

Para el análisis e interpretación de la información, se desarrolló una plataforma informática que nos permitió generar de manera ordenada y confiable los resultados obtenidos, que fue de utilidad para definir estrategias de DITEMCO. Su innovación, la cual será una ventaja competitiva es incluir dentro del proceso de modificación de conducta, un dispositivo temporizador, con funciones de recordar distintos eventos a pacientes con problemas de conducta, con el fin de habituarlos a ejercer dichos eventos conductuales, temporizados o cronometrados, en sus vidas cotidianas ( ver figura 2), para ello el dispositivo consta de lo siguiente: un microcontrolador Arduino, dispositivo en forma de reloj conteniendo iconos de los distintos eventos a señalar, iluminados por LED's, donde se programan los distintos eventos temporizados cada uno según sea la necesidad del individuo ejemplo: ir al baño, hacer tarea, medicamento, lectura entre otros. Al final se obtuvo un sistema Integrado, que complementa a la aplicación del Reloj, que controla la ejecución de eventos programados en el dispositivo microcontrolador convirtiéndose en una interface hombre-máquina.

Figura 2: Diagrama de proceso de integración del dispositivo DITEMCO



La figura muestra el diagrama de comunicación del dispositivo DITEMCO que podrá ser utilizado como apoyo en la terapia conductual del sujeto. La imagen como reloj al final del proceso es el resultado visual del dispositivo el cual se diseñó de material no invasivo, ergonómico y programable solo por los especialistas, padres o maestros de los niños y jóvenes.

## RESULTADOS

La Incuación de la PyME DITEMCO S.A. de C.V. ubicada en Agua Prieta, Sonora México, contribuyó al diseño de su modelo de negocios y lo transformó en un plan de negocios realista pero visionario, lo que permite facilitar la gestión de recursos para su operación ante instituciones y/o organismos para tal fin. El proceso de modificación de la conducta propuesto por DITEMCO generó información de primera mano, si bien no en su totalidad, pero de la obtenida se pudieron formular estrategias de solución que permitirán su mejoramiento y comercialización.

Este proceso de modificación de conducta que incluye una herramienta en una de sus fases o etapas que trabaja sobre los principios psicológicos conductistas del condicionamiento operante, con el objetivo de administrar contingencias ante la emisión o no de una conducta a través del tiempo para fijarla como un hábito, la ventaja resultante incide en la disminución de tiempo del proceso y la autonomía e incremento del autoestima del paciente. Fue avalado por especialistas en la materia pertenecientes a EDIA Consultores (Estudios de desarrollo integral del alumno) de Hermosillo Sonora, quienes esperan su lanzamiento al mercado y proponerlo a sus pacientes además de darlo a conocer a su gremio para su pronta incorporación en sus tratamientos conductuales quienes determinarán el tiempo y modo de uso del dispositivo DITEMCO.

La prueba piloto se llevó a cabo en una escuela primaria de la ciudad de Agua Prieta, Sonora, México, con niño de 9 años diagnosticado con TDAH que presentaba un cuadro de enuresis diurna, lo que ocasionaba problemas de autoestima y académicos en el aula. La implementación de DITEMCO bajo el seguimiento de los especialistas y maestros del colegio dieron como resultado la generación del hábito a través de la modificación de la conducta en el alumno en un periodo aproximado de 60 días, mejorando su desempeño académico y social del estudiante.

## CONCLUSIONES

Del análisis de la información se visualiza que la PyME DITEMCO S.A. de C.V. identificó una necesidad imperante para un sector de mercado muy amplio, haciendo con esto una aportación significativa en el mejoramiento de la calidad de vida de las personas que necesiten un tratamiento de modificación de conducta, pudiendo ser TDAH o presentar otro tipo de problema

derivado de lo conductual. Necesitará seguir avocándose a la búsqueda de procesos de mejoramiento continuo de su capacidad de gestión de los factores de producción. Por ende, también, el mejoramiento de la productividad y la competitividad, como toda empresa innovadora, emprendedora, moderna y flexible.

Dados los resultados de la aplicación del mecanismo de recolección de información, se concluye que mediante el análisis de los datos y resultados obtenidos de la presente investigación, se puede:

Identificar las oportunidades de mercado para esta empresa con una idea innovadora de procesos.

Definir al menos dos estrategias de consolidación para DITEMCO S.A. DE C.V.

Búsqueda de posibles inversionistas.

Contribuir en la calidad de vida de niños y jóvenes en su desarrollo académico, personal y social.

Registro de patente ante el Instituto Mexicano de la Propiedad Industrial (IMPI), como modelo de utilidad el cual se encuentra en trámite.

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## BIOGRAFIA

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# **CAMPAÑA DIGITAL COMO ESTRATEGIA DE EDUCACIÓN CONTINUA PARA EL MANEJO ADECUADO DE MATERIALES DE REÚSO PROVENIENTES DEL PROCESO DE RECICLAJE**

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## **RESUMEN**

*El Centro de Ingeniería y Tecnología (CITEC) de la Universidad Autónoma de Baja California (UABC), es un centro de enseñanza de nivel profesional localizado en Valle de las Palmas, donde los alumnos reciben enseñanza, tanto teórica como práctica, además de una formación integral la cual se basa en la importancia de la difusión de valores. La conciencia ecológica y compromiso social, son valores claves para la institución, principalmente en el campus Valle de las Palmas, al encontrarse en una zona urbana con un giro de desarrollo "Sustentable". En el presente trabajo se desarrolla una estrategia comunicacional (campaña) digital de educación continua con la comunidad Universitaria que tenga impacto en la adecuada implementación de la separación de residuos inorgánicos en CITEC dirigida a la comunidad universitaria, así como sensibilizar a la comunidad a manejar correctamente los residuos inorgánicos que generan, además de disminuir la cantidad de basura, puede surgir la oportunidad de realizar propuestas de ECODISEÑO o simplemente el hecho de destinar residuos a un segundo propósito en lugar de ir directo a la basura, puede ser un gran avance para la institución.*

**PALABRAS CLAVE:** Educación Continua, Reciclar, Campaña Digital

## **DIGITAL CAMPAIGN STRATEGY AS CONTINUING EDUCATION FOR THE PROPER MANAGEMENT OF MATERIALS FROM REUSE RECYCLE PROCESS**

### **ABSTRACT**

*The Engineering and Technology Center ( CITEC ) of the Autonomous University of Baja California ( UABC ) is an educational professional level located in Valle de las Palmas (Tijuana, Baja California), where students learn theoretical and practical way, in addition to training comprehensive which is based on the importance of the spread of values . Environmental awareness and social commitment are key values for the institution, primarily in the Valle de las Palmas campus , being in an urban area with a turn of development " Sustainable " .In this paper, a digital communications strategy ( campaign ) develops continuing education with the University community to have an impact on the proper implementation of the separation of inorganic waste CITEC directed to the university community and sensitize the community to properly manage inorganic waste generated , in addition to reducing the amount of waste , may arise the opportunity to make proposals for Ecodesign or just enjoy spending waste a second purpose instead of going straight to the trash can be a breakthrough for institution.*

**JEL:**

**KEY WORDS:** Continuing Education, Recycle, Digital Campaigning

## INTRODUCCIÓN

*Problemática:* El Centro de Ingeniería y Tecnología (CITEC) de la Universidad Autónoma de Baja California, es un centro de enseñanza de nivel profesional localizado en Valle de las Palmas, donde los alumnos reciben enseñanza, tanto teórica como práctica, además de una formación integral la cual se basa en la importancia de la difusión de valores. La conciencia ecológica y compromiso social, son valores claves para la institución, principalmente en el campus Valle de las Palmas, al encontrarse en una zona urbana con un giro de desarrollo “Sustentable”, por lo que difundir y promover una cultura de conciencia ecológica es indispensable. En la actualidad, el CITEC cuenta con trece licenciaturas y una totalidad de 2410 alumnos las cuales generan una gran cantidad de residuos sólidos inorgánicos, resultante de materiales utilizados en prácticas y proyectos. Así mismo, no cuenta con una estrategia de separación y/o abastecimiento de basura.

### Justificación

El objetivo de la Universidad Autónoma de Baja California de impulsar y difundir una cultura de conciencia ecológica (UABC, 2011), lo cual puede verse plasmado en un esfuerzo inicial por la capacitación a la comunidad y como resultado obtener una apropiada disposición de sus propios residuos; Al menos en CITEC, gran parte de los residuos pueden ser separados y reutilizados fácilmente por un programa reúso. A la fecha los esfuerzos para la separación de material no han cobrado la importancia necesaria y se han obstaculizados por no tener el diseño formal campaña que ayude a educar a la comunidad a entender y apoyar el propósito. Al sensibilizar a la comunidad a manejar correctamente los residuos inorgánicos que generan, además de disminuir la cantidad de basura, puede surgir la oportunidad de realizar propuestas de ECODISEÑO o simplemente el hecho de destinar residuos a un segundo propósito en lugar de ir directo a la basura, puede ser un gran avance para la institución.

*Objetivo Generales:* Desarrollar una estrategia comunicacional (campaña) digital de educación continua con la comunidad Universitaria que tenga impacto en la adecuada implementación de la separación de residuos inorgánicos en el Centro de Ingeniería y Tecnología (CITEC) de la Universidad Autónoma de Baja California (UABC) dirigida a la población estudiantil.

### Objetivos Específicos

*Medir el conocimiento de los términos de reutilización y reciclaje en la población estudiantil de CITEC. Proponer un esquema de difusión sobre separación de residuos inorgánicos. Medir resultados de la funcionalidad de la campaña. Evaluar las conductas pro-ambientales de cada persona de la comunidad de CITEC. Analizar las causas por las cuales no se pone en práctica los conocimientos adquiridos sobre cuidados ambientales del estudiante y personal de CITEC. Investigar sobre los materiales de mayor uso en las carreras de CITEC.*

### Antecedentes

La creación de campañas sociales, así como estrategias y programas sobre el cuidado del medio ambiente ha sido un tema transversal en instituciones educativas, debido a que por la naturaleza de las actividades se tiene un gran potencial de aprendizaje. En España en el año de 1997, la

Universidad Autónoma de Madrid aprobó “La carta de compromiso ambiental con la Agenda 21” (Ostolaza, 2002), en la cual se crean estrategias que permiten mejorar la gestión ambiental en ámbitos de minimización de residuos peligrosos, pacificación del tráfico, entre otras cosas, así como impulsar la participación de la comunidad universitaria. Por otro lado, en el continente Americano, se cuenta a su vez con algunos casos de éxito, como es el caso de los Autores (Alvira, Hernando, & Mejía, 2012) Gómez Alvira, Hernando Blanco y Mejía Fernández de la Universidad Nacional de Colombia quienes logra implementar un programa de reciclaje que se ha convertido en modelo para varias regiones e instituciones educativas del país. Este programa consiste en la clasificación de residuos y su desintegración. La Universidad Nacional Autónoma de México (UNAM) creó un programa de reciclado de poliestireno siendo la primera institución de Latinoamérica en contar una iniciativa de este tipo (UNAM, 2012). Ahora bien, en Baja California en la UABC campus Tijuana, la Facultad de Ciencias Químicas e Ingeniería desarrollan un proyecto ecológico enfocado al reciclaje de residuos urbanos no peligrosos con estudiantes de la licenciatura en Químico Farmacobiólogo (Alvira, Hernando, & Mejía, 2012).

### Marco Teórico

#### Diseño Gráfico y Estrategias Comunicacionales

El diseño gráfico es una herramienta que permite satisfacer la necesidad de la sociedad de comunicarse a través de medios visuales procurando mensajes significativos bien estructurados. Influye en la actitud y comportamiento de los seres humanos, por tal motivo el diseño gráfico es una actividad que tiene una gran responsabilidad social que va en busca de mejorar la calidad de vida trabajando ecológica, cívica y lo más humanamente posible. Está en las manos de los diseñadores crear e innovar diseños que solucionen problemas sociales que se están viviendo actualmente, aprovechándose del poder que tienen de entrar y permanecer en la mente de la gente utilizando un arma muy poderosa la cual es el lenguaje bimedia, que es el empleo de imágenes y textos para la transmisión de mensajes (Costa, 2012).

El diseño es un proceso de creación visual con un propósito, a diferencia de la pintura y de la escultura, que son la realización de las visiones personales y los sueños de un artista, el diseño cubre exigencias prácticas. Una unidad de diseño gráfico debe ser colocada frente a los ojos del público y transportar un mensaje prefijado. Un producto industrial debe cubrir las necesidades de un consumidor (Wong, 2009).

Según Wuicius Wong (Wong, 2009), los elementos prácticos son de suma importancia dentro de cualquier del diseño estos elementos son: la representación que exprese ideas o ambientes a los espectadores, y estos pueden ser representativos o abstractos pero siempre relacionados al segundo elemento que es el significado, el cual consiste en generar códigos visuales que sean fáciles de entender, y ayuden a la correcta trasmisión de mensajes o que ya cuenten con una alfabetidad visual establecida, como sucede con los colores del semáforo, o los colores que se han utilizado para la separación de residuos, en los cuales ya existe información establecida, y por último la función que se hace presente cuando un diseño cumple con los objetivos específicos para los cuales fue propuesto.

Realizar campañas sustentadas en los principios de la mercadotecnia social con el fin de modificar conductas e ideas negativas y transformarlas en actitudes positivas para crear un beneficio a la sociedad es de lo que hemos estado hablando, responsabilidad social del diseñador. Participar desarrollando campañas sociales entorno al impacto ambiental es una excelente forma para comenzar. Pero para adentrarnos a estos tipos de campañas, es necesario entender el concepto de conciencia ambiental tanto como educación ambiental. La primera es tener presente

que debemos respetar la naturaleza y por lo tanto necesitamos conocerla para poder cuidarla. La segunda es actuar para revocar los problemas ambientales una vez adquirida una conciencia sobre el medio. Relativamente estos dos conceptos no tienen mucho dentro del vocabulario de la sociedad. Todo nace a partir de la llegada de la industrialización en los países desarrollados originando una acelerada intervención del hombre sobre su entorno provocando la degradación de su medio ambiente así como una modificación en la actitud de la sociedad.

El desarrollo masivo de campañas sociales sobre el cuidado del medio ambiente tiene apenas unas décadas cuando la naturaleza comenzó a tener cambios climáticos muy severos, especies de flora y fauna comenzaron a extinguirse, resumiendo cuando comenzó a alterarse el funcionamiento natural de la biodiversidad.

## **METODOLOGÍA**

### Definición de Modelo Metodológico de la Campaña Digital

FASE I. Identificar y definir el problema, para identificar el problema, se debe confiar en los datos sobre manejo de residuos, comportamientos observados y otras cuestiones actuales. FASE II. Analizar el contexto, un análisis de los contextos generales y específicos en los que aparece el problema indicarán si la campaña puede o debe combinarse con otras acciones o programas. FASE III. Localizar socios y partes interesadas e implicarlas, dichos socios y partes interesadas pueden ser autoridades públicas y/o organizaciones privadas. Su participación puede ser de carácter económico, logístico o de otro tipo. FASE IV. Elaborar el presupuesto, debe definir el presupuesto estimado o real de la campaña, incluyendo los gastos de investigación y evaluación. FASE V. Convocar a los socios de campaña para una reunión inicial, definir el objetivo general de la campaña, así como tratar la estrategia de campaña, para conocer cuáles son sus necesidades. Basándose en estas necesidades, debe reunirse con los socios de campaña a fin de identificar los recursos de que ya dispone y aquellos que tendrá que localizar en otros lugares. Deberá redactar la primera versión del informe creativo, con toda la información que se ha recogido hasta este momento. Dicho informe constituirá el documento de referencia central de la campaña y se actualizará a lo largo del proceso de campaña.

FASE VI. Concurso de ofertas y constitución del equipo de campaña, El equipo de campaña debería incluir a personas de la organización promotora, los socios de campaña, y cualquier agencia externa y proveedores contratados tras un concurso de ofertas. Los licitantes podrán incluir a agencias de publicidad, producción y medios, relaciones públicas e investigadores. La participación de investigadores externos puede ser necesaria o no, dependiendo de si existe un departamento interno de investigación en la organización promotora. No obstante, se recomienda que la evaluación sea realizada por un agente externo, siendo esencial para mantener la objetividad.

### Análisis Situacional

Se debe realizar un análisis pormenorizado del problema, sus posibles soluciones y la audiencia objetivo. Esto le permitirá definir los objetivos específicos de la campaña, ayudarlo a diseñar el mensaje y preparar la evaluación de la campaña.

### Análisis Exhaustivo del Problema y Posibles Soluciones

Estudios cualitativos y cuantitativos que analicen el comportamiento problemático en profundidad;

Investigaciones sobre modelos teóricos que expliquen las motivaciones subyacentes al comportamiento;  
Campañas y otras acciones pasadas;  
Estudios de marketing sobre la audiencia objetivo.

*Segmentar la audiencia:* Determine si la audiencia objetivo necesita estar segmentada o no. A menudo lo mejor es segmentar la audiencia para abordar las necesidades diferentes y características de subgrupos concretos (estilo de vida, cultura, etc.). Una vez definidos los subgrupos, evalúelos y seleccione uno o más como objetivo de la campaña. Además del grupo objetivo más obvio (el grupo cuyo comportamiento necesita cambiar más, o audiencia primaria) puede ser útil intentar alcanzar una segunda audiencia que podría influir sobre la audiencia primaria. A continuación necesita determinar cómo llegar a la audiencia o audiencias objetivo y sus subgrupos concretos basándose en la información obtenida previamente.

### Determinar Cómo Actuar Sobre las Motivaciones Principales y Llegar a la Audiencia

Factores que contribuyen al comportamiento problemático identificado. Primeramente, pregúntese si el comportamiento de su público es intencionado, en una segunda fase es importante comprender los motivos que subyacen a dicho comportamiento inseguro. En algunos casos esta información no estará disponible, haciendo que sean necesarios estudios adicionales. En concreto, será necesario realizar estudios adicionales si se aplica alguna de las siguientes condiciones: ¿Dispone de amplia información sobre las principales variables dependientes del problema y/o comportamiento seguro pero desea saber qué es lo que más pesa en el grupo objetivo?; ¿Ha encontrado información y sabe que faltan ciertos elementos; o bien No dispone de información sobre las principales variables dependientes. Basándose en los resultados de estos estudios, podrá elegir el modelo teórico adecuado sobre el que construir su estrategia de campaña. Este puede ser o bien un modelo teórico establecida o uno creado por usted. En cualquier caso, el modelo debe contener los principales determinantes del comportamiento de su audiencia particular.

*Definir los objetivos específicos de la campaña:* Este mini-paso consiste en desglosar el objetivo general de la campaña en objetivos específicos, concretamente:

*Objetivos primarios:* defina qué comportamiento ha de adoptar la audiencia objetivo para alcanzar el objetivo general de la campaña.

*Objetivos secundarios:* identifique otros factores que pueden contribuir a lograr los objetivos primarios como conocimientos, actitudes y normas.

*Recopilar información de evaluaciones de campañas anteriores y otras acciones:* Debe seleccionar una metodología de evaluación apropiada para cada uno de los objetivos específicos que ha definido previamente. En este caso, puede ser muy útil utilizar la información proporcionada por las investigaciones apropiadas realizadas en el pasado.

*Diseño De La Campaña Digital:* Como actividades principales al iniciar la planeación de la campaña, es conveniente el ejercicio de responder a las siguientes preguntas: ¿Qué debemos hacer? ¿Cómo debemos hacerlo? y ¿Cómo sabremos si la campaña funciona o no?

*Desarrollar la estrategia de campaña:* La estrategia de campaña se debe basar en sus objetivos específicos, que definen cómo lograr el objetivo general de la campaña de forma operativa. La estrategia de campaña determinará cómo influirá sobre la audiencia objetivo para cambiar o inculcar conocimientos, creencias y/o conductas, y se basará en modelos teóricos.

*Definir la estrategia:* Aquí se incluye el tipo de campaña (campaña de comunicación, combinada, integrada) y su alcance (local, regional y/o nacional), dependiendo de las zonas en las que aparece el problema, así como la audiencia objetivo y cómo se puede llegar a ella. Debería además estudiar las campañas y acciones anteriores para obtener directrices que sirvan para el desarrollo de su estrategia. Una vez definida la estrategia de campaña, el informe creativo debe actualizarse añadiendo componentes nuevos.

Desarrollar el contenido del mensaje. Aquí incluimos el contexto, estructura y estilo del mensaje que ha definido en el informe creativo. Para ello será preciso establecer un procedimiento claro y un debate con la agencia de publicidad y el promotor de la campaña. El mensaje debe ser tan concreto y comprensible como sea posible. Debe usar una estrategia de marketing social y considerar los objetivos específicos de la campaña, las características del comportamiento problemático y su correspondiente comportamiento seguro, las principales variables dependientes del comportamiento problemático para la audiencia objetivo (frecuencia y lugar), los beneficios y costes percibidos de adoptar un comportamiento seguro, el lugar y momento en el que se debe adoptar el comportamiento seguro, las características de la audiencia objetivo, los factores ambientales, y las características del remitente. Para desarrollar el contenido del mensaje y la estrategia de ejecución se podrán usar estudios cualitativos, como entrevistas individuales, grupos muestra o sesiones de creatividad. Temas de impacto a tratar en la campaña:

- Cuidas el planeta
- Cuidar el medio
- Reusar material (beneficios)
- Reducir el consumo de materiales (se genera menos contaminante)
- Energía—CO2 papel. – Tala de árboles
- Impacto directo a la economía

Elegir los identificadores de la campaña. Estos son elementos visuales o sonoros que aportan consistencia a una campaña o grupo de campañas; también añaden identidad a una campaña y señalan a las organizaciones implicadas. Como identificadores de campaña se pueden usar portavoces, logotipos, mascotas y marcas. Seleccionar los medios y definir el plan de medios. El plan de medios se debe definir conforme al presupuesto de la campaña, su calendario y duración, las tarifas de publicidad en cada medio y vehículo (periódico, programa de radio, etc.), las estadísticas demográficas de cobertura, y las aberturas

Desarrollar y probar los mensajes y eslóganes en su contexto. Sometiendo el mensaje a prueba conseguimos saber más sobre sus puntos fuertes y débiles y sobre si puede llegar a la audiencia seleccionada. Puede haber herramientas (por ejemplo, la Escala de diagnóstico de conductas de riesgo) que nos ayuden a mejorar y optimizar el mensaje antes de la puesta en marcha de la campaña.

*Ejecución de la campaña:* La elección del momento de lanzamiento es muy importante ya que genera oportunidades únicas de conseguir publicidad gratuita para la campaña. En aquellos casos en los que la campaña está combinada con otras acciones, es importante que se coordinen cuidadosamente todas las actividades a fin de asegurarse de que cada componente se lleva a la práctica según se ha programado. Para ello se precisa una organización muy estricta y una buena

comunicación entre el promotor de la campaña y sus socios y mediadores. Controlar la publicación de materiales de campaña y posiblemente información recibida sobre pasos previos.

*Evaluación de la campaña:* La evaluación se debe diseñar con tanto cuidado como la propia campaña, para ello se considera: Definir los objetivos de la evaluación. La evaluación de su campaña debe, como mínimo, permitirle determinar si la campaña funciona o no, y si es rentable. Más específicamente, debe identificar asimismo qué aspectos de la campaña funcionan y cuáles no, y descubrir los posibles motivos. Cada uno de estos objetivos se corresponde con un tipo distinto de evaluación –un proceso, resultado o evaluación económica. Elegir el diseño y muestra de evaluación. Debe elegir un diseño de evaluación adecuado con al menos una medición previa y posterior y, de ser posible, usar un grupo de control o comparación. Elija la muestra que encaje en el calendario, presupuesto, tamaño y tipo de audiencia objetivo, tema de la campaña y cualquier actividad de apoyo. Desarrollar medidas de evaluación. (datos sobre accidentes en carretera, comportamientos observados, datos propios y datos sobre costos). Definir métodos y herramientas para recopilar datos. Seleccione los métodos (cualitativos o cuantitativos) y las herramientas necesarias para la evaluación, en consideración de su viabilidad, el tiempo y los recursos que precisan. Someter a prueba previa las herramientas de evaluación es especialmente recomendable. La recogida de datos se debe realizar de la misma forma en cada fase. Planificar la evaluación. Organice la evaluación Para determinar si la campaña que ha puesto en marcha ha sido eficaz, debe completar la evaluación de campaña comparando las medidas tomadas antes y después de la campaña. También recomendamos realizar una medición mientras la campaña está en marcha. El análisis de los datos recogidos en estos momentos le dirá si la campaña ha tenido efecto y en qué dimensiones. Independientemente de la existencia de repercusión, se deben comunicar los resultados. La evaluación debe ser independiente y no debe ser objeto de ningún tipo de influencia o parcialidad. El comité de evaluación debe salvaguardar la objetividad de la evaluación, aunque la absoluta imparcialidad no se puede garantizar nunca.

## CONCLUSIONES

Se considera la Campaña Digital como estrategia de Educación Continua a la comunidad estudiantil en materia de reciclaje y reúso de materiales, partiendo de la idea que un buen diseño es la mejor expresión visual de la esencia de "algo", ya sea esto un mensaje o un producto, para hacerlo fiel y eficazmente, el diseñador debe buscar la mejor forma posible para que ese "algo" sea conformado, fabricado, distribuido, usado y relacionado con su ambiente. Su creación no debe ser sólo estética sino también funcional, mientras refleja o guía el gusto de su época (Wong, 2009). Es por eso que en la era digital, el diseño se ha adaptado a las nuevas tecnologías de la información y se ha desarrollado como un agente de interacción humana, que refleja las tendencias sociales de comunicarse de manera visual. Los usuarios diseño gráfico en la actualidad se han incrementado, debido a la promoción de la imprenta el conocimiento pudo llegar a cada vez más personas, pero en la era digital este crecimiento ha sido superado, actualmente la comunicación visual sustituye al papel por dispositivos electrónicos, y el lenguaje cada vez es más visual e interactivo. También las tareas que cumple esta comunicación visual ha crecido, y el uso de dispositivos móviles ha facilitado la rápida propagación de información visual. Siendo el Reciclaje un tema de necesidad mundial es conveniente aprovechar las ventajas tecnológicas, el desarrollo del diseño grafico y los modelos actuales de difusión de la información para la formación de nuestra comunidad.

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# EDUCACIÓN SUPERIOR EN BAJA CALIFORNIA: ANÁLISIS DE LAS NECESIDADES FÍSICAS Y HUMANAS PARA UNA MATRÍCULA EN CRECIMIENTO

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## ABSTRACT

*En el caso de Baja California, se percibe como una entidad que se encuentra por encima de la media nacional, de hecho en los primeros lugares, en lo que respecta a indicadores educativos como el número máximo de años estudiados y la tasa analfabetismo. Sin embargo u sobre todo a nivel superior se sigue percibiendo una capacidad física insuficiente para una población con educación superior creciente. Habrá que agregar que al encontrarse en una zona privilegiada dado su cercanía con California, se tiene un mercado educativo y laboral competitivo por lo que se hace necesario seguir ampliando los accesos a la educación superior de la población Bajacaliforniana y de aquellos que emigran de otras zonas del país. Así pues el problema que se pretende analizar es una matrícula en crecimiento del nivel superior es la escasez de espacios educativos y de personal calificado que absorba y atienda a ese nivel educativo.*

## HIGHER EDUCATION IN BAJA CALIFORNIA: ANALYSIS OF HUMAN AND PHYSICAL HUMAN NEEDS FOR REGISTRATION GROWTH

*This research analyses the impact of adequate infrastructure to support increase enrollment in Baja California*

### Se Plantearan el Siguiete Objetivo

Determinar el impacto del crecimiento poblacional en la educación superior en Baja California para el período 2010-2030. Habría que agregar que la hipótesis que se plantea en este documento es que la demanda en educación superior crecerá de forma sostenida en los próximos 20 años lo que dará lugar a un incremento significativo en la presión por la apertura de nuevos espacios físicos y recurso humano para la atención de ese nivel. La educación superior en el plan de desarrollo 2007-2013, tenemos que solo se capta a uno de cada cuatro jóvenes de entre 18 y 22 años de edad es decir solo un 25% de cobertura. Según el PND (2007:179) esta escasa cobertura es el resultado de rezagos e ineficiencias en los niveles previos, a la pobreza de las familias y a las características propias de las instituciones de educación superior, puesto que muchas e ellas operan por debajo de su capacidad, dada la concentración de la demanda educativa. Asimismo la la educación superior en el entorno global, generalmente se asume que una población con altos niveles educativos y de capacitación puede resultar en un elemento importante que genera impactos positivos en el bienestar económico y social de aquellos países que cuenten con una población altamente calificada. La evolución de la educación superior en el marco global, se ha presentado en los últimos 30 años un aumento de los índices educativos a nivel internacional en los países desarrollados así como también en países en desarrollo, así por ejemplo:

La composición en 1997 de los niveles educativos promedios alcanzados por la población de los países miembros de la Organización para la Cooperación y el desarrollo Económico (OCDE) era del 37% de la población no había completado la educación preparatoria (secundaria y menos), 43% había terminado su educación preparatoria y el 20% restante alcanzaba niveles de educación superior (OCDE 2009:28).

En el caso de México, donde más de dos terceras partes de la población no ha alcanzado ni completado la educación preparatoria. En la educación superior en Baja California, siendo uno de los estados punteros a nivel nacional en términos de crecimiento económico y poblacional por encima de la media nacional.

En Baja California la matrícula en educación superior ha pasado de solo 24200 alumnos en el ciclo escolar 1990-1991, hasta 81223 alumnos en el ciclo 2009-2010. En relación a la infraestructura, en el ciclo escolar 1990-1991, solo existían 36 instituciones de educación superior, hasta alcanzar un total de 97 instituciones en el ciclo escolar 2008-2009. Para la predicción de los valores de oferta y demanda de la educación superior, en la metodología se utiliza básicamente un enfoque, donde se utilizan los valores estimados de la población estimada realizados por el Consejo Nacional de Población para Baja California disponibles en su sitio web a esta estimación posteriormente se le aplica los distintos indicadores educativos (eficiencia terminal y absorción) para proyectar la matrícula del nivel de educación superior en los próximos 20 años. La proyección de la demanda de educación superior 2010-2030, de la matrícula en Baja California, comportándose para el ciclo escolar 2005-2006 de casi 75000 estudiantes, esta alcanzarán valores de 183043 para el ciclo 2020-2021, y de 233673 en el ciclo 2030-2031 lo que representa incrementos de este indicador del orden de 172% y de 212% respecto a los valores al inicio del periodo de estimación. Para hacer frente al crecimiento que se muestra anterior, es necesario determinar si las instituciones educativas y el Gobierno Estatal, podrán incrementar y/o mantener sus niveles actuales de generación de infraestructura, así como de formación de docentes, que permitan el que la población escolar pueda acceder a un espacio de educación superior.

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## DESAFÍOS DE LA MUJER EMPRESARIA Y SU RELACIÓN CON FACTORES CULTURALES FAMILIARES

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### RESUMEN

*El objetivo de este trabajo buscó describir diversos desafíos a los que se enfrenta la mujer empresaria al iniciar y desarrollar su empresa buscando la relación con aspectos culturales de educación familiar así como la relación con el contexto en el que participa. Este estudio se desarrolló con 17 empresarias- propietarias que empleaban 238 trabajadores a mayo de 2012, predominantemente casadas, con hijos, con estudios de licenciatura, integrantes de una Asociación (Deriva del Proyecto de Investigación con registro de la DGEST No. AGS-MCA-LA-IGEM-2011-102) que contaba con 42 empresarias asociadas. La muestra representó el 40.48% de la población de estudio, propietarias de micro, pequeñas y medianas empresas (MiPyME), de la ciudad de Aguascalientes, México. Los resultados muestran que rara vez, se enfrentan a discriminación, envidias, represiones y acoso moral. En cuanto a los factores culturales predominantes están de acuerdo en que la mujer es cuidadora del bienestar familiar y preparada psicológicamente para ser madre. En la prueba Rho de Spearman se obtuvieron correlaciones significativas positivas entre el desafío de formar y educar a los hijos y los factores culturales de renunciar a su profesión y permanecer en el hogar, además del hallazgo de que a mayor acoso laboral, son menores los ingresos y tienen menos posibilidades de acceder a cargos directivos.*

**PALABRAS CLAVE:** Desafíos, mujer empresaria, factores culturales familiares, propietarias, MiPyME.

## CHALLENGES OF WOMEN ENTREPRENEURS AND THEIR RELATIONSHIP WITH FAMILY CULTURAL FACTORS

### ABSTRACT

*The aim of this study was to describe various challenges facing women entrepreneurs to start and grow your business to pursue the relationship with cultural aspects of family education and the relationship with the context in which it participates. This study was conducted with 17 entrepreneurs - owners employing 238 workers to May 2012, predominantly married, with children, with a bachelor's degree, members of an association that entrepreneurs had 42 partners. The sample represented 40.48 % of the study population, owners of micro, small and medium enterprises (MSMEs) in the city of Aguascalientes, Mexico. The results show that rarely face discrimination, envy, repression and harassment. Regarding cultural factors prevailing agree that women are caregivers of family welfare and psychologically prepared for motherhood. The Spearman rho test significant positive correlations were obtained between the challenge of training and educating children and cultural factors give up his profession and remain in the home, in addition to finding that greater workplace harassment are lower income and have less access to leadership positions.*

**JEL:** M1, M10

**KEYWORDS:** Challenges of women entrepreneurs, family cultural factors, owner women, MSMEs

## INTRODUCCIÓN

La organización de este estudio se presenta en cuatro secciones. En la primera sección se incluye la revisión de la literatura planteando argumentos que sustentan los desafíos y obstáculos a los que se enfrentan las mujeres empresarias al iniciar y desarrollar su empresa, así como los aspectos culturales de educación familiar tomando en cuenta el contexto organizacional en el que participan. En la segunda sección se incluye la metodología aplicada para llevar a cabo el estudio, tomando como marco de referencia las empresarias integrantes de una asociación, con muestreo no probabilístico, representando el 40.48% de la población de estudio. En la tercera sección se presentan los principales resultados de la hipótesis de estudio planteada y en la cuarta y última sección se integran las conclusiones, limitaciones y futuras líneas de investigación en la búsqueda de conocimiento y desarrollo de la mujer empresaria mexicana.

## REVISIÓN LITERARIA

Las crisis contemporáneas de trabajo como el déficit estructural y creciente de empleo, la precarización del trabajo con trabajos temporales, contratos de corta duración, trabajos forzados de tiempo parcial, así como el incremento de capacidades exigidas en la actividad profesional sin reconocer esas capacidades a través de niveles más altos de salarios, han generado en las mujeres la necesidad de crear y desarrollar empresas (Bouffartigue, 1997 en Sánchez-Apellániz, M., 1999). En este estudio se planteó el objetivo de identificar los desafíos que enfrentan las mujeres empresarias que se relacionan con factores culturales familiares en el contexto organizacional de micro, pequeñas y medianas empresas. (MiPyMEs).

### Desafíos y Obstáculos a los Que se Enfrentan las Mujeres Empresarias en el Ámbito Internacional

En el análisis del empresariado femenino en Aragón, realizado por Blasco, M.P., Brusca, I, Condor, V., Esteban, M.L. y Labrador, M. (s/f:1-15), argumentan que las mujeres son más propensas a recibir una mayor discriminación, fueron las que habían trabajado previamente como empleadas por cuenta ajena en empresas privadas. En el caso de Junquera (2004:961), en cambio realizó un estudio destacando los factores determinantes de éxito de empresas dirigidas por mujeres. Y en el estudio realizado por Navarro, Gámez y Alvarado, 2008, p. 14), identificaron barreras y obstáculos a los que se enfrentan las mujeres ejecutivas empresarias de Chile, como son discriminación laboral, envidia, represiones, acoso moral, mobbing organizacional, techo de cristal y en ocasiones, jefes misóginos. Además, en el trabajo de Daeren (2000, p. 6) uno de los desafíos que enfrentan es el *techo de cristal*.

### La Mujer Empresaria en el Ámbito Mexicano

En México, según Camarena A., M.E. y Hernández G., C. (2005), la mujer mexicana y latinoamericana ha experimentado la historia del feminismo con características diferentes. Si bien ha mejorado su salud, y las posibilidades de estudiar y trabajar fuera de casa, aún perdura su condición de mujer como servidora del hombre. De acuerdo a Hernández y Camarena (2004

en Hernández y Camarena, 2005), lo que ha marcado el ingreso de la mujer a puestos de toma de decisiones han sido el incremento en los niveles de escolaridad y los cambios en la manera en que la sociedad percibe el trabajo femenino.

### Factores Culturales Familiares de la Mujer

De acuerdo con Zabludovsky, G. (2007, p. 14) argumenta que “desde la infancia, hombres y mujeres aprenden a separar sus mundos sociales dando lugar a dos culturas diferentes que marcarán su comportamiento futuro.” En tiempos recientes la mujer ha incrementado su coparticipación en el sustento familiar, que ha ocasionado incompatibilidad entre las esferas doméstica y extra-doméstica del trabajo (Oliveira y Ariza, 2006 en Zabludovsky, 2007, p. 16)

En América Latina la “gran mayoría de las mujeres empleadas, empleadoras, micro-empresarias, profesionales, etc., tienen que combinar las responsabilidades de su trabajo remunerado con sus responsabilidades familiares y reproductivas que –según las pautas sociales y culturales – son impuestas unilateralmente a las mujeres como una responsabilidad biológica o “natural” mientras que ello no es el caso para los hombres”

De acuerdo a Navarro C., G., Gámez G., R. y Alvarado A. S. (2008), algunos aspectos culturales de educación que prevalecen actualmente en las mujeres son: sumisa, abnegada, cuidadora del bienestar familiar, humilde, discreta, prudente, depender económicamente de los demás, renuncia a su profesión, sacrificio de la individualidad, el hombre debe ser el proveedor y permanecer en el hogar, de los cuales es necesario obtener evidencia empírica si se presentan esos factores en la mujer empresaria.

### **METODOLOGÍA**

Esta investigación se realizó en la ciudad de Aguascalientes a mujeres empresarias pertenecientes a una Asociación, de septiembre de 2011 a mayo de 2012. Se desarrolló un diseño no experimental, de corte transversal, de carácter exploratorio, descriptivo y correlacional. Las variables de estudio fueron: *desafíos y obstáculos, factores culturales familiares y contexto organizacional* de las MiPyMEs, como variable de control, la muestra fue no probabilística, específica de las integrantes de una asociación, tomando como criterio del investigador la disponibilidad de las empresarias, solicitada a través de convenio de colaboración y en su Asamblea General de Socias. La recolección de datos fue aplicando las técnicas de la entrevista semi – estructurada y un cuestionario, obteniendo la muestra de 17 empresas que emplean a 238 trabajadores. La hipótesis planteada es la existencia de relaciones significativas positivas entre los desafíos y obstáculos que enfrenta la mujer empresaria y los factores culturales familiares que aún se aplican en su familia en un contexto de MiPyMEs. Las dos variables de estudio se sometieron al análisis de confiabilidad por el método Alfa de Cronbach, obteniendo valores de confiabilidad de .772 con 11 ítems para la variable de *Desafíos y obstáculos que enfrenta la mujer empresaria*, con escala de totalmente en desacuerdo a totalmente de acuerdo; y de .817 con 12 ítems para la variable *Factores culturales familiares*, con escala de nunca a siempre.

### **RESULTADOS**

Con base en la metodología aplicada, la mujer empresaria de la muestra tiene edades de 51 a 70 años (53%); y el 47% de 30 a 50 años; es casada, 52.9%; el 35.3% soltera y sólo el 11.8% divorciada. En su formación escolar, el 41.2% cuenta con licenciatura, el 17.6% especialidad y el 11.8% con maestría. La relación que tiene la pareja en su empresa es 23.5% propietario, 17.6%

colaborador, pero el 47.1% no cuenta con ninguna relación. El 70.6% de las mujeres empresarias tiene hijos y sólo el 29.4% no. El 64.7% de la muestra administran empresas micro, el 23.5% pequeña, y el 11.8% mediana; 35.3% tiene de 6 a 10 años de antigüedad en el mercado, el 23.5% de 11 a 20 años y el 17.6% de 21 a 30 años. La relación del gerente es familiar en 82.4% y el 52.9% atiende mercado regional.

En el análisis descriptivo de frecuencias realizado, se argumenta que rara vez, los desafíos a que se enfrentan las mujeres empresarias son discriminación 41.2%, envidias 41.2%, represiones 41.2%, acoso moral 41.2%, acoso laboral 11.8%, techo de cristal el 11.8%, menos ingresos que el hombre 11.8%, jefes misóginos 11.8%, menos posibilidades de acceder a cargos directivos 5.9%, relaciones familiares 35.3%, relaciones con el esposo 17.6%, formación y educación de los hijos 11.8%. Además siguen siendo amas de casa el 58.8% en actividades diarias que realiza como las tareas domésticas en el hogar, el 35.3% de ellas se dedica al cuidado de los hijos, atención escolar, educación y formación de los mismos como madre de familia. En cuanto a los factores culturales educativos de la mujer que aún se aplican en su familia, se argumenta que sólo el 11.8% está de acuerdo en la sumisión o acatamiento, subordinación manifiesta con palabras o acciones; 23.6% está de acuerdo a totalmente de acuerdo en ser abnegada o resignada; el 47.1% está totalmente de acuerdo en ser cuidadora del bienestar familiar; el 58.8% está de acuerdo a totalmente de acuerdo en ser humilde, modesta; el 29.4% en ser discreta, prudente y reservada; el 29.4% en depender económicamente de los demás; el 27.4% en renunciar a su profesión; el 27.7% en el sacrificio de la individualidad; el 29.4% están de acuerdo en que el hombre debe ser el proveedor de la familia; el 11.8% está de acuerdo en permanecer en el hogar y el 47% está de acuerdo en estar preparada psicológicamente para ser madre. En el análisis de correlación que se realizó para probar la hipótesis planteada aplicando la prueba Rho de Spearman, únicamente se obtuvo evidencia significativa positiva como se muestra en la Tabla 1.

Tabla 1: Resultados del Análisis de Correlación con Prueba Rho de Spearman

VARIABLE: DESAFÍOS Y OBSTÁCULOS	FACTORES CULTURALES FAMILIARES	
	Renunciar a su profesión	Permanecer en el hogar
Formación y educación de los hijos	.484*	.504*
	.049	.039

\*\* La correlación es significativa al nivel 0.01 (bilateral); \* la correlación es significativa al nivel 0.05 (bilateral). Solo se obtuvo evidencia parcial de las relaciones entre la variable desafíos y obstáculos que enfrenta la mujer empresaria en cuanto a la formación y educación de los hijos y los factores culturales familiares de renunciar a su profesión y la decisión de permanecer en el hogar. A mayor desafío y obstáculo para formar y educar a los hijos, más renuncian a su profesión y toman la decisión de permanecer en el hogar. Además se encontró una relación significativa positiva entre los desafíos y obstáculos de que a mayor acoso laboral o mobbing, mayor techo de cristal (.874\*\*), menores ingresos (.866\*\*), y menos posibilidad de acceder a cargos directivos (.876\*\*)

## CONCLUSIONES

Al ser un estudio exploratorio en las variables de *desafíos y obstáculos de la mujer empresaria y su relación con factores culturales familiares*, se obtuvo un acercamiento al identificar diversos desafíos que se le presentan, aunque manifiestan que rara vez, a pesar de que en esta muestra las mujeres empresarias cuentan con mayores niveles educativos como son la licenciatura, especialidad y maestría. Uno de los principales desafíos que enfrenta la mujer empresaria mexicana es la formación y educación de los hijos, y por ello, la influencia de los factores culturales familiares de renunciar a su profesión y de permanecer en el hogar para brindar esa formación y educación. Aunque también se vislumbró con una mayor correlación significativa positiva el hallazgo de que a mayor acoso laboral que se le presenta a la mujer empresaria, son menores los ingresos, tienen menos posibilidades de acceder a cargos directivos y mayor techo de

crystal. Por lo que se argumenta y aporta evidencia empírica coincidiendo con Navarro, Gámez y Alvarado (2008, p. 14) en cuanto al mobbing organizacional o acoso laboral y el techo de cristal. Sin embargo se requiere mejorar la muestra, abarcar un mayor número de entidades para que estas evidencias sean representativas y se puedan generalizar.

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## RECONOCIMIENTO

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# **EL PERFIL DEL EMPRENDEDOR DE LA ZONA SUR DEL ESTADO DE YUCATÁN: CARACTERÍSTICAS, FACTORES DE VOCACIÓN Y FUENTES DE INSPIRACIÓN**

Mario René Chan Magaña, Universidad Tecnológica Regional del Sur

## **RESUMEN**

*Un elemento clave de la innovación es el empresario, pues éste es quien realiza las innovaciones hasta obtener nuevos productos y/o servicios, por lo que es considerado como el motor del cambio tecnológico según Schumpeter. Empero, el estudio del impacto de las actividades desarrolladas por este tipo de agentes es relativamente reciente, los primeros estudios se centraron en las características personales del empresario; sin embargo, la evidencia y hallazgos obtenidos permiten concluir que lo que realmente diferencia al empresario emprendedor es un proceso caracterizado por la innovación constante. Es por esto que, los trabajos recientes, proponen considerar al proceso emprendedor como un conjunto de funciones, actividades y acciones asociadas con la percepción de oportunidad y la creación de la organización para explotarla. En este contexto, el objetivo de este trabajo es conocer e identificar las principales características que poseen los emprendedores de la zona sur del estado de Yucatán, para que estos puedan desarrollar productos o servicios innovadores. Entre los resultados obtenidos se encuentra las principales fuentes de inspiración que contribuyeron a generar su negocio, los factores que determinaron su vocación emprendedora y los principales atributos y hábitos que poseen.*

**PALABRAS CLAVE:** Emprendedor, Empresario, Innovación

## **THE ENTREPRENEUR PROFILE OF THE SOUTH STATE OF YUCATAN: FEATURES, VOCATION FACTORS AND SOURCES OF INSPIRATION**

### **ABSTRACT**

*A key element of the innovation is the entrepreneur, because this is who makes innovations to develop new products and/or services, so it is considered as the engine of technological change according to Schumpeter. However, the study of the impact of the activities developed by such agents is relatively recent. Early studies focused on the personal characteristics of the entrepreneur. However, the evidence and findings obtained indicate that what really differentiates the enterprising entrepreneur is a process characterized by constant innovation. For this reason, recent work, propose to consider the entrepreneurial process as a set of functions, activities and actions associated with the perception of opportunity and the creation of the organization to exploit. In this context, the aim of this work is to find and identify the main features that entrepreneurs have in the southern state of Yucatán, so that they can develop innovative products or services. Among the obtained results are the main sources of inspiration that contributed to generate your business, the factors that determined their entrepreneurial spirit and the main attributes and habits they have.*

**JEL:** M1, M13, M130

**KEYWORDS:** Entrepreneur, Entrepreneur, Innovation

## INTRODUCCION

La generación de emprendedores es de vital importancia para un país debido a los beneficios que esto genera en el ámbito económico, tales como el crecimiento de la economía, la generación de empleos, el crecimiento del PIB, y mayores inversiones extranjeras dentro del país que mejores resultados económicos refleje. A pesar de estos beneficios existen diversas barreras que impiden el desarrollo de un espíritu emprendedor dentro de una sociedad. En el caso particular de México se realizan proyectos emprendedores que nunca llegan a culminarse, debido a que se desconocen las fuentes de financiamiento, o que el emprendedor no tiene el suficiente conocimiento técnico sobre como allegarse de recursos.

Durante las últimas décadas se ha observado un creciente interés de parte de varios analistas, investigadores y funcionarios en el fenómeno del empresario emprendedor, y en particular, de su manifestación más conspicua: la emergencia de empresas innovadoras. Este interés surge de la evidente contribución que dichos agentes han hecho al crecimiento económico y a su efecto sobre el rejuvenecimiento del tejido productivo, el relanzamiento de los espacios regionales y la generación de nuevos empleos (OCDE, 1999 y 2001). Gracias a ello el debate sobre empresariedad ha registrado una notable evolución: desde quienes intentan definir quien es un emprendedor —y por tanto indagan en los aspectos de su personalidad (Frese y Rauch, 2001)— hasta los que se concentran en el proceso empresarial como un fenómeno más complejo en el que intervienen e interactúan factores situacionales, sociales, culturales y económicos (Smith, Glasson y Chadwick, 2005).

Dentro de éstos últimos es posible observar perspectivas que se diferencian según el énfasis que se haga en el plano individual frente al papel del entorno social, llegando algunos a sostener la necesidad de concebir el fenómeno de la empresariedad como de naturaleza colectiva, tal y como Fairlie y Woodruff (2005) proponen para explicar el caso mexicano. En la búsqueda de los factores que explican las variaciones del fenómeno emprendedor, los primeros estudios se centraron en las características personales que diferenciaban los emprendedores de los que no son. Pero dada la diversidad y complejidad de la realidad emprendedora, los resultados no fueron muy productivos. Gartner (1985) plantea que la complejidad y variedad de los emprendedores hizo imposible lograr caracterizar un emprendedor promedio y por ende la construcción de una base teórica común a este tema (Bygrave, 1989).

En respuesta a esta situación, Bygrave y Hofer (1991) proponen que la delimitación del campo de conocimiento del espíritu emprendedor se amplíe y que además del estudio de las características personales y las funcionales del emprendedor incluya el estudio del proceso emprendedor y sus características. Estos autores proponen considerar el proceso emprendedor como un conjunto de funciones, actividades y acciones asociadas con la percepción de oportunidad y la creación de la organización para explotarla. Como punto de partida, Gartner (1985) propone considerar como elementos esenciales del estudio del emprendedor: a) el entorno, b) las características del individuo, c) el proceso, y d) la organización creada. Por su parte, Martinelli (2001) nota que para varios autores (e.g., Baumol, 1968; Kirzner, 1973; Thornton, 1999) hay dos aproximaciones al concepto de empresarios/emprendedores. Por el lado de la oferta existe el estudio de aquellos factores que influyen, propician y/o determinan su formación, y por el lado de la demanda está el análisis de los factores que influyen sobre la solicitud de las capacidades del empresario/emprendedor dentro del sistema económico.

Así, de acuerdo con Martinelli, existen dos dimensiones que subyacen en este enfoque: variables del sistema y variables de los agentes, que se pueden concebir como dos aproximaciones

equivalentes y contrapuestas: a) modelos macroanalíticos contra modelos microanalíticos y b) variables estructurales contra variables culturales. En cuanto a los rasgos que caracterizan la personalidad del empresario/emprendedor, el trabajo de McClelland (1961) es una referencia clásica. Para este autor las experiencias adquiridas durante la niñez crean en ciertos individuos un factor psicológico particular, al cual McClelland llama “la necesidad por logros” (the need for achievement, o n-achievement). De acuerdo con McClelland, la inculcación de la necesidad por logros es resultado de las prácticas de crianza que subrayan los estándares de excelencia, el entrenamiento de la autosuficiencia, el calor maternal y la poca dominación paterna. Lo interesante, como menciona el autor, es encontrar menos gentes con alta necesidad por logros en los países en desarrollo, además de que los que hay tienden a irse a otros campos distintos de los negocios o la industria

Después de analizar toda la información anterior podemos entender el porqué es importante conocer cuál es la personalidad de los emprendedores que han logrado realizar proyectos productivos, y las más interesadas en conocerlo son las universidades ya que requieren inculcar el perfil de emprendimiento entre sus alumnos. Es por ello que esta investigación analizara las características de los emprendedores de la zona sur del estado de Yucatán, específicamente de los municipios de Oxcutzab, Tekax y Ticul, zonas de alto crecimiento comercial en esa zona de nuestro estado, cercanas a donde se encuentra ubicada la Universidad Tecnológica Regional del Sur (UTRSUR), la cual cuenta entre su matrícula con estudiantes de los municipios mencionados. El resultado de este estudio nos permitirá saber las características de los emprendedores de la zona sur, y se propondrán a través de las academias y cuerpos académicos de investigación, estrategias para inculcarlas a los alumnos de la UTRSUR. De igual manera se llevarán los resultados a la incubadora de negocios para su análisis y diseño de estrategias de fortalecimiento.

### Planteamiento del Problema

Un elemento clave de la innovación es el empresario, ya que este es la persona que realiza las innovaciones hasta obtener nuevos productos y/o servicios, por lo que es considerado como el motor del cambio tecnológico (Schumpeter, J. A. 1997). Empero, el estudio del impacto de las actividades desarrolladas por este tipo de agentes es relativamente reciente, los primeros estudios se centraron en las características personales del empresario; sin embargo, la evidencia y hallazgos obtenidos permiten concluir que lo que realmente diferencia al empresario emprendedor es un proceso caracterizado por la innovación constante. Es por esto que, los trabajos recientes, proponen considerar al proceso emprendedor como un conjunto de funciones, actividades y acciones asociadas con la percepción de oportunidad y la creación de la organización para explotarla. La Universidad Tecnológica Regional del Sur (UTRSUR se crea en el año 2000 en el municipio de Tekax, y entre sus propósitos está el formar gente emprendedora que pueda desarrollar negocios y contribuir al crecimiento económico de la zona sur del estado de Yucatán. Debido a que la UTRSUR se localiza en el cono sur del estado de Yucatán, a pocos kilómetros de los municipios de Oxcutzab, Tekax y Ticul; en el presente trabajo se pretende analizar las principales características inherentes al emprendedor de estos municipios mencionados, así como de igual manera conocer cuáles fueron los principales factores que determinaron su vocación emprendedora y sus fuentes de inspiración.

### Objetivo General

Determinar las principales características de los emprendedores de los municipios de Oxcutzab, Tekax y Ticul del estado de Yucatán.

Objetivos Específicos

1. Determinar cuales son las principales características del emprendedor de los municipios de Oxcutzcab, Tekax y Ticul.
2. Identificar los factores que determinaron su vocación emprendedora.
3. Identificar sus principales fuentes de inspiración para crear su propio negocio.

### Justificación

La industria reclama al sistema educativo la responsabilidad de formar a los jóvenes en competencias metodológicas y habilidades sociales y desarrollar competencias tales como: interés por la calidad, capacidad de innovar, responsabilidad ante las propias decisiones y actuaciones, familiarizarse con el entorno, capacidad para trabajar en equipo y cooperar, pensar en positivo y capacidad de aprender. Es muy importante para nuestro estudio, conocer las principales competencias o características de la gente emprendedora de los municipios de Oxcutzcab, Tekax y Ticul, esto nos dará los elementos necesarios para establecer estrategias que coadyuven en la adecuada formación emprendedora de nuestros estudiantes tomando como base este estudio. El conocer los resultados de este proceso, nos permite sentar las bases e identificar las áreas de oportunidad en este sentido, de manera que podamos ser congruentes en nuestros estilos de enseñanza y técnicas didácticas aplicadas, buscando que se produzca un mejor efecto formativo en nuestros alumnos.

### **REVISION DE LA LITERATURA**

Emprender es un concepto con múltiples acepciones, de hecho, dependiendo del contexto en que se utiliza es la connotación que se le da, por ejemplo, para el ámbito empresarial el emprendedor es un empresario, es decir es sinónimo de propietario de una empresa comercial con fines de lucro, como es el caso de Finley (1990), quien lo describe como alguien que se aventura en una nueva actividad de negocios o Say (1800), citado por Drucker (1989), quien lo clasifica como un “buen administrador”.

Para el académico en cambio, emprender denota más un perfil, un conjunto de características que le hacen actuar de una manera determinada y que le permiten mostrar ciertas “capacidades” para visualizar, definir y alcanzar objetivos, tal como lo señalan Ely y Hess (1937), citados por Ronstadt (1985). De la misma manera, Shefsky (1997) y Baumol (1993), éste último citado por Ibáñez (2001), señalan que el término es utilizado para describir a cualquier miembro de la economía cuyas actividades son, de alguna forma, novedosas, quienes en definitiva huyen de rutinas y prácticas mayoritariamente aceptadas, por tanto es definido en términos de su capacidad para crear, innovar, salir de la rutina, hacer cosas diferentes, mejorar lo existente. Morris y Kuratko (2002), ubican al Emprendedor como una persona que además de hacer uso óptimo de los recursos disponibles y utilizarlos en combinaciones que maximizan los resultados factibles de dichas combinaciones, “agrega valor” a todo proceso o actividad en la que interviene. De la misma manera, Hernández (1992), señala que el emprendedor es una persona capaz de concentrar su mente en ciertos aspectos del medio que le rodea e ignorar otros, lo que les permite aplicar su tiempo y esfuerzo en la búsqueda y materialización de oportunidades; así mismo, Hernández cita a Hawkins y Turla (1991), quienes señalan que el emprendedor es un alquimista peculiar que toma un sueño particular propio y lo transforma en algo esplendido y real, por lo que tiene “dinamismo creativo”.

Así pues, existen diversas formas de definir y entender el término emprendedor, sin embargo en lo que coinciden diversos autores es en que el término Emprendedor se deriva de la palabra Entrepreneur, que a su vez se origina del verbo francés: “Entreprendre”, que significa *encargarse de*, tal como lo señala Jennings (1993), en su libro “Multiple perspectives of Entrepreneurship”. De la misma manera, Jennings cita a Joseph Schumpeter (1934), quien afirma que la innovación se desarrolla a partir de la capacidad para emprender, por tanto, los emprendedores no son necesariamente capitalistas, administradores o inventores, ya que finalmente se trata de personas

con una capacidad para “combinar” los factores de producción existentes y obtener mejores resultados de dicha forma de utilizarlos, es decir, de *innovar*.

Sin embargo hay un acuerdo generalizado en que emprender involucra la toma de decisiones y en particular implica contar con las “competencias” necesarias para poder tomar dichas decisiones de la manera correcta, y esto abarca diversos aspectos o elementos a considerar, tal como lo señalan VanderWerf y Brush (1989), en su revisión de 25 definiciones de Emprender, quienes afirman que Emprender es una actividad de negocios que consiste en una intersección de las siguientes conductas:

1. Creación: establecimiento de una nueva unidad de negocios
2. Administración general: dirección apropiada para una buena utilización de recursos
3. Innovación: generación y explotación comercial de nuevos productos, servicios procesos, mercados, sistemas de organización, etc.
4. Aceptación del riesgo: la capacidad para manejar el riesgo de fallas potenciales al tomar decisiones o realizar acciones
5. Mejor desempeño: el intento por lograr altos niveles de desempeño o de crecimiento.

Burch (1986), agrega a la lista:

6. Trabajadores: trabajo-adictos que se enfocan a sus metas y trabajan incansablemente para alcanzarlas
7. Optimistas: consideran que cualquier cosa es posible y que el momento es inmejorable para alcanzar metas y logros
8. Orientación a la excelencia: su deseo de logro los lleva a hacer las cosas al mejor nivel posible para sentirse aún más orgullosos y satisfechos de lo alcanzado.

Por otra parte las características más señaladas por los autores localizados (más de 50, que a su vez citan a más de 150 autores y sus correspondientes estudios), fueron un total de 60, sin embargo aquellas en las que coincidieron el mayor número de autores y que fueron seleccionadas por ser las mencionadas más recurrentemente y que se diferenciaban claramente unas de otras, fueron:

1. Creatividad
2. Iniciativa
3. Auto-confianza (confianza en sí mismo)
4. Energía y capacidad de trabajo
5. Perseverancia
6. Liderazgo
7. Aceptación del riesgo
8. Necesidad de Logro
9. Tolerancia al cambio
10. Manejo de Problemas

Así pues, tal como puede observarse de esta revisión de autores y definiciones, el emprendedor es en última instancia una persona con una serie de características que le permiten detectar oportunidades, generar conceptos de negocio a partir de la creación, innovación o mejor utilización de recursos, para alcanzar logros, asumiendo el riesgo inherente a su toma de decisiones y la puesta en marcha de las mismas. El siguiente y fundamental paso es entonces tratar de determinar cuáles son esas características que lo hacen exitoso, revisar si son

desarrollables o factibles de ser mejoradas, así como establecer un sistema de medición que permita determinar el éxito con que estas son promovidas o reforzadas.

## METODOLOGIA

Este estudio es no experimental, ya que las se analizaran las principales características de los emprendedores, las cuales no son objeto de manipulación, es transaccional ya que se recolectara datos en un tiempo determinado y descriptivo ya que se describirá a los sujetos de estudio en base a sus características de emprendimiento Se analizaron los municipios de Oxcutzcab, Tekax y Ticul del estado de Yucatán, distinguiendo a los potenciales empresarios/ emprendedores dentro de la población en general, a través de un criterio de selección basado en que el respondiente hubiera iniciado una empresa o negocio en el pasado reciente o de estar en vías de hacerlo en el futuro próximo. En otras palabras, el ayuntamiento de los municipios seleccionados nos proporciono una lista de su padrón de empresas y tomando como base sus ingresos y número de empleados se seleccionaron 40 empresas las cuales fueron visitadas en su totalidad, ya que por el número reducido de las mismas se optó por censarlas. De igual manera se aplicó una encuesta que permitió conocer, aparte de las características de los emprendedores, los principales factores que determinan la vocación emprendedora, sus principales fuentes de inspiración para crear sus empresas, la importancia de algunos determinantes de la cultura emprendedora en México, así como las fuentes de financiamiento que conocen y que han utilizado.

El trabajo de campo se realizó de mayo a agosto del 2013. El instrumento utilizado para medir las características de emprendimiento es el de “Inventario de perfil del emprendedor” elaborado por el Ing. Rafael Alcaraz, del tecnológico de monterrey, el cual consiste en un cuestionario de 20 ítems, contestado en una escala de Likert del 1 al 5, donde 1 es “Definitivamente no” y 5 es “definitivamente si”. Las preguntas nos permitirán conocer dimensiones o características del emprendedor como: creatividad, Riesgo, iniciativa, autoconfianza, energía y capacidad de trabajo, perseverancia, liderazgo, capacidad para afrontar el riesgo, necesidad de logro, tolerancia al cambio y manejo de problemas.

## RESULTADOS

A continuación se presentan los resultados obtenidos en el presente trabajo de investigación: En la siguiente tabla 01, se muestran las evaluaciones promedio del instrumento “Inventario del perfil del emprendedor” que respondió la muestra de 40 empresarios innovadores de los municipios de Oxcutzcab, Tekax y Ticul:

Tabla 1: Valoración Promedio del Cuestionario “Inventario del Perfil del Emprendedor”

PREGUNTAS	Valoración promedio
1.-Frecuentemente tengo ideas originales y las pongo en practica	4.5
2.-Cometo errores y me equivoco, pero se que puedo hacer bien las cosas	4.6
3.-Cuando quiero algo insisto hasta que lo consigo	4.5
4.-Cuando invierto mi dinero prefiero arriesgarlo en algo que pueda darme mas ganancias, que en un deposito a plazo fijo	4.7
5.-No me resulta difícil encontrar varias soluciones a un mismo problema	4.3
6.-Puedo resolver problemas rápidamente , incluso bajo presión	4.1
7.-Veo posibilidades creativas (de innovación) en cada cosa que hago	4.3
8.-Creo firmemente que tendré éxito en todo lo que me proponga hacer	4.5
9.-Creo firmemente que si la primera vez no lo logro, debo de intentarlo una y otra vez	4.2
10.-Me considero una persona ingeniosa, especialmente cuando se presentan soluciones difíciles	4.5
11.-Disfruto buscando nuevas formas de ver las cosas, en lugar de guiarme por las ideas ya conocidas	4.3
12.-Considero que el riesgo es estimulante	4.5

13.-Estoy convencido de mis capacidades y se muy bien como explotarlas	4.6
14.-Creo en el dicho “El que no arriesga no gana”	4.7
15.-Estoy seguro de mis propias ideas y posibilidades	4.7
16.-Me entusiasma cosas nuevas e inusuales	4.7
17.-Creo que en la vida hay que tomar riesgos para ganar mas o alcanzar metas mas altas	4.8
18.-Frecuentemente encuentro soluciones rápidas y eficaces a los problemas	4.2
19.-Soy bueno enfrentando una gran cantidad de problemas al mismo tiempo	4.0
20.-Considero que la perseverancia (constancia) es importante para llegar al éxito	4.9

*Esta tabla muestra el promedio de cada uno de los ítems del instrumento del inventario del perfil del emprendedor obtenido por la participación y respuesta de la población de empresarios objeto del estudio. Fuente: Elaboración propia con base en trabajo de campo (2013).*

Como podemos observar la mayoría de los ítems esta por encima de la valoración de 4, es decir, todos los encuestados coincidieron en mencionar que poseen las características mencionadas en el instrumento utilizado. Tomando como base la tabla anterior se obtuvo la puntuación total de cada una de las dimensiones, sumando el valor promedio de cada ítem correspondiente. Se comparo con el máximo valor que marca el instrumento y en base a ello se determino el nivel de evaluación de las respuestas por dimensión (alto, medio, bajo). Una vez obtenida esta información se establecieron comentarios y sugerencias del resultado.

**Tabla 2: Determinación del Nivel de Evaluación de Cada Dimensión del “Inventario del Perfil del Emprendedor”**

Dimensiones (Características)	Puntuación total	Puntuación encuesta	Diferencia	% relativo	Evaluación	Comentarios y sugerencias del instrumento
Creatividad	25.0	22.3	-2.7	89%	Nivel alto	Eres una persona que cuenta con sensibilidad para analizar los problemas, originalidad para resolverlos, flexibilidad, evaluación y capacidad de análisis y síntesis, te gusta promover un ambiente de innovación y eres un generador constante de ideas originales. Continúa reforzando estas características.
Seguridad personal	35.0	32.0	-3.0	91%	Nivel alto	Tienes seguridad en la toma de decisiones, consideras las capacidades y aptitudes que posees para salir adelante en cualquier situación. Te conoces a ti mismo y sabes cuales son tus limitaciones, no te afecta las críticas de los demás ya que tienes la certeza de tus cualidades. Trata de aplicar esta característica en todas las áreas de tu vida.
Aceptación del riesgo	20.0	18.5	-1.5	92%	Nivel alto	Estás convencido que el riesgo es algo inherente al éxito, ya que evalúas el riesgo en función al tamaño de su meta y confías en tus capacidades para afrontarlo. Crees que el riesgo es un catalizador, la adrenalina que te mueva a actuar con más ahinco. Continúa reforzando esta característica.
Manejo de problemas	20.0	16.6	-3.4	83%	Nivel alto	Identificas claramente discrepancias entre un estado actual y uno deseado y actúas para resolver tal discrepancia. Este proceso de solución te orienta a superar los obstáculos y vencer las dificultades que impiden lograr un objetivo. Escuchas la opinión de aquellos que entienden un problema de manera diferente a la propia, es esencial que sigas fortaleciendo esta característica.
Perfil completo	100%	89.4%	-10.6			

*Esta tabla refleja la puntuación promedio obtenida en cada una de las dimensiones del instrumento así como la representación porcentual con respecto a la puntuación máxima lo que permitió determinar el nivel promedio obtenido. Fuente: Elaboración propia con base en trabajo de campo (2013).*

Como podemos observar en la tabla 2 la mayoría de los encuestados obtuvo una alta puntuación en las características de creatividad, seguridad personal y aceptación del riesgo, todas entre el rango de 83% y 92%; pero en la de manejo de problemas se obtuvo únicamente el 83% de la misma. A pesar de que el instrumento lo evalúa como de nivel alto, seria bueno trabajar en este

punto para que fortalezcan su habilidad de identificar claramente el problema, vencer los obstáculos para lograrlo y el hecho de aceptar opiniones que contribuyan a su solución. Un tema de importancia para el presente análisis lo constituye la evaluación de los factores que inciden en la determinación de la vocación emprendedora fundada en cada una de las encuestas aplicadas a los empresarios. La tabla 3 refleja los resultados obtenidos:

Tabla 3: Evaluación de los Factores Que Determinan la Vocación Emprendedora

FACTORES	%
Motivación personal	40
Espíritu emprendedor	25
Oportunidad de negocios	20
Tradición familiar	08
Autoempleo	07
TOTALES	100

*Esta tabla muestra la jerarquización obtenida en el procesamiento de la información del trabajo de campo acerca de los factores que los emprendedores consideran relevante y que contribuyeron a determinar su vocación de emprendimiento. Fuente: Elaboración propia con base en trabajo de campo (2013).*

De acuerdo con los respondientes, la motivación personal pesa mucho en la decisión de volverse emprendedor, mientras que el autoempleo es, paradójicamente, el factor menos importante. Cabe mencionar que el espíritu emprendedor es el factor en segundo orden de importancia por encima de la oportunidad de negocios y la tradición familiar. Esta última antes de iniciar este estudio, es la que se presumió que iba a prevalecer como el factor determinante, ya que la zona sur del estado de Yucatán es de empresas prácticamente familiares.

En el tema de la cultura empresarial del país, el 90% de los entrevistados dijo que si existe tal cultura en México y el 10% opinó lo contrario. También se les preguntó a los entrevistados en que medida estaban de acuerdo con seis preposiciones que explican la existencia de dicha cultura emprendedora en el país. Las respuestas se reflejan en la siguiente tabla:

Tabla 4: Importancia de Algunos Determinantes de la Cultura Emprendedora en México

FACTORES	%
Para ser emprendedor hay que tener vocación	32
Ser emprendedor es cuestión de personalidad	28
En la escuela se enseña a ser emprendedor	18
La sociedad valora a la empresas generadoras de empleo	16
Existen políticas que incentivan la creación de empresas	4
El gobierno incentiva la creación de changarros	2
TOTALES	100

*Esta tabla muestra la jerarquización obtenida en el procesamiento de la información del trabajo de campo acerca de los indicadores más importantes que los emprendedores consideran relevante y que determinan la cultura emprendedora en México. Fuente: Elaboración propia con base en trabajo de campo (2013).*

Como se observa en la tabla 4, el 32% de los respondientes estuvo de acuerdo en pensar que para ser emprendedor hay que tener vocación, mientras que el 98% de los entrevistados estuvo en desacuerdo en que el gobierno incentiva o facilita la creación de changarros. En términos del sexo de los respondientes, se destaca que existió una diferencia estadísticamente significativa entre las respuestas dadas por los hombres y las mujeres en cuanto a la pregunta de que para ser emprendedor hay que tener vocación, en virtud de que el 88% de los hombres estuvo de acuerdo con esta aseveración, mientras que solo el 50% de las mujeres también lo estuvo. Con respecto a la aseveración de que para ser emprendedor es cuestión de personalidad, estadísticamente hablando no hubo diferencia, ya que el 72% de los hombres aceptó la propuesta mientras que el 75% de las mujeres lo hizo. Otra de las preguntas que se les hizo a los encuestados es de qué fuentes se habían inspirado para formar las empresas que crearon. La tabla 5 reporta la proporción de esas fuentes:

Tabla 5: Fuentes de Inspiración Para la Creación de Nuevas Empresas

FACTORES	%
Observación de las necesidades del mercado	22
Identificación de nichos de mercado	18
Observación de cambios en la demanda	16
Desarrollo tecnológico propio	15
Visitas a ferias y exposiciones	13
Otros - Iniciativa propia	11
Oportunidades vistas en otras empresas	5
TOTALES	100

*Esta tabla muestra la jerarquización obtenida en el procesamiento de la información del trabajo de campo acerca de los indicadores más importantes que los emprendedores consideran relevante y que consideraron como las principales fuentes en las cuales se inspiraron para crear sus empresas. Fuente: Elaboración propia con base en trabajo de campo (2013).*

Como se observa en la tabla anterior, el 22% de los respondientes se inspiró a través de la observación de las necesidades del mercado, seguida de la identificación de nichos de mercado y la observación de cambios en la demanda. Es de resaltar que la explotación del desarrollo tecnológico propio representó un porcentaje relativamente bajo (15%) del total de los entrevistados, dejando ver la baja propensión que tienen los emprendedores innovadores de esta muestra de la zona sur del estado.

## CONCLUSIONES

De acuerdo al objetivo 01 el cual se refiere a la determinación de las principales características de los emprendedores de la zona sur del estado de Yucatán, específicamente Ticul, tekax y oxcutzcab, podemos mencionar que son la creatividad, la seguridad personal, aceptación del riesgo y manejo de problemas. Cabe mencionar que las tres primeras dimensiones o características la poseen los emprendedores en un alto porcentaje (89%, 91 y 92% respectivamente). La cuarta dimensión a pesar de que el instrumento la señala como de alto nivel, su porcentaje es del 83%, por lo que se recomienda identificar con mayor claridad discrepancias entre un estado actual y uno deseado y actuar de manera más oportuna para resolver tal discrepancia. Tratar de escuchar la opinión de aquellos que entienden un problema de manera diferente a la propia, es esencial que se fortalezca esta característica.

De acuerdo al objetivo 02, acerca de cuales son los factores que determinaron la vocación emprendedora de los sujetos del presente estudio, se llegó a la conclusión de que la motivación personal pesa mucho en la decisión de volverse emprendedor, mientras que el autoempleo es, paradójicamente, el factor menos importante. Cabe mencionar que el espíritu emprendedor es el factor en segundo orden de importancia por encima de la oportunidad de negocios y la tradición familiar. Esta última antes de iniciar este estudio, es la que supusimos que iba a prevalecer como el factor determinante, ya que la zona sur del estado de Yucatán es de empresas prácticamente familiares.

De acuerdo al objetivo 03, en el que se menciona el identificar sus principales fuentes de inspiración para crear su propio negocio, se concluye que la cuarta parte de los respondientes se inspiró a través de la observación de las necesidades del mercado, seguida de la identificación de nichos de mercado y la observación de cambios en la demanda. Es de resaltar que la explotación del desarrollo tecnológico propio representó un porcentaje relativamente bajo (15%) del total de los entrevistados, dejando ver la baja propensión que tienen los emprendedores innovadores de esta muestra de la zona sur del estado.

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# **GESTIÓN E IMPACTO DEL COMERCIO ELECTRÓNICO EN EL RENDIMIENTO EMPRESARIAL**

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## **ABSTRACTO**

*Las diferentes tecnologías existentes en el mercado son aplicadas diariamente con el objetivo de resolver problemas de la sociedad, las organizaciones y las personas; al hacer uso de ellas se alcanzan ventajas competitivas con eficiencia y flexibilidad ante los cambios que enfrenta el entorno competitivo del mundo globalizado. Gracias a ellas se permite una rápida reacción ante los mercados actuales logrando que empresas (especialmente micros, pequeñas o medianas) tengan la capacidad humana, tecnológica y administrativa (logística) en la cadena de valor para colaborar y competir con las grandes empresas transnacionales que acaparan el mercado. El comercio electrónico (electronic commerce - e-commerce) consiste en la compra y venta de productos o de servicios a través de medios electrónicos, principalmente la venta de bienes y servicios a través de internet, usando como forma de pago medios electrónicos como tarjetas de crédito, débito, transferencias entre cuentas bancarias de empresas, efectivo a la entrega o cheque. El correcto uso de los medios electrónicos, el adecuado trato, atención y soporte personalizado a los clientes permitirán alcanzar la satisfacción y lealtad de los clientes al ofrecer cualquier bien o servicio en el desarrollo de la industria en línea en la región.*

**PALABRAS CLAVE.** Comercio Electrónico, Cliente, Tecnologías de Información, Satisfacción

## **ABSTRACT**

# **E-COMMERCE MANAGEMENT IMPACT IN BUSINESS PERFORMANCE**

*The available technologies are applied daily in order to solve society problems to make them efficiently, achieving competitive advantage with flexibility in the competitive globalized world environment. Allows quickly response to current market making firms they have capabilities in the value chain to collaborate and compete with large corporations. E-commerce is the buying and selling of products or services through internet, as payment using electronic media such as cards credit, debit, transfers between bank accounts of companies, cash on delivery or check. The correct use of electronic media, the proper treatment, care and personalized customer support will be vital for the development of the online industry in the region. This research aims to develop a strategic model to support Mexican companies over the Internet in a way that their use Information Technology solutions that lead to success depending on many factors that are impacted when interacting with customers online to obtain the satisfaction and loyalty.*

**KEYWORDS:** E-Commerce, Customer, Information Technologies, Satisfaction

## **INTRODUCCION Y REVISION BIBLIOGRAFICA**

El comercio llevado a cabo electrónicamente ha crecido extraordinariamente pese al colapso de las cifras económicas en todo el planeta con aumentos de hasta un 39% en el 2009 y de un 27% en los primeros trimestres del 2010; en el último bimestre; gracias en parte a la propagación de internet en los últimos años y el internet como canal de distribución de productos y servicios a consumidores siguió a la alza con 150 millones de usuarios de habla hispana y unos 40 de ellos con acceso a banda ancha. Brasil continua a la cabeza pero México viene creciendo constantemente teniendo actualmente un 12% de participación en negocios con clientes (B2C - Business to Customer) ya sea en la región o desarrollando servicios especiales para clientes internacionales (La fuerza del e-commerce, 2010).

Más del 45% de los usuarios de Internet se encuentran en Asia, le siguen con un 22% Europa y otro 22% América; México representa el 1.5% de ese total por lo que el margen con respecto al total no es tan significativo, pero la oportunidad de entrar a competir en ese mercado de casi 2 billones y medio de personas en el mundo que cuentan con acceso a internet es asombroso e interesante (Internet World Stats, 2013). La globalización no ha influido de manera semejante a todos los países por lo que la difusión de las innovaciones y la convergencia de tecnologías desempeñaran un papel clave en la aceleración del proceso y las personas que compran en México a través de internet ha crecido considerablemente en los últimos 2 años pues en el 2009 se tenían 4.7 millones y en el 2011 ya eran 7 millones (e-Readiness en América Latina, 2012). Adicionalmente el crecimiento se ve claramente representado en los más de 6,000 millones de dólares que se mueven en el mercado Mexicano con 40.6 millones de usuarios y más de 14,2 millones de ellos (35%) ya haciendo compras por internet El 63% de los usuarios se encuentran entre los 18 y 34 años de edad y el 80% de ellos entre los 18 y los 44 años, mitad de ellos hombres y la otra mitad mujeres (AMIPCI, 2012). Latinoamérica es una de las regiones que sigue creciendo a doble dígito año con año y es por ello que nuestro país que forma parte de ella se ve beneficiado pues el número de internautas ha sido del 16% durante el último año, el mayor porcentaje a nivel mundial en base a la información que esta compañía especializada en performance marketing ha presentado recientemente sobre el estado de internet y comercio electrónico (Matomy, 2013).

El poder de compra de los compradores y la fuerza que ahora ellos tienen, junto con los factores de desarrollo en la industria y tendencias en variables de consumo como el día de la semana en el que con mayor posibilidad el internauta podrá comprar, el tiempo promedio que ahora él dedica a medios electrónicos con más de 3:32 horas al día y el uso cada vez más popularizado de redes sociales da claras muestras de las tendencias a seguir en mercadotecnia para alcanzar a ese nuevo mercado que está esperando detrás de un medio electrónico para ser seducido por una buena propuesta de compra-venta de productos y/o servicios a través de internet en la región pues 6 de cada 10 mexicanos hace uso de redes de este tipo (AMIPCI, 2011). En el 2012 el 46% de los internautas ha comprado algún producto y/o servicio por internet con lo que la cifra aumentó en un 18% con respecto al 2011. La razón por la que en este año los Mexicanos estamos comprando en internet es por practicidad y asegurar el producto y/o servicio; sin dejar a un lado el ahorro de tiempo, el ahorro de costo y la variedad de productos y/o modelos encontrados en línea. Cabe mencionar que el 97% de quien compra en internet en México tiene la intención de volver a hacer otras compras (AMIPCI, 2012).

Según IDC, un estudio de la agencia de publicidad Nazca Saatchi&Saatchi y la AMIPCI hay 34.9 millones de usuarios de Internet en México en 2010 (49% son mujeres y 51% hombres, de los cuales cerca de 30 millones de internautas mayores a 6 años se encuentran en zonas urbanas); la mayoría de ellos con 12 a 34 años de edad en promedio (AMIPCI, 2011). Los pagos electrónicos han crecido significativamente añadiendo \$983,000 millones de dólares americanos entre el 2008

y el 2012 en países evaluados, siendo Brasil, Argentina y México (en ese orden con \$51,300 MUSD, \$8,100 MUSD y \$7,800 MUSD) los países con mayor contribución en el desarrollo económico de América Latina; a su vez han estimulado el crecimiento económico en Estados Unidos, de las tarjetas de crédito, reduciendo los costos de transacciones, etc. (Valerie, 2013). El auge y crecimiento genera ventajas que son aprovechadas por emprendedores en el área, pero las oportunidades se convierten también en amenazas crecen, un ejemplo de ello es la cantidad de hackers que buscan alternativas para cometer fraudes.

Para el 2015 las tarjetas de crédito y débito contarán con microcircuitos integrados de seguridad (chip) que minimizarán la posibilidad de fraudes por clonación, pero ello abre oportunidades al medio electrónico que deberá fortalecerse para no ser presa de defraudadores. Es importante evitar compartir datos de tarjetas y no perder de vista las tarjetas al pagar en comercios y restaurantes tradicionales pues internet no es en sí un canal de riesgo, sino que el problema es el robo de datos. Es por ello que los procesos para reforzar la autenticación de las compras en línea, así como el análisis y validación de manera automática de las transacciones para generar seguridad pero a la vez conveniencia en el proceso de compra sean vitales; pues ello ocasiona que la experiencia de compra del cliente sea la esperada (Cybersource, 2013). Casi el 50% de la población en México usa Internet, (56.5 millones de usuarios en Internet, de una población de 116 millones), de ellos más del 60% de los usuarios de Internet tienen entre 12 y 34 años, casi todos ellos de la Generación Y (1982-1994), algunos pocos de la Generación Z (1995-2004) y muy pocos de la Generación X (1970-1981); es por ello que se deben diferenciar las estrategias a seguir para cada tipo de cliente y dependiendo de su rango de edad enfocar los esfuerzos para atenderlo y generar una experiencia de compra adecuada (E-Marketer, 2013).

Para que todos estos factores interactúen armónicamente es necesario que tanto portales, tiendas, malls y supermercados, así como bancos, gobierno, empresas de telecomunicaciones, proveedores de medios de comunicación y proveedores de servicios de internet colaboren con un fin común de desarrollar y fomentar el uso del comercio electrónico pues el crecimiento tanto en dispositivos fijos como móviles se estima en más de 443 billones de US dólares para el 2016, de ese total se espera que tan solo en comercio a través de dispositivos móviles sea de 31 billones de US dólares (Mulpuru, 2011); por lo que el mercado está creciendo exponencialmente y el pedazo de pastel que aplica a la región de Saltillo y sus alrededores debe ser mejor aprovechado.

## **METODOLOGÍA**

En la Figura 1 se muestran los 7 pasos utilizados en la investigación empleando el método de investigación descriptiva, donde se recolectan datos básicos o de fuentes primarias y se procesan para luego ser interpretados dentro del marco de la estadística no paramétrica.

Figura 1: Diseño de la Investigación.



*Esta Figura muestra el análisis de esta investigación y su orden de realización. Se demostrará la confiabilidad de las respuestas a las encuestas aplicadas a través del coeficiente Alfa de Cronbach y la concordancia o no de las respuestas a través del coeficiente de Kendall.*

El objetivo del trabajo es determinar las causas del comportamiento de los clientes y del mismo negocio al momento de interactuar en un proceso de compra en línea de un producto o servicio a partir de la revisión de los antecedentes bibliográficos consultados, en resultados de estudio de casos, análisis de mercado y las buenas prácticas de la gestión de procesos de tecnologías de información; con el objetivo de alcanzar la satisfacción del cliente, alcanzar su fidelidad y lealtad por último generar una identidad de marca e imagen a la empresa. El descubrimiento de relaciones causales entre las variables objeto de estudio y el análisis de las variables analizadas en las ciencias sociales a través de modelos de ecuaciones estructurales son una herramienta útil para el estudio de tipo lineal que expliquen los fenómenos a estudiar; con lo que la toma de decisiones se hace más sencilla al rechazar las hipótesis causales al revisar los datos y entender las correlaciones entre las variables.

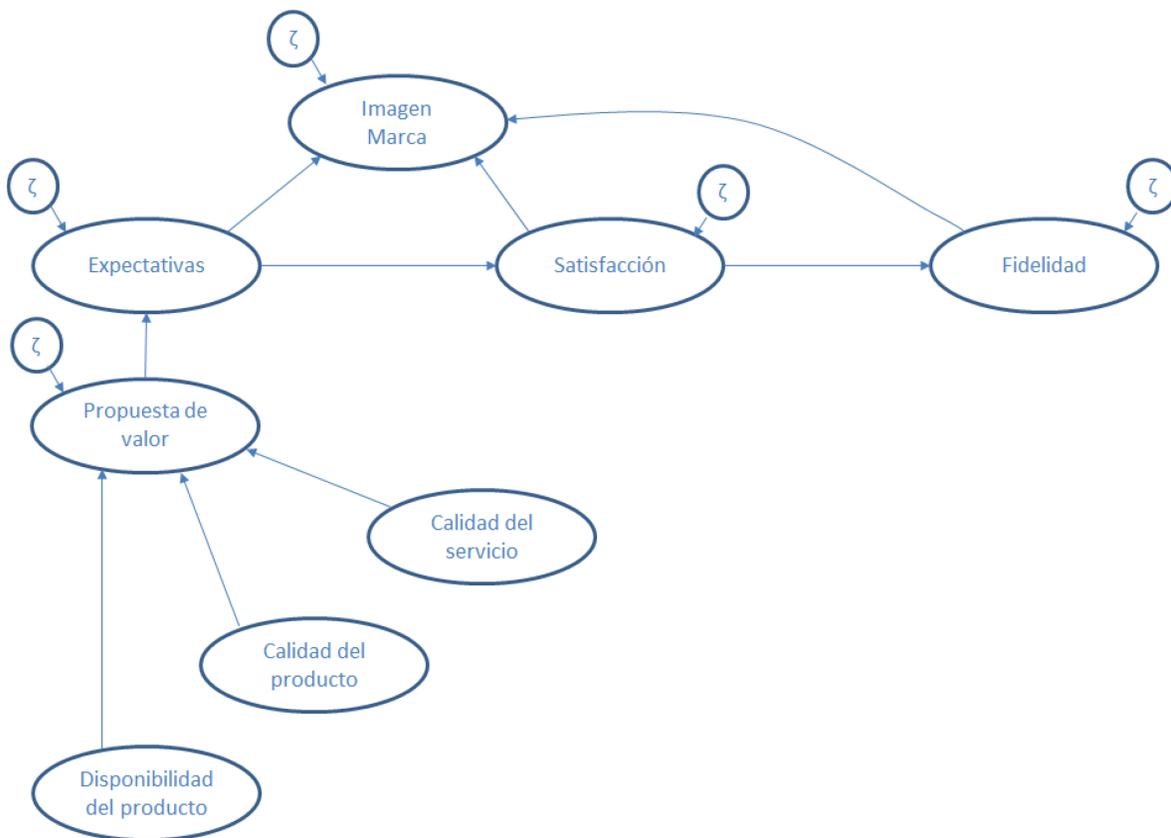
A través de análisis de alternativas (path-analysis) se estudian los efectos directos e indirectos en las variables observadas, se asumen relaciones lineales entre ellas, la definición de los errores de regresión y la ausencia de errores de medición de las variables; se estudian los efectos de unas variables consideradas “causa” (variables independientes, exógenas o explicativas) sobre otras variables que denominaremos “efecto” (variable dependiente, endógena o explicada). Se buscará establecer los factores en el Comercio Electrónico que impactan la conducta del consumidor, por lo que se cubrirán las necesidades de los clientes a través la confiabilidad, seguridad, métodos de pago y la atención adecuada que genere una experiencia de compra extraordinaria para generar una sinergia de clientes leales y potenciales. Con ello se desarrollará un modelo estratégico que apoye a las empresas que ofrecen productos y/o servicios a través de internet de manera que eficienten el uso de sus tecnologías de información.

Al entender al cliente y usar estrategias diferenciadas para cada generación (X, Y, Z) y así captar su atención dependiendo del segmento de edad se crearán una relación de factores que deriven en el éxito y/o fracaso organizacional a través del uso de Tecnologías de Información para la compra de productos y/o servicios en Saltillo y su área metropolitana a través de internet; siempre retroalimentando aquellos aspectos que generen beneficios y permitan a las empresas saber qué

hacer y cómo enfocar sus esfuerzos y que Tecnologías usar con diferentes tipos de clientes. Se generarán propuestas y soluciones a programas aplicados en el Gobierno, Universidades e Iniciativa Privada para gestionar estrategias que fortalezcan la compra de productos y/o servicios en medios electrónicos a través de un modelo dinámico que se adapte a los cambios recurrentes en la tecnología (Torres, 2011).

Ese modelo permitirá mejorar la toma de decisiones en relación a la clasificación de los clientes por sexo, edad, estudios, tiempo dedicado a internet, cantidad de compras en línea, factores de compra y razones que los hacen dudar de comprar debido a la falta de confianza, su capacidad de compra y los métodos de pago preferidos por cada uno de los rangos de personas y así encontrar la manera idónea para llegar al cliente (Yoon, 2009).

Modelo Conceptual



Las variables latentes y sus relaciones causales en el modelo son:

*Satisfacción: variable que evalúa el estado psicológico del cliente tras su experiencia de compra o la actitud que asumirá hacia la empresa de la que recibió el producto/servicio (Variable principal). Imagen: evalúa la marca o prestigio que tiene el cliente en relación a la empresa en su conjunto y los productos o servicios que ofrece. Tiene un efecto directo sobre las otras variables e incide en la fidelidad a largo (Variable exógena o independiente). Expectativas: referencia de lo que espera el cliente que adquiere un producto o servicio antes de efectuar la compra. La expectativa produce un efecto directo sobre la propuesta de valor. La calidad del producto: es la calidad percibida del producto físico o servicio en cuanto a las características genéricas que se ofrecen pues influye en la satisfacción directa en función de la evaluación de la durabilidad y calidad del producto/servicio que reciba el cliente. La calidad del servicio: determina la satisfacción del cliente según la forma en la que experimentó el servicio; aspectos específicos de la prestación del servicio como la cortesía, rapidez, atención personalizada, servicios posventa, etc. Propuesta de valor: es lo que hace diferente a comprar a esta empresa o hacerlo con otra, es el enfoque en el costo, métodos de entrega o pago, diseño o innovación, mercadotecnia que diferencia o da ese plus extra; actuando como variable que influye entre la calidad percibida y las expectativas del cliente. Fidelidad o lealtad: rendimiento del índice de satisfacción del cliente que mide la capacidad que tiene la empresa de retener a sus clientes, en función de la buena relación calidad-precio que el cliente percibe, de la capacidad de lograr que el cliente regrese a comprar nuevamente en el sitio y a la utilización de tus medios electrónicos de información para disparar futuras compras.*

Cada una de las variables latentes son evaluadas a través de indicadores que fueron establecidos en una encuesta realizada a los usuarios y empresarios para entender el comportamiento y lo que genera una satisfacción total en el proceso de compra. En donde el coeficiente de regresión “ $\gamma$ ” relacionan las variables latentes y las variables observadas entre sí y el término de perturbación “ $\zeta$ ” incluye los efectos de las variables omitidas, los errores de medida y la aleatoriedad del proceso especificado. Las ecuaciones estructurales propuestas para el modelo serían las siguientes:

- Disponibilidad del producto = Disponibilidad del producto
- Calidad producto = Calidad producto
- Calidad servicio = Calidad servicio
- Propuesta de valor =  $\gamma_{23}$  Disponibilidad del prod +  $\gamma_{24}$  Cal producto +  $\gamma_{25}$  Cal servicio +  $\zeta_5$
- Expectativa =  $\gamma_{12}$  Propuesta Valor +  $\zeta_4$
- Satisfacción =  $\gamma_{61}$  Expectativas +  $\zeta_3$
- Fidelidad =  $\gamma_{76}$  Satisfacción +  $\zeta_2$
- Imagen =  $\gamma_{01}$  Expectativas +  $\gamma_{06}$  Satisfacción +  $\gamma_{07}$  Fidelidad +  $\zeta_1$

Tabla 1. Factores del Comportamiento del Cliente al Comprar Por Internet en las Organizaciones en México

Variabes latentes	Indicadores
Satisfacción: Variable principal	Cumplimiento de la expectativas
Imagen/Marca: Variable exógena	Confianza / Seguridad
Expectativas del cliente	Tecnología
Disponibilidad del producto	Presencia / Tiempo en internet
	Interés por comprar
	Expectativa creada en calidad y atención
	Diversidad de oferta
	Variedad
	Características
	Tipos/Modelos
Calidad del producto	Durabilidad
Calidad del servicio	Garantía
	Cortesía
	Excepciones
	Rapidez de transacción
	Servicio posventa
	Atención personalizada
	Lenguaje
Propuesta de valor	Diseño / Ingeniería / Innovación
	Costo
	Entrega
	Métodos de pago
	Producto / Servicio
	Mercadotecnia / Ofertas / Descuentos
Fidelidad / Lealtad	Buena relación calidad-precio
	Cliente que vuelve a comprar
	Uso / Utilización del sitio para decidir

Además existen varios factores externos al negocio y al mismo cliente que influyen de manera directa en la decisión y son: Leyes y regulaciones, globalización, accionistas y alianzas entre empresas, mercadotecnia y economía que van de la mano con el efecto país y el efecto sector. Mientras que las variables relacionadas con el efecto empresa son en las que nos enfocaremos.

## RESULTADOS Y CONCLUSIONES

A partir de gran cantidad de artículos, estudios, investigaciones, análisis e interpretaciones acerca del comportamiento de los clientes al momento de tomar la decisión de compra; así como las causas que derivan en comportamientos contrarios a lo esperado y formas de atender a ese cliente dependiendo de su rango de edad y vinculación con la tecnología se recopilan y procesan las causas. Después de analizar los resultados y compararlos con la información recopilada en las encuestas, encontramos que existe una oportunidad muy grande en la cantidad de gente que cuenta con tarjetas de crédito, generando un sinfín de alternativas adicionales de métodos de pago que complican la administración de un negocio en línea, además de que gran parte de la población no cuenta con el conocimiento para llevar a cabo una compra por este medio pues argumentan no saber. Esta es un área de oportunidad a la mejora de la estabilidad de las empresas mexicanas que deberá analizarse y explotarse, misma que no forma parte de este trabajo de investigación pero que deberá atenderse. Si no se previenen las causas, será muy difícil y costoso el enfrentar las consecuencias de la forma de proceder de los clientes en los negocios en línea mexicanos.

Aunque pudiera parecer que el precio es el detonante, los resultados demuestran que es la disponibilidad del producto y las especificaciones o personalizaciones aplicables al mismo las que hacen que un cliente decida comprar en un lugar en específico.

El modelo estará basado en métricas apropiadas enfocadas en el negocio con el que se pueda asegurar que la base es la generación de valor y no la exigencia técnica por alcanzar un valor como fin mismo. El factor que hace la diferencia para que el Comercio Electrónico no detone y se desarrolle es la falta de confianza y seguridad que el cliente percibe; y es debido a mal uso que se hace de la información confidencial del cliente, especialmente de quienes la manejan en las empresas que venden a través de internet, ello genera un dilema en el cliente y se resiste a brindar datos personales en línea, el mal uso de tarjetas, funcionarios que crean falsas alarmas a través de comentarios en medios de comunicación, etc.

Es por ello que enfocar esfuerzos en fortalecer el correcto uso de la información y el apego a las políticas y procedimientos en las empresas será crítico y el estudio de los factores éticos de quienes atienden y soportan una compra por internet será vital.

Es importante ofrecer seguridad en el pago ofreciendo información detallada de los productos, así como simplicidad y una interface amigable, con tiempos de entrega oportunos y un servicio de post-venta constante que haga sentir al cliente que será respaldado por una organización seria, honesta y experta en lo que hace (Chen, 2008). Algunas estrategias que se pueden seguir para generar confianza en medios electrónicos de la localidad es uso de innovadores conceptos en el cobro a través de negocios electrónicos, uno de ellos es el llamado cobro al momento de la entrega (Cash On Delivery - COD), con lo cual se pueden atacar nichos de mercado más amplios, ya que no solo se enfocaría en las personas que tienen tarjeta de crédito; e incluso algunos clientes recibían sus pedidos de esta forma y cuando ya “confien” del sitio pueden hacer uso de su tarjeta de crédito en la segunda compra; así se podría eliminar la gran desconfianza de las personas, y del miedo o inseguridad de que legalmente no tengan alternativas de defender sus derechos ante un fraude (La fuerza del e-commerce, 2010).

Con ello se buscará eficientizar un modelo de gestión de las Tecnologías de Información que garanticen una alineación entre los procesos de gestión en el área, costos específicos, calidad de los servicios, entrega oportuna de soluciones, mitigación de riesgos asociados; siempre alineados con las metas del negocio. Aún existen muchos cabos sueltos que se deben atar para que la sensibilización del público en general en el área de comercio electrónico se dé, sin embargo, las ventajas que ofrece la tecnología nos pueden hacer la vida más fácil. Algunos de los problemas

que las organizaciones enfrentan actualmente pueden ser surcados gracias a estrategias de este tipo, tal es el caso de la eliminación de barreras tradicionales a los productos mexicanos (calidad-precio, capacidad-inventarios, financiamiento-utilidad-inversión). Entrar lo más pronto posible al mercado electrónico es vital, pues como dice el viejo y conocido refrán “el que pega primero, pega dos veces”, así es que no queda de otra, como lo dice Bill Gates en su libro "Business at the Speed of Thought: Using a Digital Nervous System" (Los Negocios a la Velocidad del Pensamiento: Usando un Sistema Nervioso Digital), es necesario y oportuno entrar rápidamente a los comercios electrónicos, pues debemos estar atentos y reaccionar a los posibles errores: “no creer nada de lo que escuchas, creer la mitad de lo que veas y aplícalo en internet”.

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# ANALISIS DE RIESGO EN LAS EMPRESAS DEL SECTOR TURISTICO DE LA ZONA SUR DEL ESTADO

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## RESUMEN

*Se cree que los administradores financieros deberían estar enfocando sus esfuerzos de gestión empresarial a la búsqueda permanente de solución a los problemas citados por Montaña, Pérez y De la O (2011) al menor costo posible, con el objeto de alcanzar beneficios razonables a su riesgo inherente.*

*El presente trabajo de investigación se enfoca en conocer la percepción de riesgo de negocio que tienen las empresas ubicadas en la región sur del estado de Yucatán, México, cuyo giro está enmarcado dentro del sector turístico, así como algunas de las acciones de control interno que los empresarios de éste sector llevan a cabo para minimizar el impacto que pudiese tener la ocurrencia de alguna de las dimensiones relacionadas con los riesgos de operación, financiero, tecnológico, de información, de recurso humano y del entorno externo.*

**PALABRAS CLAVE:** Riesgo, riesgo de negocio, administración de riesgo, control interno

## RISK ANALYSIS OF THE TOURISM SECTOR COMPANIES IN THE SOUTH OF THE STATE OF YUCATAN

### ABSTRACT

*It is believed that financial managers should be focusing their efforts on business management to the permanent search of solution to the problems cited by Montaña Pérez de la O. (2011) at the lowest possible cost in order to achieve reasonable benefits to their inherent risk. This research work is focused on determine the degree of business risk with companies located in the southern region of Yucatán state, México, whose line is framed within the tourism sector as well as some of the internal control actions that employers in this sector carry out to minimize the impact that might have the occurrence of any of the dimensions related to the operation risks , financial, technological, of information, human resource and environment.*

**JEL:** G01, G11, G110, G32

**KEYWORDS:** Risk, business risk, risk management, internal control

### INTRODUCCIÓN

Como consecuencia de la crisis económica internacional de los años 2008 y 2009, el sistema económico mundial se vio afectado por un descenso en la actividad económica, cuyos efectos fueron percibidos en indicadores económicos tales como el aumento del desempleo, la disminución de inversiones, el incremento en el riesgo e incertidumbre de empresarios y

consumidores, así como severas fluctuaciones en los tipos de cambio, generándose así un incierto panorama económico y los peores resultados de la economía mundial registrados en la última década (Montaño, Pérez y de la O, 2011)

La crisis económica del 2009 deprimió el sistema económico mundial afectando a la industria turística, por lo que se presume que las empresas que se encuentran en este sector y ubicadas en el sur del estado enfrentan problemas en relación a su rentabilidad. Se sabe que el turismo es una de las actividades económicas más importantes a nivel mundial, sujeto a muchos factores tanto endógenos como exógenos que la pudieran afectar, siendo estos factores los riesgos que pudieran ser determinantes en la permanencia del negocio en el mercado.

De acuerdo a las cifras estadísticas del Instituto Nacional de Estadística Geografía e Informática en su anuario estadístico Yucatán 2011, la contribución del estado al Producto Interno Bruto (PIB) nacional por sector económico fue de aproximadamente 117,436 millones de pesos (a precios del 2003) representando el 1.5% del indicador. La actividad económica más importante del estado es el sector terciario, correspondiente al área de servicios, donde la actividad turística juega un papel importante, motor principal del presente estudio de investigación. Por lo anterior se establece el problema general de investigación ¿Cuál es el riesgo de negocio e impacto percibido entre los inversionistas del sector turístico en la zona sur del estado de Yucatán? Las preguntas específicas de investigación son:

1. ¿Qué dimensión de riesgo de negocio endógeno y exógeno tienen mayor impacto dentro de las empresas objeto del estudio?
2. ¿Qué acciones de control interno establecen para minimizar el riesgo del negocio?
3. ¿Qué giro del sector turístico conlleva un mayor riesgo de negocio?
4. ¿Cómo está conformada la estructura financiera de las empresas objeto del estudio?

Delimitaciones del estudio: Sujetos empresarios del ramo turístico Lugar: Zona sur del estado de Yucatán, en ella se encuentra enclavada la zona arqueológica de Uxmal, declarada por la UNESCO como patrimonio cultural de la humanidad, en específico en el municipio de Santa Elena.

Las hipótesis de investigación que se pretenden comprobar son:

Hi: La distribución que presenta el nivel de riesgo es distinta al normal

Hi: El riesgo de negocio percibido por los empresarios turísticos en la zona sur de Yucatán es considerado (mayor a 3, en el instrumento de investigación)

La percepción a que se refiere el problema de investigación, se refiere a la probabilidad de pérdida o perturbación que existe cuando los controles internos establecidos no son adecuados, para su minimización. La presente investigación pretende demostrar que una adecuada administración de los riesgos contribuye a incrementar el valor empresarial de las organizaciones de este sector, considerando la forma en que toman sus decisiones actuales sobre los riesgos, y midiendo su impacto bajo este esquema.

## REVISION LITERARIA

Rodríguez Valencia (2002) define empresa como una entidad económica destinada a producir bienes y servicios venderlos y obtener con ello un beneficio; por su parte Parkin, (2008) la ley la reconoce y autoriza para realizar determinada actividad productiva que de algún modo satisface

las necesidades del hombre en la sociedad del consumo de la actualidad; es una entidad económica porque debe buscar el manejo eficiente de los recursos escasos de los que dispone para la consecución de sus fines. Con base a la definición de Rodríguez Valencia(2002) de empresa, la del ramo turístico está definida por el tipo de consumidor a la cual se dirige, o sea el turista, persona que se traslada de su lugar de origen por motivo de ocio y que Ribeirinho (2010) en su tesis doctoral señala que el turismo es la “concreción del descanso físico, mental, espiritual u ocio de personas que viajan a lugares distintos de su casa diseñándoles una oferta de productos y servicios que los ayude a vivir bien el ocio en sus vacaciones” (p. 10)

De conformidad con el artículo 4º. De la Ley Federal de Turismo en México, los servicios turísticos prestados por empresas de este sector se clasifican en:

- I. *Hoteles, moteles, albergues y demás establecimientos de hospedaje, así como campamentos y paradores de casas rodantes que presten servicios a turistas;*
- II. *Agencias, subagencias y operadoras de viajes;*
- III. *Guías de turistas, de acuerdo con la clasificación prevista en las disposiciones reglamentarias;*
- IV. *Restaurantes, cafeterías, bares, centros nocturnos y similares que se encuentren ubicados en hoteles, moteles, albergues, campamentos, paradores de casas rodantes a que se refiere la fracción I de este artículo, así como en aeropuertos, terminales de autobuses, estaciones de ferrocarril, museos y zonas arqueológicas; y*
- V. *Empresas de sistemas de intercambio de servicios turísticos.*

Para efectos de este trabajo las empresas objeto de estudio, forman parte de los apartados I, II y IV de la Ley Federal de Turismo los de aspecto legal, recurso naturales, demográficos, sociológicos y económicos.

Por su lado Zvaigzne (2010 citado por Zvaigzne, en 2012) define riesgo como la posibilidad de que uno o varios eventos ocasionales puedan ocurrir causando efectos positivos o negativos, en especial a negocios del ámbito turístico trayendo consecuencias económicas benéficas o perjudiciales. Según Zvaigzne (2012) el riesgo tiene cuatro funciones importantes para los negocios: Regulación, protección, innovación y analítica. Por su parte, Cañas (2009) establece que las metodologías de gestión del riesgo son:

1. AS/NZS 4360:1999, Estándar Australiano para la Administración de Riesgos.
2. Metodología de Riesgos U.S. Federal Reserve Banks. (1994 revisión más reciente)
3. Gestión de Riesgos Corporativos – Marco Integrado, COSO-ERM
4. Basilea II: Nuevo enfoque basado en tres pilares

Para propósitos de la investigación se utilizará el enfoque FRB o sea el del Banco de la Reserva Federal de Estados Unidos.

## **METODOLOGÍA DE LA INVESTIGACIÓN**

El estudio está dirigido a empresas del sector turístico de la zona sur del estado de Yucatán pues es uno de los sectores de mayor relevancia e importancia económica en la entidad. El trabajo de campo se realizó de agosto a octubre del 2013. La elección de la población ha seguido el criterio de seleccionar todas las empresas del sector turístico que forman del padrón empresarial de los

diferentes municipios que conforman la región 9 de Yucatán de la zona sur del estado. Un dato importante es que el número total de empresas del padrón de cada uno de los municipios referidos es solamente de 65 (fuente: Secretaria de Fomento Turístico del Estado de Yucatán, SEFOTUR, 2013) en vista de que, a pesar de todos los atractivos culturales y naturales que existen en la zona, no existe una inversión representativa por parte de empresarios del giro. La determinación de la muestra será utilizando el muestreo aleatorio simple, en el cual se puede numerar a las empresas de acuerdo al padrón (de los diferentes municipios que conforman la región 9 y aplicar el programa de cálculo de números aleatorios ubicado en <http://nosetup.org/>, lo cual permitiría que todas las empresas que forman parte de la población, tengan la misma probabilidad de ser seleccionadas dentro de la muestra. A pesar de que el tamaño de la población es pequeño, es decir de 51 empresas, se dar por hecho que el resultado de la muestra será mayor a 30 empresas lo cual de acuerdo al teorema del límite central, la mayoría de las distribuciones  $n > 30$  dará una distribución de muestreo que es casi normal. El tamaño de la muestra se calculó con 90% de confianza y 5% de error de estimación.

Con base en la Metodología de identificación de riesgos de negocio mediante el análisis PEST y la de Cañas (2009) se elaboró un instrumento de autoría propia, el cual fue validado a través de un jueceo y confiabilizado vía pilotaje arrojando un Alpha de Cronbach superior al 70%. Debido a las características del estudio, la encuesta se presentaba como el instrumento para la obtención de información más apropiado ya que permite obtener información específica para la investigación que no es posible obtener de las bases de datos públicas. Las variables de investigación objeto del estudio son: riesgo de negocio (dependiente) y riesgo de tipo operacional, financiero, tecnología de la información, información para toma de decisiones, recursos humanos y medio ambientes (independientes).

## RESULTADOS

El 49% de los entrevistados fueron establecimiento de hospedajes (25 de 51), le siguen los establecimientos de alimentos y bebidas con el 45.1% (23 de 51). Ticul y Oxcutzcab son los municipios que más contribuyeron al estudio con el 49.1%, es decir, 14 y 11 encuestados respectivamente de un total de 51. Cabe destacar que el primero genera empleos básicamente con su actividad principal, la venta de calzado a nivel nacional. El segundo tiene como actividad preponderante la venta de frutas y verduras.

A continuación se presenta en la tabla 1 los indicadores endógenos que los encuestados consideran más riesgosos:

Tabla 1: Indicadores de Mayor Riesgo Percibido en los Factores Endógenos

FACTORES ENDOGENOS					
Riesgo	Indicador de mayor riesgo	Media	Mediana	Desv estándar	Interpretación
Operaciones	Riesgo de la impartición de un mal servicio	3.78	4.00	0.673	El servicio es la operación que consideran de mayor riesgo (media de 3.78 de un máximo de 4) y que por cierto tiene la menor variabilidad con 0.673 y 17.8% de coeficiente de variación que es considerado mínimo. Los empresarios ven la satisfacción del cliente como una estrategia para cautivarlo.
Financiero	Riesgo de incumplimiento en sus obligaciones con base a financiamiento por capital	2.76	3.00	0.651	El mayor riesgo financiero que perciben los empresarios es perder el capital que tienen si el negocio no funciona, puesto que su promedio fue de 2.76 de un máximo de 4 ; una desviación estándar de 0.651 con un coeficiente de variación de 23.5%
Tecnología de la información	Riesgo de dar un mal servicio con el uso del software	2.43	3.00	1.237	Existe un mayor riesgo de otorgar un mal servicio por el uso de software, (2.43 de 4 posible) y una desviación estándar elevada de 1.23 y un coeficiente de variación de 50.9% Existe una gran similitud entre los riesgos percibidos en toma de decisiones

Información para toma de decisiones	Riesgo de que la información financiera no se realice según normas	2.18	2.00	1.367	El mayor riesgo en toma de decisiones es que la información no se presente de acuerdo a las Normas de Información financiera (NIF), con un promedio de 2.18; aunque su variabilidad es alta de 1.367. El cumplimiento de las NIF reviste la importancia de obtener información confiable y certera para la toma de decisiones.
Recursos humanos	Riesgo de que el personal contratado no se desempeñe eficazmente?	2.92	3.00	1.163	El mayor riesgo en recursos humanos es que el empleado no se desempeñe eficazmente, con un promedio de 2.92 de 4 posible; aunque su variabilidad es alta de 1.16 y un coeficiente de variación de 39.7%. Los empresarios confían en sus contadores ya que el menor riesgo es que la información financiera no se realice según normas con 2.18 de 4 posible.

*Esta tabla refleja los indicadores de mayor riesgo considerados por los encuestados de cada una de las dimensiones endógenas con sus respectivos cálculos de media, mediana y desviación estándar cuyos resultados sirvieron de base para la interpretación de cada uno de ellos.*

De igual manera en la tabla 2 se puede observar los indicadores exógenos que los encuestados consideran más riesgosos así como amenazas para la empresa y la interpretación respectiva de cada uno de ellos:

Tabla 2: Indicadores de Mayor Riesgo Percibido en los Factores Endógenos

FACTORES EXOGENOS					
Riesgo	Indicador de mayor riesgo	Media	Mediana	Desv. estándar	Interpretación
Económico	Riesgo percibido en depreciación de la moneda	3.12	4.00	1.107	En este rubro económico, el indicador de mayor riesgo es la depreciación de la moneda ya que tiene un promedio de 3.12 y una mayor variabilidad de 1.107 con un coeficiente de variación de 35.4%. Vinculado con el control interno que refieren los participantes la cobertura cambiaria es prioritaria de igual manera.
Legal	Riesgo percibido en la reforma fiscal	2.94	3.00	1.066	El mayor riesgo percibido en el rubro de aspectos legales es en la reforma tributaria o hacendaria ya que en promedio tuvo un puntaje de 2.94, una desviación estándar de 1.06 y un coeficiente de variación de 36.2%. Los empresarios ven como una inversión el capacitar a su personal contable en reforma hacendaria para una adecuado calculo y entero del mismo.
Social	Riesgo percibido en delincuencia	3.02	4.00	1.140	El mayor riesgo social percibido lo es la delincuencia, (asaltos, pandillerismo), con un promedio de 3.02 de un máximo de 4 puntos y una desviación estándar de 1.14 y coeficiente de variación de 37.7%.
Educativo	Riesgo de no formar profesionales que requiere el campo laboral	2.59	3.00	1.203	Respecto al riesgo de que las instituciones de educación superior de la zona no formen profesionales que la industria necesita, los empresarios tuvieron en promedio 2.59 puntos de 4 y una desviación estándar 1.20 y un coeficiente de variación de 46%. Concluyéndose que los empresarios tiene mucha variación en sus opiniones
Demográfico	Riesgo percibido en cambios poblacionales	2.65	3.00	1.074	Los cambios poblacionales tuvieron una percepción de riesgo de 2.65 puntos y una desviación estándar de 1.07 teniendo como coeficiente de variación resultante de 40%, lo que indica que existe una alta variación en las opiniones respecto al tema
Natural	Riesgo percibido de huracanes	3.25	4.00	1.036	Los huracanes tuvieron el mayor riesgo pues 3.25 puntos de 4 máximos; se tuvo una desviación estándar elevada de 1.03 y u coeficiente de variación de 31.6%
Cultural	Cambios en los gustos y				El riesgo percibido por cambios en los gustos y preferencia de los consumidores tiene un promedio de 3 puntos y una

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preferencias del consumidor	del	3.00	3.00	1.095	desviación estándar de 1.09 lo que da un coeficiente de variación de 36.3%. Los empresarios buscan estrategias de fidelidad hacia sus productos y servicios.
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*Esta tabla refleja los indicadores de mayor riesgo considerados por los encuestados de cada una de las dimensiones endógenas con sus respectivos cálculos de media, mediana y desviación estándar cuyos resultados sirvieron de base para la interpretación de cada uno de ellos.*

Tabla 3: Controles Internos Principales Para Minimizar el Riesgo de los Factores Endógenos

Dimensión endógena		Control interno
C O N T R O L  D E  R I E S G O S	Operación	Control estricto de registro de todas las operaciones del mes
		Evidencias y soportes documentales en todas las operaciones de la empresa
		Apego a políticas de la empresa
		Conocimiento del reglamento de la empresa
	Financiero	Conocimiento del manual de políticas y procedimientos
		Elaboración y análisis del flujo de efectivo diario/semanal
		Eficiencia en la base y cálculo de impuestos federales y estatales
		Establecimiento de reservas de contingencias
		Oportuno cobro a clientes y pago a proveedores
	Tecnología	Estados financieros oportunos para toma de decisiones
		Respaldo de información
		Manejo de claves y passwords
		Capacitación constante al personal
	Información para toma de decisiones	Acceso restringido a las áreas de sistemas
		Softwares acordes a las necesidades de información
		Auditoría interna
Registros con apego a normas contables		
Supervisión constante del procesamiento de la información		
Recursos humanos	Planeación fiscal	
	Informe diario de operaciones bancarias	
	Motivación	
	Clima organizacional adecuado	
	Sueldos y prestaciones competitivos	
	Adecuado proceso de reclutamiento para el perfil requerido	
	Indicadores de desempeño para aplicación de estímulos	

Esta tabla muestra los principales controles internos mencionados por los participantes del estudio para minimizar los riesgos de los diferentes factores endógenos de la empresa. (Fuente elaboración propia, trabajo de campo, 2013)

En la tabla 3 se refleja lo que los encuestados consideraron como los principales controles internos que deben de establecerse para minimizar el riesgo de los diferentes factores de riesgo internos de la organización sobre los cuales tiene control.

Tabla 4: Tabla de Contingencia Riesgo Ponderado Nuevo \* Giro de la Empresa

		G i r o de la e m p r e s a					
			Hotel	Restaurante	Bar	Ag.viaje	Total
Riesgo bajo	Recuento		0	1	0	0	1
	% dentro de Riesgo ponderado nuevo		0.0%	100.0%	0.0%	0.0%	100.0%
	% dentro de Giro de la empresa		0.0%	4.8%	0.0%	0.0%	2.0%
	% del total		0.0%	2.0%	0.0%	0.0%	2.0%
Riesgo Ponderado nuevo	Recuento		16	16	1	2	35
	% dentro de Riesgo ponderado nuevo		45.7%	45.7%	2.9%	5.7%	100.0%
	% dentro de Giro de la empresa		64.0%	76.2%	50.0%	66.7%	68.6%
	% del total		31.4%	31.4%	2.0%	3.9%	68.6%
Riesgo moderadamente bajo	Recuento		9	4	1	1	15
	% dentro de Riesgo ponderado nuevo		60.0%	26.7%	6.7%	6.7%	100.0%
	% dentro de Giro de la empresa		36.0%	19.0%	50.0%	33.3%	29.4%
	% del total		17.6%	7.8%	2.0%	2.0%	29.4%
Riesgo moderadamente alto	Recuento		25	21	2	3	51
	% dentro de Riesgo ponderado nuevo		49.0%	41.2%	3.9%	5.9%	100.0%
	% dentro de Giro de la empresa		100.0%	100.0%	100.0%	100.0%	100.0%
	% del total		49.0%	41.2%	3.9%	5.9%	100.0%

*Esta tabla muestra el porcentaje de riesgo ponderado versus el porcentaje de giro de las empresas encuestada con el propósito de visualizar de manera adecuada qué giro del sector turístico conlleva un mayor riesgo de negocio. (fuente: elaboración propia, trabajo de campo 2013)*

La tabla 4 refleja que el 49% los encuestados (25 de 51) fueron hoteles, dentro de ellos (9 de 25) tiene la percepción de haber un riesgo de negocio moderadamente alto. Esto quizá se deba a que este giro depende casi exclusivamente de la actividad turística, mientras que los restaurantes y bares pueden tener clientes locales. Respecto a los porcentajes de financiamiento vía deuda y capital: La media de la deuda es del 35% y la de capital es casi del 65%, La deuda tiene un 64% de coeficiente de variación lo que es respaldado por un 23% de desviación típica, la mitad de los encuestados tienen financiamiento vía deuda de un 30% (mediana). Por otra parte, el coeficiente de variación de financiamiento vía capital tiene menor variación respecto a deuda ya que solo es del 35.7%, y la mitad de los entrevistados tiene 70% de financiamiento vía capital (mediana). Se puede concluir que los entrevistados por cada 3 pesos de financiamiento 2 son por capital y uno vía deuda

### Comprobación de Hipótesis

Tabla 5: Prueba de Normalidad Para Nivel de Riesgo Percibido a Través de la Prueba Kolmogorov-Smirnov (KS) Para una Muestra

Prueba de KS para una muestra		
N	Riesgo del negocio	51
Parámetros normales <sup>a,b</sup>	Media	84.43
	Desviación típica	14.504
Diferencias más extremas	Absoluta	.116
	Positiva	.072
	Negativa	-.116
Z de Kolmogorov-Smirnov		.825
Sig. asintót. (bilateral)		.503
a. La distribución de contraste es la Normal.		
b. Se han calculado a partir de los datos.		

*Esta tabla muestra la si la distribución que presenta la percepción de riesgo de negocio es distinta a la normal*

Se realizó la prueba de KS para una muestra ( $n > 50$  elementos) para identificar si la distribución que presenta el nivel de riesgo de negocio percibido por las empresas del sector turístico del sur del estado de Yucatán bajo la contratación de la hipótesis:

#### Prueba de hipótesis 1

Hi: La distribución que presenta el nivel de riesgo es distinta al normal

Regla de decisión: Rechazar la hipótesis nula si  $p$  valor  $< 0.05$

Nivel de significancia: 5%

Como  $p$  valor =  $0.503 > 0.05$  entonces no se rechaza la hipótesis nula por lo que se puede concluir con 95% de confianza de que no existe evidencia estadística para aceptar que la distribución que presenta la percepción de riesgo de negocio es distinta a la normal

Tabla 6: comprobación de hipótesis 2 a través de la prueba Z para una muestra

	T	gl	Sig. (bilateral)	Diferencia de medias	95% Intervalo de confianza para la diferencia	
					Inferior	Superior
Riesgo de Negocio	-3.459	50	.001	-.314	-.50	-.13

*Esta tabla muestra la probabilidad de ocurrencia de medición de riesgo percibido por los encuestadores y que sirve de base para aceptar o rechazar la hipótesis nula.*

## Prueba de hipótesis 2

Hi: El riesgo de negocio medido por la probabilidad de ocurrencia es percibido por los empresarios turísticos en la zona sur de Yucatán como alto (mayor a 3)

Regla de decisión Rechazar  $H_0$  si  $Z > 1.645$  (prueba de una cola)

Nivel de significancia  $\alpha = 0.05$

$Z = -3.4 < 1.645$  entonces no se rechaza la nula por lo que se puede concluir con 95% de confianza que no existe evidencia estadística para aceptar que el nivel de riesgo de negocios en los empresarios turísticos de la zona sur de Yucatán es alto.

## CONCLUSIONES

Después de haber analizado la información obtenida se presentan las conclusiones de la investigación: La dimensión de riesgo que tiene mayor impacto dentro de las empresas es el natural, en especial por los huracanes considerando que la península de Yucatán es un paso natural de fenómenos meteorológicos de este tipo que durante los meses de junio a noviembre pueden azotar la zona donde se encuentran establecidos los negocios. Las acciones de control interno que los empresario utilizan para minimizar el riesgo son: en cuanto lo operativo, un estricto control del registro de las operaciones mensuales, respecto al financiero, elaboración y análisis de flujos de efectivo de la empresa; tecnológico, respaldo de información cuando la tienen; toma de decisiones, auditoría interna; recursos humanos, la motivación a sus colaboradores. El giro de establecimientos de hospedaje es el que tiene mayor riesgo de negocio por su temporalidad y dependencia casi estricta a los turistas que visitan la zona *Puuc* de Yucatán. La estructura financiera de las empresas de la región está conformada por un 65% de financiamiento vía capital y un 35 % vía deuda. Esto significa que las empresas de este sector no tienen problemas graves de endeudamiento, es decir, cuentan con el respaldo de su capital propio y ganado. El riesgo de negocio percibido presenta una distribución normal, tanto que al realizarse la prueba KS para una muestra no se rechazó la hipótesis nula. En términos generales se puede decir que existe un riesgo de negocio moderadamente alto en las empresas turísticas de la zona sur del estado de Yucatán.

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# IMPACTO DE LA GESTIÓN DE LA CADENA DE SUMINISTROS SOBRE EL DESEMPEÑO COMPETITIVO DE EMPRESAS MANUFACTURERAS DE AGUASCALIENTES, MÉXICO

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## RESUMEN

*Se analiza la relación entre la gestión de la cadena de suministros y el desempeño competitivo de 60 empresas del estado mexicano de Aguascalientes. Las dimensiones de la gestión de la cadena de suministros consideradas fueron: enfoque al cliente, cooperación, integración, coordinación, desarrollo, gestión de la información y mejora continua, mientras que las dimensiones del desempeño competitivo fueron: desempeño competitivo en costos, desempeño competitivo en flexibilidad, desempeño competitivo en calidad y desempeño competitivo en capacidad de innovación. Los datos se analizaron mediante cuatro análisis de regresión lineal múltiple, en los que las variables dependientes fueron las dimensiones del desempeño competitivo. Las dimensiones de la gestión de la cadena de suministros no explicaron el desempeño competitivo en costos, pero explicaron el 10.5% de la variabilidad en desempeño competitivo en flexibilidad, el 26.4% de la variabilidad del desempeño competitivo en la capacidad de innovación y el 12.3% de la variabilidad del desempeño competitivo en calidad, justificando así los recursos que las empresas aplican a esas prácticas.*

**PALABRAS CLAVE:** Gestión De La Cadena De Suministros, Desempeño Competitivo, Empresas Manufactureras

## IMPACT OF THE MANAGEMENT OF THE SUPPLY CHAIN ON THE COMPETITIVE PERFORMANCE OF MANUFACTURING COMPANIES IN AGUASCALIENTES, MEXICO

### ABSTRACT

*We analyze the relationship between the management of the supply chain and competitive performance of 60 companies in the Mexican state of Aguascalientes. The dimensions of the management of the supply chain were considered: customer focus, cooperation, integration, coordination, development, information management and continuous improvement, while the dimensions of competitive performance were cost competitive performance, competitive performance flexibility, quality and competitive performance in competitive performance in innovation capacity. Data were analyzed using four multiple linear regression analysis in which the dependent variables were the dimensions of competitive performance. The dimensions of the*

*management of the supply chain explained not cost competitive performance, but accounted for 10.5 % of the variability in competitive performance in flexibility, 26.4 % of the variability of competitive performance in innovation capacity and 12.3 % of the variability of competitive performance in quality, justifying the resources that companies apply to those practices.*

**JEL:** M1

**KEYWORDS:** Supply chain management, competitive performance, manufacturing companies.

## INTRODUCCIÓN

La gestión de la cadena de suministros, se refiere a la combinación del uso de la tecnología disponible y la aplicación de las mejores prácticas de negocios existentes en los procesos de una cadena de suministros, con la finalidad de implantar acciones que permitan alcanzar mayores ahorros y beneficios mediante la mejora de los procesos, manejo eficiente de productos y/o servicios, así como el correcto intercambio de información de negocios que permite que generen competitividad y ganancias. (Cai, Liu, Xiao, y Liu, 2008).

## REVISIÓN LITERARIA

### La Gestión De Cadena De Suministros

En la revisión de literatura, se identificaron como las prácticas de gestión de la cadena de suministro más significativas al enfoque al cliente, la cooperación, la integración, la coordinación, el desarrollo, la gestión de la información y la mejora continua. El enfoque al cliente refleja el compromiso de la compañía con la satisfacción de las necesidades del cliente (Kanji y Wong, 1999), a través de actividades planeadas y organizadas para la mejora de procesos. La satisfacción del cliente es un atributo absolutamente necesario para que las empresas puedan mantenerse al día en el entorno competitivo, lo cual sólo puede lograrse mediante la rápida respuesta a las necesidades del cliente (Borade y Bansod, 2008).

Para que las empresas puedan ser plenamente eficaces en el entorno competitivo actual, deben ampliar su comportamiento integrador para incorporar tanto a clientes como proveedores (Bowersox y Closs, 1996, en Mentzer et al., 2001). Esta extensión de los comportamientos integradores, a través de la integración externa, es la base de gestión de la cadena de suministro. La aplicación de la filosofía de gestión de la cadena de suministros se realiza mediante una serie de actividades acordes a un esfuerzo organizado entre los socios de la cadena de suministro, tales como proveedores, transportistas y fabricantes, para responder dinámicamente a las necesidades del cliente final (Greene, 1991, en Mentzer et al., 2001). Kannan y Tan (2005) aseguran que la coordinación entre empresas está relacionada positivamente con el desempeño operativo organizacional, y agregan que las organizaciones deben participar proactivamente en las decisiones de sus proveedores acerca del origen de los componentes y/o materias primas.

El enfoque de la gestión de cadena de suministros busca la integración de los proveedores en el desarrollo de productos (Kannan y Tan, 2005), ello implica su participación desde comienzos del proceso de desarrollo de productos para aprovechar sus capacidades y experiencia (Ragatz, Handgeld y Scannell, 1997). Por otro lado, las prácticas de intercambio de información, tales como el sistema de inventario gestionado por proveedor, herramienta conocida como *VMI* por sus siglas en inglés (*Vendor-Managed Inventory*), proporcionan a los socios fabricantes de una cadena de suministros, la facultad de tener acceso a la información más precisa de la demanda

(Borade y Bansod, 2007). Kanji y Wong, (1999) coincide con ello al señalar que el intercambio de información entre los miembros de una cadena de suministros facilita su operación. La mejora continua hace un fuerte énfasis en el uso de procedimientos robustos para el diseño o introducción de productos y servicios nuevos o mejorados, así como al diseño de procesos que satisfagan y excedan los requerimientos de calidad establecidos por el cliente (Rodríguez, 2007). Por otro lado, Anumba et al., (2000) sostienen que es importante incorporar los nuevos productos al mercado lo más rápido posible; cuidar las fechas calendario se ha vuelto el principal recurso por ser optimizado o reducido, más que los mismos costos. Skinner (1969) identificó cuatro criterios de desempeño relacionados con la puesta en marcha de una filosofía de SCM entre los que se incluye calidad, costo, tiempo y flexibilidad. Posteriormente Leong, Snyder y Ward (1990) añaden la innovación como indicador del desempeño de las empresas. En este estudio se propone que el desempeño competitivo depende de las prácticas de gestión de la cadena de suministros.

## METODOLOGÍA

El diseño de investigación se caracterizó como cuantitativo y transversal. Su alcance fue exploratorio por la escasez de estudios previos en el contexto de estudio. La muestra de empresas manufactureras estudiadas fue de 60. Las unidades de análisis fueron elegidas por conveniencia. Las empresas fueron identificadas en un directorio publicado por el Instituto Nacional de Estadística y Geografía. Los datos se recolectaron mediante un cuestionario contestado por un directivo de cada empresa. El cuestionario estuvo integrado por 75 reactivos tipo Likert de 7 puntos, diseñados por Rodríguez (2011). En la Tabla 1 se presentan los bloques de reactivos utilizados para medir las variables así como el número de reactivos con los que se integraron. Las prácticas de la gestión de la cadena de suministros consideraron por separado la cooperación, la coordinación la integración, el desarrollo y la gestión de la información, cuando éstas tenían lugar con los clientes y con los proveedores. En la misma tabla se presentan los coeficientes alfa de Cronbach que dieron cuenta de la adecuada confiabilidad del instrumento.

Tabla 1: Resultados de Alfa de Cronbach

NOMENCLATURA	DIMENSIÓN	NÚMERO DE REACTIVOS	COEFICIENTES ALPHA DE CRONBACH
EC	Enfoque con los clientes	4	0.69
CPC	Cooperación con los clientes	5	0.84
CPP	Cooperación con los proveedores	5	0.85
INC	Integración con los clientes	5	0.87
INP	Integración con los proveedores	5	0.85
CRC	Coordinación con los clientes	4	0.80
CRP	Coordinación con los proveedores	4	0.82
DEC	Desarrollo con los clientes	4	0.83
DEP	Desarrollo con los proveedores	4	0.86
GIC	Gestión de la información con los clientes	3	0.68
GIP	Gestión de la información con los proveedores	3	0.76
MC	Mejora continua	6	0.88
DCC	Desempeño competitivo en costos	4	0.78
DCF	Desempeño competitivo en flexibilidad	5	0.89
DCCAL	Desempeño competitivo en calidad	4	0.88
DCCI	Desempeño competitivo en capacidad de innovación	8	0.84

*Los coeficientes Alfa de Cronbach con los que se verificó la confiabilidad de los bloques de reactivos con que se midieron las 12 prácticas de la gestión de la cadena de suministros y los cuatro componentes del desempeño competitivo, tuvieron valores entre 0.69 y 0.89.*

La hipótesis general que dirigió el estudio fue:

H0: El desempeño competitivo en costos es independiente a las prácticas de la gestión de la cadena de suministros.

HA: El desempeño competitivo en costos depende de las prácticas de la gestión de la cadena de suministros

## RESULTADOS

La hipótesis general fue desglosada, para ser sometida a prueba, en cuatro particulares:

H1: El desempeño competitivo en costos depende de las prácticas de gestión de la cadena de suministros

H2: El desempeño competitivo en flexibilidad depende de las prácticas de gestión de la cadena de suministros.

H3: El desempeño competitivo en calidad depende de las prácticas de gestión de la cadena de suministros

H4: El desempeño competitivo en capacidad de innovación depende de las prácticas de gestión de la cadena de suministros. Las cuatro hipótesis particulares fueron sometidas a prueba mediante un análisis de regresión múltiple para cada una. El modelo de regresión en el que la variable dependiente fue el desempeño competitivo en costos no se presenta debido a que en la corrida de la rutina de regresión no encontró ninguna relación entre las variables independientes y la dependiente que fuera estadísticamente significativa al 95%. La Tabla 2 presenta el modelo correspondiente a la prueba de la hipótesis 2, en la que se rechazó la hipótesis nula que sostenía la independencia entre el desempeño competitivo en flexibilidad y las prácticas de la gestión de la cadena de suministro, ya que la  $R^2$  del modelo indica que el 10.5% de la variación del desempeño competitivo en flexibilidad (DCF) es explicada por la práctica de gestión de la cadena de suministro llamada coordinación con el cliente (CRC).

La Tabla 3 presenta el modelo correspondiente a la prueba de la hipótesis 3, en la que se rechazó la hipótesis nula que sostenía la independencia entre el desempeño competitivo en capacidad de innovación y las prácticas de la gestión de la cadena de suministro, ya que la  $R^2$  del modelo indica que el 26.4% de la variación del desempeño competitivo en capacidad de innovación (DCCI) es explicada por la práctica de gestión de la cadena de suministro llamada cooperación con el cliente (CPC). La Tabla 4 presenta el modelo correspondiente a la prueba de la hipótesis 4, en la que se rechazó la hipótesis nula que sostenía la independencia entre el desempeño competitivo en calidad y las prácticas de la gestión de la cadena de suministro, ya que la  $R^2$  del modelo indica que el 12.3% de la variación del desempeño competitivo en capacidad de innovación (DCCI) es explicada por la práctica de gestión de la cadena de suministro llamada cooperación con el cliente (CPC).

Tabla 2: Modelo De Regresión 2

R	0.324
T (variable CRC)	(2.610)**
R cuadrada	0.105
F	6.810
FIV	1.000

La ecuación del modelo ajustado es:  $DCF = 3.778 + 0.265 CRC$

*\*\*Significativo al 5%. La  $R^2$  del modelo indica que el 10.5% de la variación del desempeño competitivo en flexibilidad (DCF) es explicada por la coordinación con el cliente (CRC).*

Tabla 3: Modelo de Regresión 1

R	0.525
T (variable CPC)	(4.703)***
R cuadrada	0.264
F	22.10
FIV	1.000

La ecuación del modelo ajustado es:  $DCCI = 3,238 + 0.319 CPC$

\*\*Significativo al 1%. La  $R^2$  del modelo indica que el 26.4 % de la varianza del desempeño competitivo en capacidad de innovación es explicado por la cooperación con el cliente.

Tabla 4: Modelo de Regresión 3

R	0.351
T (variable CPP)	(2.857)**
R cuadrada	0.123
F	8.162
FIV	1.00

La ecuación del modelo ajustado es:  $DCCAL = 3.864 + 0.263CPP$

\*\*Significativo al 5%. La  $R^2$  del modelo indica que el 12.3 % de la varianza del desempeño competitivo en calidad es explicado por la cooperación con el proveedor.

## CONCLUSIONES

Las prácticas de gestión de la cadena de suministro llamadas cooperación con el cliente, coordinación con el cliente y cooperación con el proveedor fueron las únicas capaces de explicar el desempeño competitivo en flexibilidad, el desempeño competitivo en capacidad de innovación y el desempeño competitivo en calidad. Lo anterior sugiere que los recursos que las empresas aplican a las prácticas de gestión de la cadena de suministros, se justifican por su impacto en su desempeño competitivo. Queda para futuras investigaciones el análisis de la relación de la gestión de la cadena de suministro y en costos. Finalmente, los resultados deben tomarse con cautela por el pequeño tamaño de la muestra y su carácter no aleatorio.

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# LA ELABORACIÓN DE BEBIDAS ESPIRITUOSAS COMO ACTIVIDAD PRODUCTIVA EN LAS COMUNIDADES MARGINADAS CASO ZAPOTITLÁN DE VADILLO

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## RESUMEN

*La presente investigación se basa la elaboración del destilado artesanal Tuxca en la región de Zapotitlán de Vadillo y la situación de esta bebida espirituosa como una actividad productiva para esta comunidad. La información se obtuvo a través de investigación de campo y se llegó al siguiente resultado: La elaboración de este destilado artesanal es una actividad que genera ingresos para sus habitantes, sin embargo los canales de comercialización y distribución no son favorables para incrementar sus ingresos y por lo tanto generar un mayor impacto en la comunidad. Al obtener los resultados, se presentan algunas opciones de comercialización y distribución que no se adecúen a la naturaleza artesanal de dicho producto de agave.*

**PALABRA CLAVE:** Bebida Espirituosa, Actividad Productiva, Comercialización, Distribución

## THE PRODUCTION OF SPIRITS AS A PRODUCTIVE ACTIVITY IN MARGINALIZED COMMUNITIES CASE ZAPOTITLÁN DE VADILLO

### ABSTRACT

*This paper is about the development of the crafting process of distillate Tuxca in the region of Zapotitlán de Vadillo and the location of this spirits as a productive activity for this community. The information was gathered through field research and came to the following results: the elaboration process of this craft distillate is an activity that generates income for this particular inhabitants, but the marketing and distribution channels are not favorable to increase their income and therefore have a significant impact in the community. The results presented are some options of marketing and distribution that does not suit the artisanal nature of this agave product.*

**JEL:** Z130,D630,D690,O100.

**KEYWORDS:** Spirits, Productive Activity, Marketing, Distribute

### INTRODUCCIÓN

La destilación como se conoce en la actualidad es un proceso Europeo que encuentra sus orígenes en España, en el siglo XVI y que fue introducido a México por los migrantes árabes. Para el siglo XVIII dicho proceso era comúnmente utilizado en la fabricación y producción de alcoholes en nuestro país. México cuenta con una amplia diversidad de plantas de agave cada una con características específicas ubicadas en distintas regiones del país; siendo la región norte,

específicamente los estados de Coahuila, Sonora y Chihuahua en donde se ubica una de las mayores concentraciones de este tipo de maguey. Hallazgos arqueológicos han constatado la importancia que la fibra de agave tuvo para las poblaciones del sur de Jalisco en el año 74 d.C al emplearlas como parte de su vestimenta y para la elaboración de implementos agrícolas como el abono. Del mismo modo para las comunidades asentadas a las faldas del volcán de Colima entre los años 500 a.C. y 1500 d.C, el agave se empleaba en la elaboración de alimentos y bebidas fermentadas con fines ceremoniales. El historiador Joseph Dacosta en el siglo XVI nombra al maguey como el “Árbol de las maravillas” ya que proporcionaba alimento, bebida, medicina además de ser empleado para elaboración de fibras, jabón y materiales para la construcción. (Benet Manuel, 2012) Cosechado a las faldas del volcán de Colima en las inmediaciones del estado de Jalisco, en la localidad de Zapotitlán de Vadillo es posible encontrar un tipo de agave de la variedad cenizo conocido como maguey Tuxcacuesco con características muy particulares. Producto de este maguey endémico se obtiene el Tuxca, un destilado elaborado en forma artesanal, de sabores y aromas empíreumáticos, buena graduación alcohólica y color cristalino, todas las anteriores cualidades reconocidas como deseables en un destilado de buena calidad que puede comercializarse a un precio elevado.

Este destilado no es tan popular en el mercado por lo que suele ser confundido con el Tonayán un subproducto que resulta de una primera destilación de la caña de azúcar y cuyo precio oscila en los 25 pesos el litro. Esta confusión dificulta la comercialización del Tuxca además de generar en los consumidores una resistencia a la compra y aceptación de un destilado artesanal poco conocido. En la actualidad la comercialización de los destilados, se ha visto afectada por distintos factores entre los principales se distinguen los elevados costos de la materia prima y la constante inserción al mercado nacional de destilados o licores importados a menor costo. Aún destilados consagrados en el gusto del consumidor como el Tequila, han sufrido algunos estragos lo cual infiere que el impacto negativo ha sido aún mayor para aquellas bebidas de producción artesanal elaboradas en localidades marginadas. Nuestro país cuenta con una amplia variedad de bebidas destiladas, muchas de ellas elaboradas de manera artesanal, sin embargo la mayoría carece de campañas de difusión, incluso se tiene poca información documentada de aquellas de menor popularidad o de producción local, lo que las pone en riesgo inminente de desaparecer. Tal es el caso del Tuxca cuya producción significativa se encuentra en una localidad alejada de las urbes y enclavada en las faldas del volcán de Colima.

## REVISIÓN LITERARIA

Las bebidas espirituosas se definen como aquellas bebidas alcohólicas obtenidas mediante la destilación de una materia prima de origen agrícola, son aptas para consumo humano, contienen una graduación mínima de 15%vol. algunas son adicionadas con aromas, azúcares o edulcorantes. México es un país rico en bebidas destiladas muchas de ellas elaboradas de manera artesanal no obstante solo algunas cuentan con reconocimientos o distinciones que faciliten su difusión y mercadeo a continuación se presentan algunos ejemplos:

*Tequila:* destilado de agave originario del municipio del mismo nombre ubicado en el Estado de Jalisco; esta bebida se elabora a partir de la destilación y fermentación del “jugo” del agave variedad azul llamado

*Tequilana Weber:* Este destilado tiene una denominación de origen en cinco Estados de la República Mexicana: Michoacán, Guanajuato, Tamaulipas, Nayarit y por supuesto el estado de Jalisco, acorde a la Norma Oficial Mexicana (NOM-006-SCFI-2005) las instalaciones de la fábrica de un productor autorizado deben estar dentro del territorio comprendido en la

declaración, la materia prima y su proceso también están normados. Según datos del informe anual que realiza el Consejo Regulador del Tequila, en las tequileras hay registrado un inventario de 315,8 millones de litros de tequila cifra que proporciona una idea de los volúmenes de comercialización de dicho destilado.

*Sotol*: uno de los destilados mexicanos más reconocidos producto de la agavácea *sereque* que crece en el norte de México principalmente en los estados de Chihuahua, Durango y Coahuila. Desde el año 2002 cuenta con denominación de origen y desde el 2004 una regulación de su producción bajo la Norma Oficial Mexicana NOM-159-SCFI- pese a esto no tiene gran producción comercial y continua fiel a su naturaleza artesanal. Su textura y sabor es parecido al Tequila con propiedades menos dulces y más fuertes.

*Charanda*: bebida espirituosa originaria de Michoacán, su nombre es de origen purépecha y significa tierra colorada. Su proceso de elaboración es muy parecido al del ron no obstante lo que hace especial a este destilado es su materia prima ya que está elaborado con caña de altura cultivada en tierras altas y con clima templado. Cuenta con Denominación de origen desde el 2003 la cual marca que ningún destilado de caña en el mundo a excepción del que se produce en Michoacán con caña de su cultivo y agua de manantial de la región puede ser llamado Charanda.

*Bacanora*: destilado artesanal originario de Sonora con características muy marcadas como su alta graduación alcohólica, licor incoloro elaborado a base de Agave *vivípara* (también conocido como agave yaquiana o agave pacífica). Debido a la reducida producción la comercialización se dificulta, por eso compañías productoras de destilados consideran viable el proyecto de industrializar la producción de este producto.

*Xtabentún*: bebida espirituosa de origen maya, de producción artesanal elaborada a base de miel fermentada de abejas que solo consumen la flor del Xtabentun y anís. Es una bebida originaria de Yucatán y su origen es maya. Zapotitlán de Vadillo es una población situada en el centro sur del estado de Jalisco, en la parte poniente del Volcán y Nevado de Colima, de clima semi seco y suelo accidentado; la mayor parte de éste último destinado al uso agropecuario ya que por sus características el terruño es ideal para la siembra de diferentes frutos, vegetales, plantas y árboles, entre los que destacan, principalmente, el maíz, frijol, semilla de calabaza, chile y el maguey variedad cenizo. Su población actual es de 6685 habitantes. La principal actividad de los habitantes de este municipio es la producción del Tuxca : la siembra, el traslado de las piñas, la cosecha, la jima, la fermentación, la cocción y la destilación son las distintas actividades productivas para el 70% de las familias que trabajan dentro de la población. Comparado con otros destilados el Tuxca es de producción local, reconocido por los oriundos de la localidad, existe la necesidad de documentar este destilado y generar un mayor interés no solo en la población sino en los visitantes.

## METODOLOGÍA

El objetivo principal de esta investigación es identificar la situación actual de las bebidas espirituosas como una actividad productiva para las comunidades marginadas estudiando el caso específico del destilado de agave cenizo *tuxcacuezo* en la región de Zapotitlán de Vadillo, Jalisco, proporcionar una información más detallada del Tuxca además de documentar su proceso de elaboración. El planteamiento de ciertas incógnitas permite construir un esbozo de la situación. ¿Cuál es el proceso de elaboración del destilado? ¿Puede el Tuxca ser considerado un destilado de alta calidad de acuerdo a sus características? ¿Cuál es la importancia de la estandarización de los procesos? ¿Cuales son las principales formas de comercialización? El cumplimiento de los

objetivos y la resolución de los cuestionamientos planteados para la investigación infieren que una estandarización en los procesos y métodos de elaboración del Tuxca además de los adecuados procesos de obtención y destilación permitirá obtener la calidad buscada en un destilado adecuado para la comercialización y venta, contribuyendo en la búsqueda del posicionamiento, promoción y reconocimiento del Tuxca. La investigación tendrá un enfoque cualitativo y la investigación de campo será la principal fuente de obtención de datos.

El estudio se basa en la aplicación de instrumentos de medición, como lo son entrevistas a los productores con respecto al proceso de elaboración del Tuxca, entrevistas a expertos en el tema de los destilados para valorar las características de este producto así como su posicionamiento en el mercado y entrevistas a la población para conocer su participación en los distintas etapas del proceso de producción del destilado. Es necesario mencionar que son 30 familias con parentescos en diferentes grados las que se incluyen en uno o más procesos de la elaboración del destilado en dicha comunidad.

## RESULTADOS

La producción del Tuxca en esta comunidad se rastreó hasta cuatro generaciones atrás, lo que se traduce en más de 30 familias beneficiadas con la venta del mismo, solo una taberna de la región conserva el proceso de elaboración tal cual se ha llevado a cabo por generaciones. Los productores no poseen una cifra exacta en litros al mes pero se obtienen aproximadamente 400 litros de Tuxca en cada destilación, y se en promedio 4 destilaciones al mes. Para el comercio cada uno de los integrantes de la taberna se lleva a casa un garrafón de veinte litros para poder comercializar. La venta del producto es a granel y solo puede comprarse cerca de la región a menos de que alguno de los productores y vendedores salgan del pueblo en sus días libres para venderlo a otras personas y lugares y que de esta manera se da a conocer el producto. El clima, la temperatura, el suelo y el espacio de plantación son lo más apto para la producción del agave Tuxcacueco un factor diferencial para esta planta es que tiene que estar expuesta todo el tiempo al sol y necesita precipitaciones abundantes durante las etapa de crecimiento; todas estas características se cumplen en esta región.

El maguey Tuxcacueco alcanza su edad reproductiva entre los 3 y 5 años y al año puede tener entre uno y dos hijuelos posterior al brote de hijuelos es necesario cuidar la planta siempre ya que su proceso de maduración es lento y va de los 8 a los 10 años. Cuando la planta alcanza los 9 años ya está lista para que se extraiga y la piña pueda convertirse en destilado. Una vez que la planta da un tallo y florea, muere por lo que la jima de la piña debe de hacerse antes de esto. El proceso de producción del Tuxca inicia con la jima la piña se extrae y se traslada a la taberna que es el lugar donde se elabora el destilado. Las piñas se queman o “tatemán” en un tepetate que es un hoyo profundo cavado en la peña donde se colocan piedras calientes que cubren las piñas, se cubren con lonas y tierra para conservar el calor.

Una vez que las piñas están tatemadas se trocea o “maja” la planta para obtener su mosto. La fermentación se lleva a cabo en agujeros cavados en la peña calafateados con arcilla blanca llamados vasijas; toma de dos a tres semanas para que el mosto esté listo para ser destilado; este proceso se lleva a cabo en un horno de piedra y cazo de cobre; y se requiere una doble destilación para que este producto sea apto para consumo humano. Todos los destilados de buena calidad se evalúan en base a tres características: el aroma, el aperlado y la retroflación. Concordando con esto el Tuxca es cristalino a la vista, con un perlado que oscile entre los 20 a 30 segundos, con aroma primario a maguey cocido y secundarios empíreumáticos como ahumado y madera, sus sabores en boca son piña con toques de agave. La comercialización del destilado

Tuxca en Zapotitlán de Vadillo es informal, el proceso de elaboración es artesanal, al igual que el envasado que se limita solo a recipientes cerrados que eviten la evaporación del alcohol. Las mujeres son las que se dedican al comercio del destilado desde sus casas, son los mismos pobladores los que asesoran a los visitantes o algunos compradores que usan el destilado como materia prima para la elaboración de otras bebidas. Es necesario mencionar que este destilado también es la materia prima de los Ponches de Comala bebida popular elaborada a base de leche o frutas y Tuxca. Los productores de ponche sostienen que el destilado es de muy buena calidad y consideran una ventaja el poder conseguirlo en una comunidad cercana y a un costo tan accesible.

Otra forma que los habitantes de Zapotitlán de Vadillo han encontrado para comercializar el Tuxca es venderla en otros municipios, de casa en casa y recientemente instalarse en el tianguis de productores que se organiza dos veces al mes en la cabecera municipal de Colima. La desventaja de esta comercialización es que debido a lo informal del producto, el poco conocimiento que se tiene del mismo y la falta de normatividades o respaldo de alguna organización especializada en los destilados el precio de comercialización oscila entre los 70 y los 100 pesos por litro dependiendo de la maduración del agave y de lo dulce que sea el destilado.

### **CONCLUSIONES**

A lo largo de la investigación se pudo constatar que el Tuxca es una bebida artesanal ancestral, de la que se conoce poco, que hasta hoy se comercializa de manera informal y directamente de los productores. Todas estas condiciones no son coherentes con las cualidades que posee y que la ubican a la altura de destilados de agave de muy alta calidad. Más aún al ser producido en una comunidad alejada de centros de consumo y urbes su forma de comercialización lo confina a ser un producto de bajo costo y del cual el consumidor muy probablemente tenga una idea errónea, y por lo tanto enfrente una inminente desaparición. Se reconocen como posibles acciones las siguientes: la estandarización de los procesos y productos para la búsqueda de alguna normatividad o distinción aplicable al Tuxca, la elaboración de una campaña de difusión del producto dando a conocer las cualidades del destilado recalando el trabajo de los habitantes de la comunidad de Zapotitlán de Vadillo, diseñar estrategias que faciliten la comercialización como el diseño de imagen, la capacitación a productores, la venta del producto al consumidor final para crear un reconocimiento del Tuxca como ha sucedido con otros destilados locales. Todas estas acciones orientadas al producto impactarán de manera directa e indirecta a la población de Zapotitlán de Vadillo lo que contribuirá a hacer de la producción de una bebida espirituosa, una actividad productiva para esta comunidad alejada.

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# ANÁLISIS DEL RÉGIMEN DE PEQUEÑOS CONTRIBUYENTES EN RELACIÓN A SU ELIMINACIÓN EN MÉXICO PARA 2014

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## RESUMEN

*El Régimen de Pequeños Contribuyentes (REPECOS) se eliminará en 2014 y pasarán a formar parte de un nuevo régimen llamado de Incorporación, al igual que los contribuyentes dados de alta como intermedios. Esta iniciativa tiene su fundamento en la premisa de que este régimen contribuye en gran medida a la evasión tan alta existente en México, según estudio realizado por el Tecnológico de Monterrey en 2011. Pero no se toma en cuenta la afectación social y económica que esto conlleva en este tipo de contribuyentes. Desde una perspectiva económica, social y fiscal se analizará el régimen de pequeños contribuyentes con el fin de vislumbrar el escenario en el que se verán inmersos para 2014 y las posibles afectaciones que pueda generar esta reforma fiscal de tipo recaudatoria.*

**PALABRAS CLAVE:** Reforma Fiscal, REPECOS, Afectación Económica, Evasión

## SMALL TAXPAYERS SYSTEM ANALYSIS REGARDING DISPOSAL IN MEXICO FOR 2014

### ABSTRACT

*Small Taxpayers system (REPECOS) disposed of in 2014 and will become part of a new scheme called Incorporation, as taxpayers discharged as intermediates. This initiative is based on the premise that this system greatly contributes to evasion as high existing in Mexico, according to study by the Tecnológico de Monterrey in 2011. But do not take into account social and economic involvement that entails in such taxpayers. From an economic perspective, social and fiscal analyze small taxpayers regime in order to envision the scenario where you will be immersed in 2014 and the possible effects that can generate this kind of revenue-raising tax reform.*

**JEL:** M48, P43, P48,

**KEYWORDS:** Fiscal reform, REPECOS, economic involvement, evasion

### INTRODUCCIÓN

Dado el tipo de economía existente en México y su modelo económico los negocios emergentes y pequeños se han tenido que abrir espacio en una economía que es bastante precaria debido a las condiciones de mercado; así mismo, su incorporación al sistema tributario ha sido una de las medidas ejercidas por las autoridades hacendarias para disminuir la evasión fiscal, aumentar su número de contribuyentes activos, además de incrementar los ingresos tributarios a un bajo costo. En 1998 se creó el Régimen de Pequeños Contribuyentes, como medida de simplificación

administrativa del régimen anterior, el de contribuyentes menores, adicionalmente a la de combatir la evasión generada en sus operaciones y, fue aplicable para cualquier operación empresarial y no solo a las de venta al público en general. Después de un largo proceso de cambios estructurales y de imposición fiscal, con la incorporación en 2004 del pago de Impuesto al Valor Agregado (IVA), en el 2008 la obligación adicional del pago del Impuesto Empresarial a Tasa Única ( IETU), el régimen llega en la actualidad a un estado de confort fiscal pues se puede pagar a través de una cuota fija integrada al Estado o con la aplicación de un 2 por ciento sobre los ingresos disminuidos de cuatro veces el salario mínimo general del área geográfica del contribuyente elevado al mes y se mantiene ahí siempre y cuando no rebase el límite de ingresos de dos millones de pesos. Pero se dice de confort fiscal, porque al realizar operaciones con el público en general y expedir comprobantes simplificados de acuerdo con el Código Fiscal de la Federación (CFF) y su Reglamento, además de calcular su impuesto conforme a una estimativa conjunta de los tres impuestos (ISR, IVA, IETU), el régimen se presta a que los contribuyentes puedan realizar una manipulación fiscal a tal grado que la evasión del pago de impuesto llega a grandes niveles en el país.

### REVISIÓN LITERARIA

Un estudio realizado por el Tecnológico de Monterrey en 2011 titulado “Estudio de evasión fiscal en el Régimen de Pequeños Contribuyentes”, revela que estos contribuyentes han encontrado la forma de evadir el pago de impuestos en una magnitud alarmante bajo los siguientes esquemas:

1. *La subdeclaración de ingresos, es decir, que omiten declarar sus ingresos reales, con el fin de caer en un rango menor de impuesto.*
2. *La atomización de ingresos, concepto utilizado en el estudio del Tec de Monterrey para ejemplificar la división entre otros sujetos la percepción del ingreso.*
3. *No declaración, que quiere decir que dejan de pagar y evaden totalmente la obligación fiscal.*
4. *Los no registrados. Personas sujetas al régimen por sus operaciones, pero que no están dadas de alta.*

Con todo este panorama, el estudio de evasión concluye que el porcentaje de evasión se ubica por encima del 90% desde el año 2002 y llega al máximo de 98% entre 2004 y 2005, considerando sobre todo las variaciones de la recaudación potencial, que son las que explican el comportamiento errático en los porcentajes. A continuación se muestran los resultados en el siguiente cuadro:

Figura 1: Resumen de la Evasión Fiscal de REPECOS Impuesto Total (Incluye IVA E ISR) en Millones de Pesos Corrientes Para Todo el País

Período	Potencial	Recaudado	Evasión	%Evasión sobre Impuesto Potencial	% Evasión sobre el PIB	PIB
2000	22,363	2,302	20,061	89.71%	0%	6,031,868
2001	9,183	1,645	7,538	82.09%	0%	6,367,438
2002	14,088	969	13,119	93.12%	0%	6,859,204
2003	17,717	1,315	16,402	92.58%	0%	7,555,803
2004	77,051	1,065	75,985	98.62%	1%	8,561,305
2005	80,104	998	79,105	98.75%	1%	9,220,649
2006	70,857	1,705	69,151	97.59%	1%	10,344,065
2007	74,303	2,111	72,192	97.16%	1%	11,290,752
2008	71,597	2,538	69,059	96.46%	1%	12,153,436
2009	84,915	2,611	82,304	96.92%	1%	11,844,514
2010	71,537	2,700	68,837	96.23%	1%	13,028,132

Fuente: Fuentes C., Hugo J. (2011) "Estudio de evasión fiscal en el Régimen de Pequeños Contribuyentes".

Estos resultados y algunas otras inconsistencias en el régimen que crean desigualdad entre las mismas Personas Físicas, son las determinantes que sustentan la eliminación de su régimen para 2014, y la de su inclusión al Régimen de Incorporación que en términos generales es con base a flujo de efectivo, cedular, con obligaciones formales como la expedición de comprobantes fiscales y pagos bimestrales sobre la utilidad fiscal. Con la finalidad de no afectar la economía de estos contribuyentes la autoridad ha propuesto que tengan una reducción gradual del impuesto para que a 10 años se incorporen totalmente al régimen general de las personas físicas con actividades empresariales y profesionales. Ésta reducción aplica como se muestra en la siguiente tabla:

Tabla 1: Reducción del Impuesto Sobre la Renta a Pagar en el Régimen de Incorporación

Años	1	2	3	4	5	6	7	8	9	10
Por la presentación de información de ingresos, erogaciones y proveedores	100 %	90%	80%	70%	60%	50%	40%	30%	20%	10%

Fuente: Deloitte (2013), "Reforma fiscal 2014, de la aprobación a la aplicación".

Pero no todo es malo en el régimen y en cualquier negocio que se considere pequeño o mediano, de acuerdo con la clasificación empresarial. Sabemos que nuestro país necesita ser más competitivo y que los negocios generen bienestar tanto económico como social. Los negocios pequeños ayudan a que muchas familias en nuestro país puedan tener el sustento diario para sobrevivir y, en otros de los casos pueden generar fuentes de trabajo a menor escala, pues muchos de ellos no son formales. Pero existe algo importante de considerar y es que la economía en México no llega a la recuperación tan esperada y crea un engranaje que no necesariamente se complementa para generar riqueza o bienestar, si no que al encontrarse en determinado momento generan efectos negativos que retardan la posibilidad de la recuperación económica.

Figura 2: Efectos Negativos de la Economía Mexicana



Fuente: Elaboración propia

Desafortunadamente las autoridades fiscales aplican medidas ortodoxas y heterodoxas para hacer frente a las crisis, perdiendo de vista, según Lomelí y Murayama (2009), el *principio de manejo responsable de la economía, el equilibrio fiscal, pues se le confiere a éstas medidas, la reactivación económica*, situación que está muy lejos de existir, ya que otros factores que se le suman como la baja capacidad recaudatoria de los distintos órdenes de gobierno que, además permite ver deficiencias administrativas por la costosa gestión de cobro de los impuestos, así como una ineficiencia en la forma de programar, ejercer y hacer transparente el gasto público. Si a la actuación del gobierno le agregamos la baja educación cívica básica, en temas de tributación, que posee la población mexicana, el asunto se agrava más pues se percibe una crisis de confianza en sus instituciones que no permiten el aumento en la recaudación, sino todo lo contrario, la evasión aumenta.

## METODOLOGÍA DE LA INVESTIGACIÓN

Con el fin de conocer la opinión de algunos contribuyentes pequeños principalmente de los municipios de Guadalajara, Zapopan, Tlaquepaque y Tonalá de la Zona Metropolitana de Guadalajara, se aplicaron encuestas (treinta por municipio) que en general abordaron los temas sobre el conocimiento de la reforma fiscal, la opinión de su actual régimen y de las acciones futuras que emprenderán para no verse afectados en su economía. La presente investigación sólo mostrará los resultados de la zona de Zapopan, pues a la fecha del envío de este trabajo aún no se contaba con los resultados totales.

## RESULTADOS

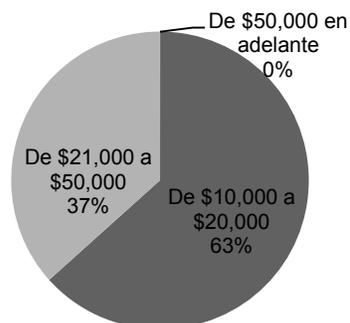
En el análisis de los resultados resaltan cuestiones interesantes e importantes de mencionar. En la figura 3 se puede ver la antigüedad en el mercado de los contribuyentes encuestados que en su mayoría se encuentra entre los 8 y 10 años, mostrando que son negocios maduros empresarialmente hablando. En la figura 4 se puede apreciar que sus ingresos rondan mayormente entre los 10 a los 20 mil pesos, nada malos pues son establecimientos acientados derivado de su antigüedad.

Figura 3: Antigüedad Como REPECO



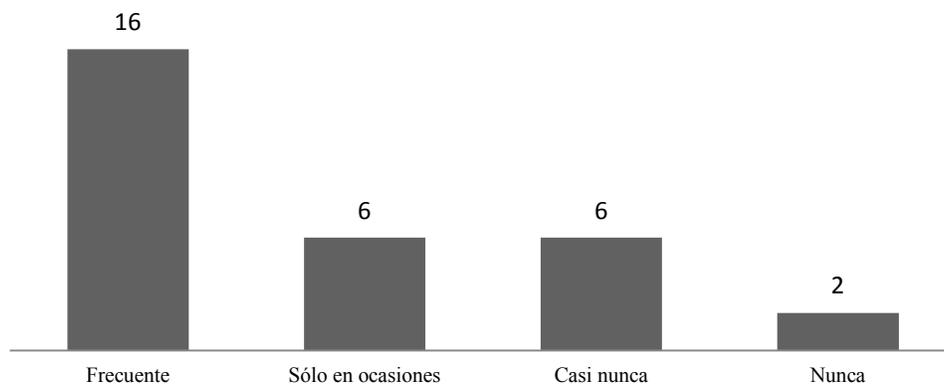
Fuente: Elaboración propia con datos de las encuestas aplicadas.

Figura 4: ¿Cuántos Ingresos Percibe al Mes?

**Figura 4: ¿Cuántos ingresos percibe al mes?**

Fuente: Elaboración propia con datos de las encuestas aplicadas.

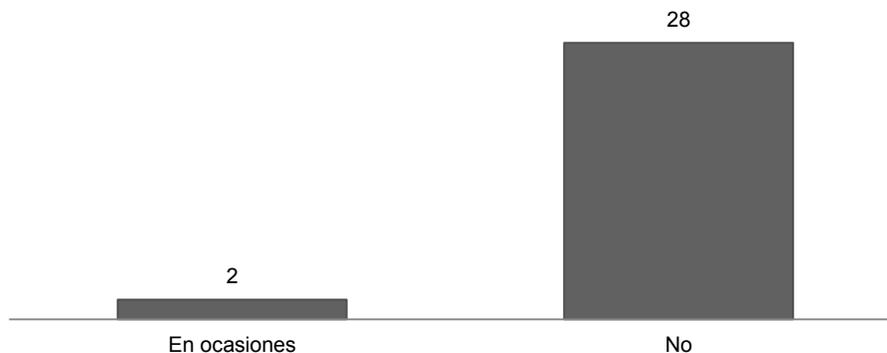
Otros datos importantes son que el 70% eran hombres cabezas de familia, el 60% tiene más de dos dependientes económicos, el 83% mencionó que la actividad que realizan es su única forma de obtener ingresos y el 60% le da trabajo a dos o más empleados, el 50% considera que la forma en que pagan sus impuestos es uno de los beneficios del régimen, el resto no le ve beneficios más que el de tener un ingreso diario que les permita sobrevivir.

**Figura 5: Según su experiencia, considera que los REPECOS evaden sus obligaciones fiscales de manera**

Fuente: Elaboración propia con datos de las encuestas aplicadas.

De los contribuyentes encuestados el 53%, consideró que las obligaciones fiscales las evaden frecuentemente por las facilidades detectadas en el sistema para realizarlo (ver figura 5). No así, cuando se les pregunta sobre su conocimiento acerca de la reforma fiscal se pudo observar que no estaban lo suficientemente informados pues el 63% contestó que no conocía bien la propuesta de reforma tributaria ni los efectos que surtirían en su régimen. Sin embargo, cuestionándolos sobre si el régimen de REPECOS desapareciera y el nuevo régimen fuera más rígido ¿continuarían con su negocio?, el 43% dijo que no continuaría, y de éstos el 63% dijo que lo haría en la informalidad. Finalmente, el 93% de los encuestados consideró que el gobierno no toma en cuenta las necesidades reales de la población pues sólo están preocupados por el poder y el dinero, así como también consideraron que el pueblo no exige lo suficiente como debiera, (ver figura 6).

Figura 6: ¿Considera Usted que el gobierno toma en cuentas las necesidades reales de la población?



Fuente: Elaboración propia con datos de las encuestas aplicadas.

## CONCLUSIONES

Definitivamente un pueblo sin educación a cualquier nivel no podrá avanzar ni económico ni socialmente. La gestión del gobierno requiere un gran esfuerzo para concientizar a la población en los beneficios reales de contribuir pagando sus impuestos, pero será una labor que deberá realizar a la par con el uso eficiente y racional de los recursos con el objetivo de ganar terreno en la confianza perdida en los gobernantes y sus instituciones. Como dicen Lomelí y Murayama (2009), *México necesita una política fiscal basada en reglas de balance estructural, que impidan el dispendio en periodos de auge y los recortes en tiempos de crisis*. Con lo analizado anteriormente, se puede considerar que la resistencia al pago de impuestos no solo responde a la crisis de confianza en la autoridad sino en la injusticia que se percibe en el sistema tributario pues si todos contribuyeran apegados a un esquema de legalidad, es decir que todos contribuyeran de acuerdo a su capacidad tributaria, no habría cabida a la informalidad ni a la evasión.

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# LA GESTIÓN DEL CONOCIMIENTO EN LA PEQUEÑA Y MEDIANA EMPRESA MANUFACTURERA DE MORELIA MICH., MEXICO

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Víctor Gerardo Alfaro García, Universidad de Barcelona

## RESUMEN

*El objetivo del presente trabajo es describir la forma en que se desarrolla la Gestión del Conocimiento para las Pequeñas y Medianas Empresas Manufacturas de la Cd. de Morelia Michoacán México, el método de investigación utilizado, está encuadrado en una investigación no experimental, de corte transversal en donde se hace una contrastación empírica del modelo observado, mediante estudios exploratorios, Análisis descriptivos, estudios correlacionales y análisis multivariado, a fin de conocer el comportamiento de las variables del modelo, para con ello hacer las recomendaciones a este tipo de empresas a fin de lograr ventajas competitivas.*

**PALABRAS CLAVE:** Gestión del Conocimiento, Pymes, Capital Estructural, Capital Relacional, Capital Humano

## KNOWLEDGE MANAGEMENT FOR SMALL AND MEDIUM ENTERPRISES MANUFACTURING MORELIA MICH., MEXICO

## ABSTRAC

*The aim of this paper is to describe how it develops Knowledge Management for Small and Medium Enterprises Manufactures of the City of Morelia Michoacán México, the research method used, is framed in non-experimental research, cross-sectional where is an empirical model observed through exploratory studies, descriptive analysis, correlational and multivariate analysis in order to understand the behavior of the variables of the model, to thereby make recommendations to these businesses in order to competitive advantage.*

**JEL:** M14, M21

**KEYWORDS:** Knowledge Management, SMEs, Structural Capital, Relational Capital, Human Capital

## INTRODUCCIÓN

Para el país la existencia de las Pequeñas y Medianas Empresas (PyMES) son un soporte invaluable en su economía ya que más del 95 % de todas las empresas establecidas en México corresponden a esta categoría, ocupan el 64% del personal de la planta productiva, su consumo en conjunto de este tipo de empresas es mayor que el de las consideradas grandes empresas y tienen una participación en el PIB del 40% (fuente Secretaria de Economía), por lo anterior se hace necesario el fortalecimiento de las mismas ya que enfrentan un ambiente globalizado e incierto, retos que solamente aquellas que sean capaces de generar ventajas competitivas logran

mantenerse y crecer en el mercado. Los desafíos que enfrentan los directivos de empresa son cada vez más exigentes, la globalización que se encuentra presente en casi todas las actividades significativas de negocio, ha dado como resultado una mayor intensidad y diversidad de competencia, lo que ha provocado una gran incertidumbre para las empresas y en mayor medida para las Pequeñas y Medianas empresas (PyMES) manufactureras, es por ello que estas empresas deben buscar nuevas alternativas a fin de lograr ventajas competitivas respecto a sus similares.

En las PyMES desconocen que es la gestión del conocimiento, que beneficios pudieran obtener por el uso de la gestión del conocimiento, que elementos le permitirían favorecer la gestión del conocimiento, es por ello la importancia del estudio exhaustivo de la gestión del conocimiento a fin de que este tipo de empresas utilicen esta herramienta para potenciar el mejor desempeño y que esto contribuya para que tenga un mejor posicionamiento en el mercado. Consideramos que las PyMES es uno de los estratos empresariales que puede esperar mejores resultados de la Gestión del conocimiento (GC), al contar con un modelo que le permita aprovechar su conocimiento en la consecución de ventajas competitivas. Objetivo: Identificar y contrastar el modelo de Gestión del Conocimiento para las Pequeñas y Medianas Empresas Manufacturas de la Cd. de Morelia Michoacán México, que le permita a los gestores-propietarios gestionar el conocimiento en la generación y sostenimiento de ventajas competitivas en el mercado global.

## REVISION DE LITERATURA

En la actualidad en un entorno competitivo, globalizado, incierto y con impresionantes desarrollos en diferentes campos de la ciencia y de la tecnología, ha propiciado que los ciclos de vida de los productos sean mas cortos, así como el surgimiento de una nueva economía basada en el conocimiento Druker P. (1993), donde este no solo es un recurso que hoy se suma a los factores tradicionales de la producción (tierra, trabajo y capital), sino que es el más importante para el apalancamiento de la innovación, es decir para la supervivencia y el crecimiento de las organizaciones. En una economía cuya única certidumbre es la incertidumbre, la mejor fuente para obtener ventajas competitivas es el conocimiento. Cuando de la noche a la mañana cambian los mercados, proliferan las tecnologías, se multiplican los competidores, y los productos quedan obsoletos, solo alcanzarán el éxito las empresas que de un modo consistente creen nuevo conocimiento, lo difundan por toda la empresa y lo incorporen rápidamente a las nuevas tecnologías y productos. Estas son actividades que definen a la empresa creadora de conocimiento, donde todo negocio gira sobre la innovación continuada, (I. Nonaka 1999).

### La Economía Basada en el Conocimiento

El conocimiento ha sido siempre fundamental para el desarrollo económico, las empresas tradicionalmente han venido gestionándolo, mas sin embargo, a lo largo del tiempo ha ido cambiando el objeto sobre el que se aplica el conocimiento gestionado. Si en la era agrícola el recurso central fue la tierra y en la era industrial fue la maquinaria (capital físico), en la nueva economía que se está configurando, el conocimiento y su distribución entre las distintas unidades que componen el sistema económico es el elemento clave para la creación de la riqueza. La evolución de la importancia de estos factores a lo largo de las tres etapas en que se ha dividido la historia de la humanidad. Estas tres etapas o eras son cronológicamente la era agraria, la industrial y la del conocimiento.

### La Gestión del Conocimiento

En la literatura existente sobre el presente trabajo y especialmente en este apartado se aborda en base a dos conceptos como administración del conocimiento y gestión del conocimiento, hemos optado por llamarle gestión del conocimiento apoyados en Koontz (1995), el cuál define el término gestión como “el proceso mediante el cual se obtiene, despliega o utiliza una variedad de recursos básicos para apoyar los objetivos de la organización”, en este caso el recurso es el conocimiento. La gestión del conocimiento es un proceso dinámico e interactivo a fin de detectar, Generar, Codificar, transferir, capturar y usar el conocimiento para lograr los objetivos y resolver los problemas que enfrenta la organización así como la generación de ventajas competitivas.

#### Modelos de Gestión del Conocimiento

En el presente apartado se presenta una serie de modelos que proporcionan las pautas a seguir para la aplicación de un sistema de gestión del conocimiento a una organización, así como los agentes implicados y su importancia siendo: Proceso de creación del conocimiento (Nonaka & Takeuchi): La creación del conocimiento para estos autores tiene su origen en dos espirales de contenido epistemológico (el conocimiento se origina de la separación del sujeto y el objeto de percepción) y ontológico (el conocimiento es solo creado por individuos) basadas en un proceso de interacción dinámica y continua entre dos tipos de conocimiento denominados tácito y explícito.

El conocimiento tácito movilizado se amplifica organizacionalmente a través de las cuatro formas de conversión de conocimiento y cristalizado en niveles ontológicos más altos. A esto le llaman espiral de conocimiento, donde la escala de interacción del conocimiento tácito y el explícito se incrementará conforme avanza por los niveles ontológicos. Así, la creación de conocimiento organizacional es un proceso en espiral que inicia en el nivel individual y se mueve hacia adelante pasando por comunidades de interacción cada vez mayores y que cruza los límites o fronteras de las secciones, de los departamentos, de las divisiones y de la organización. Modelo Arthur Andersen: Andersen A.

(1999), sostiene que existe la necesidad de acelerar el flujo de la información que tiene valor, desde los individuos a la organización y de vuelta a los individuos, de modo que ellos puedan usarla para crear valor para los clientes. El modelo KMAT (Knowledge Management Assessment Tool): El KMTA es un instrumento de evaluación y diagnóstico construido sobre la base del Modelo de Administración del Conocimiento Organizacional desarrollado conjuntamente por Arthur Andersen y la American Productivity & Quality Center (APQC) El centro del modelo KMAT es el conocimiento organizacional el cual se identifica, se crea, se organiza, se aplica y se comparte. En el Proceso, se definen los pasos mediante los cuales la organización establece las brechas del conocimiento, lo captura, lo adapta y lo transfiere para agregar valor cognoscitivo al usuario y potenciar los resultados de utilización del conocimiento. Para favorecer el proceso de administrar el conocimiento organizacional, el KMAT propone cuatro elementos facilitadores: Liderazgo, Cultura, Tecnología y Medición.

Modelo de Gestión del Conocimiento de KPMG Consulting (Tejedor & Aguirre 1998): Este modelo pretende hacer una exposición clara y práctica de los factores que condicionan la capacidad de aprendizaje de una organización, así como los resultados esperados del aprendizaje y los procesos de gestión del conocimiento. Una de las características esenciales del modelo es una visión sistémica que permite una interacción de todos los elementos de gestión que afectan directamente a la forma de ser de una organización: cultura, estilo de liderazgo, estrategia, estructura, gestión de las personas y sistemas de información y comunicación en la búsqueda de unos objetivos específicos y comunes, observando que estos no son independientes sino que están conectados entre sí, la siguiente figura ilustra los conceptos básicos expuestos por este modelo.

Modelo de Crecimiento de Conocimiento de Kogut y Zander (1992): Es un modelo dinámico de crecimiento del conocimiento de la empresa. En el que los individuos poseen el conocimiento, centrándose esta teoría que es la propia empresa la encargada de crear y transferir el conocimiento y que las empresas son comunidades sociales en las cuales las acciones individuales están ligadas a un conjunto de principios organizativos. Estos principios protegen las capacidades organizativas de la misma manera que la estructura protege las relaciones entre los individuos y los grupos.

#### Modelo de Gestión del Conocimiento Para las Pymes Manufactureras de la Cd. de Morelia Mich.,

Mex.: Una vez analizado los modelos más representativos de Gestión del conocimiento y de acuerdo al objetivo planteado en la presente investigación construimos el modelo propuesto de Gestión de conocimiento para las PyMES manufactureras a partir de: Conceptualización de la gestión del conocimiento y los modelos más representativos consideramos: Kogut & Zander (1992), el conocimiento que se encuentra en la empresa reside en los recursos humanos coordinados, y las empresas son comunidades sociales en las cuales las acciones individuales están ligadas a un conjunto de principios organizativos. fracasos de la organización Von Krogh, et al. (2001). La fuente principal del conocimiento radica en las personas y la relación entre ellas Tejedor & Aguirre (1998). El proceso de creación del conocimiento expuesto por Nonaka & Takeuchi (1999), como un proceso que se amplifica organizacionalmente el conocimiento es creado por los individuos y los solidifica como parte de la red de conocimiento de la organización. Proceso sistémico que permite la interacción de todos los elementos de gestión que afectan directamente a la forma de ser de una organización: cultura, estilo de liderazgo, estrategia, estructura, gestión de las personas y sistemas de información en la búsqueda de los objetivos específicos y comunes Tejedor & Aguirre (1998), Andersen A. (1999).

El compromiso por parte de la administración al fortalecimiento de la cultura y políticas hacia la gestión del conocimiento. Tejedor & Aguirre (1999). Proceso dinámico en el cuál el conocimiento va de las personas hacia la organización y de vuelta a las personas, Andersen A. (1999). En cuanto a las características de las PyMES La alta motivación del gestor propietario y su grado de influencia en la organización así como la relación proveedores y clientes. Habilidad de cambiar y ajustarse hacia la innovación. Su flexibilidad. En relación a los factores de éxito de este tipo de empresas: Habilidades personales del gestor propietario; La habilidad del gestor propietario hacia la gestión y liderazgo efectivo, habilidad de establecer a una cultura organizativa adecuada, capacidad de obtener y utilizar diversos recursos y de aprovechar las oportunidades. Compromiso por el éxito de la empresa por parte del gestor propietario. Experiencia, Capacidad y conocimiento para el desarrollo de las actividades de su trabajo Saber lo que se quiere. Creer en si mismo (Tenacidad). El liderazgo y la habilidad para motivar a otros. Comunicación y relación efectiva con empleados, proveedores y clientes. Capacidad de resolver problemas técnicos y la capacidad de innovar. Fortaleza de la asociación entre los miembros fundadores de la empresa, basada en el respeto y la confianza recíproca. Facilitar la acumulación de conocimientos que se origina en la interacción de las habilidades y actitudes de los miembros de la organización y de las oportunidades que surgen en el entorno. Habilidades de los empleados de la empresa. Capacidad de resolver problemas técnicos.

*Las habilidades y actitudes que determinan la calidad del producto y la posibilidad de innovar. Experiencia, Capacidad y conocimiento para el desarrollo de las actividades de su trabajo. Compromiso por el éxito de la empresa. Comunicación y*

*relación efectiva con el gestor propietario, empleados-empleados, empleados-clientes y empleados-proveedores.*

Elementos que conforman modelo de gestión de conocimiento para las PyMES manufactureras. El modelo propuesto tiene un enfoque sistémico en donde todos y cada uno de los elementos que lo integran están relacionados y su influencia de estos se explican a continuación: Cultura: A fin de que se desarrolle la Gestión del Conocimiento en la empresa, es necesario que el gestor propietario cree o alinee la cultura hacia el aprendizaje continuo y a gestionar lo aprendido. Una cultura compatible con el conocimiento es una de las condicionantes más importantes que conducen el éxito de un proyecto, ya que como afirman O'Dell & Grayson (1998) las empresas con una cultura abierta, que motiven a compartir el conocimiento tendrán más éxito en su transferencia, Ruggles (1997) menciona que una de las principales barreras para la transferencia del conocimiento es la falta de una cultura abierta y que apoye a sus miembros, por lo que una comunicación intensiva y una cultura que acepte nuevas ideas y esté preparada para soportar la exploración de sus procesos y actividades, favorece la Gestión del conocimiento. Andersen A. (1999), Tejedor & Aguirre (1998), mencionan que la cultura es un elemento facilitador de la Gestión del conocimiento ya que esta favorece el aprendizaje y la innovación incluyendo las acciones que refuerzan la actitud abierta al cambio.

El gestor propietario deberá aprovechar la flexibilidad, la capacidad de innovación que caracterizan a su empresa y con base a sus habilidades de liderazgo, crear una cultura que: movilice los recursos humanos en la identificación de problemas y búsqueda de soluciones creativas, mejore el trabajo individual y grupal, rediseñe los procesos de aprendizaje en concordancia con los valores deseados, como sostén de la visión, trabajar en consenso por medio de la participación, cree un clima de confianza y compromiso por el éxito de la empresa a fin que esta cultura propicie la gestión del conocimiento.

*Estilo de dirección:* Castells (1999) afirma que el proceso de la gestión del conocimiento requiere la plena participación de todos los integrantes de la organización, de tal forma que los individuos compartan lo que saben con los demás, Ruggles (1998) menciona que la falta de apoyo de la alta administración es una barrera significativa para la gestión del conocimiento. Andersen (1999), menciona que para el reforzamiento de capacidades críticas de la empresa es necesario un liderazgo que defina la estrategia de cómo la organización define el objetivo y uso del conocimiento, Tejedor & Aguirre (1998), mencionan que las condiciones organizativas pueden actuar como obstáculos al aprendizaje organizacional, bloqueando las posibilidades de desarrollo personal, de comunicación, de relación con el entorno, de creación, etc. Todo ello al no existir un clima favorable en la organización que le corresponde al gestor propietario propiciar.

El conocimiento radica y es generado por las personas que trabajan en la empresa, el reconocimiento por parte de la alta administración es vital, y deberá utilizar un conjunto de métodos y procedimientos para dirigir la empresa hacia la Gestión del Conocimiento ya que de no hacerlo tal como menciona Davenport & Prusak (2001), El mayor activo de una empresa es su conocimiento, la empresa que no pueda generar conocimiento nuevo posiblemente dejará de existir. Por todo lo anterior consideramos el estilo de dirección como elemento facilitador del proceso de gestión del conocimiento debe de estar en el modelo propuesto. Capital estructural Representa al conocimiento estructurado por la empresa y recogido en sistemas de información y comunicación utilizados para almacenar y transmitir la información, generalmente se conforma por activos de propiedad intelectual como son las marcas registradas, patentes, stocks de conocimientos, derechos de autor, tecnología disponible, procesos de trabajo, sistemas de gestión, etc. Según Stewart (1997) este capital sirve a dos propósitos: reunir stocks de conocimientos para

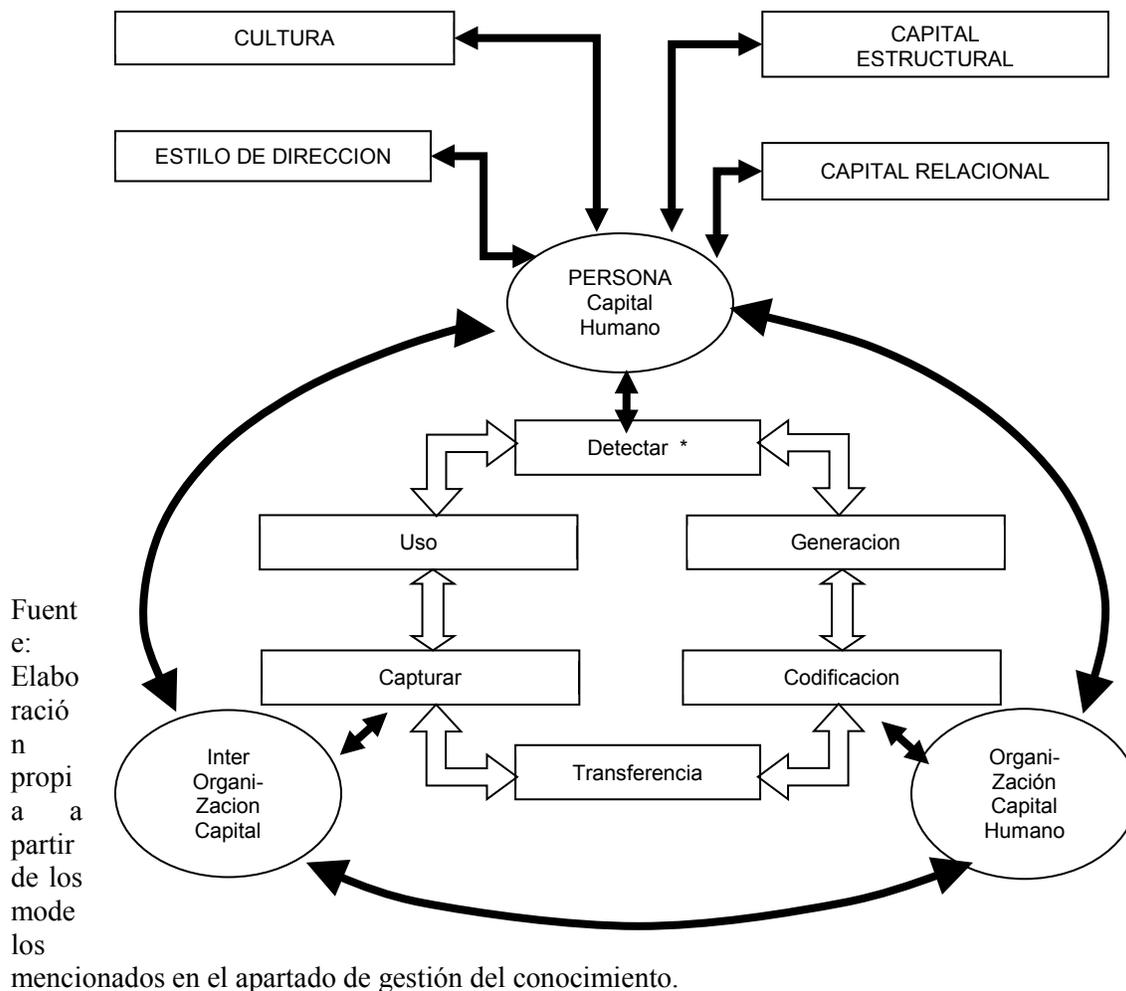
sustentar el trabajo que valoran los clientes y acelerar el flujo de la información dentro de la empresa, todo con la finalidad de ser usado y para crear valor. Por lo anterior este capital deberá estar perfectamente integrado a fin de permitir una óptima gestión del conocimiento.

### Capital Relacional

Este elemento como facilitador de la gestión del conocimiento es de importancia ya que estima y valora la capacidad que tiene una organización para mantener y promover relaciones con el exterior a ella. Haciendo mención a clientes y proveedores factores que se pueden evaluar lealtad de clientes, su satisfacción, la notoriedad de la marca o las alianzas estratégicas entre otros. La retroalimentación que la empresa obtiene del producto por parte del cliente le permitirá incrementar su base de conocimiento en la innovación del mismo producto, es por ello la importancia de la inclusión de este elemento en el modelo de propuesta de Gestión del Conocimiento. Proceso de la gestión del conocimiento. En el marco teórico presentado, obtuvimos una definición propia de la gestión del conocimiento que nos sirve como mecanismo para que los protagonistas del proceso de la gestión del conocimiento sean capaces de generar y utilizar el conocimiento. “Proceso dinámico e interactivo a fin de detectar, generar, codificar, transferir, capturar y usar el conocimiento para lograr los objetivos y resolver los problemas que enfrente la organización así como la generación de ventajas competitivas”.

El proceso es dinámico y continuo, ya que este nunca se detiene; no hay un inicio y un fin, en donde esta implícita la teoría de creación del conocimiento propuesta por Nonaka & Takeuchi (1999), en la PyME dada su estructura simple que poseen y en ocasiones informal en lugar de ser una desventaja se convierte en una ventaja a fin de implementar un proceso de gestión del conocimiento. Al integrar los elementos mencionados tales como Cultura, Estilo de dirección, Capital estructural, Capital relacional, elementos generadores y el proceso de gestión del conocimiento obtenemos el modelo de Gestión de Conocimiento propuesto para las PyMES manufactureras de la Cd. de Morelia, Mich., México. Este modelo tiene un enfoque sistémico, ya que permite la interacción de los elementos que intervienen en el proceso de la gestión del conocimiento, observando que estos no son independientes sino que están conectados entre sí.

Figura. 1. Modelo propuesto de gestión del conocimiento para la PyMES manufactureras de la Cd. de Morelia Michoacán México.



## METODOLOGÍA

A fin de verificar si el modelo de Gestión del Conocimiento propuesto es aplicable a las pequeñas y medianas empresas manufactureras de la cd. de Morelia Michoacán, contestar las preguntas de investigación surgidas del problema identificado, verificar las hipótesis planteadas y lograr cumplimentar los objetivos establecidos, nos trazamos el método de investigación a seguir, cuyo diseño está encuadrado en una investigación no experimental, de corte transversal en donde se hace el análisis de las variables identificadas mediante los estudios exploratorios, Análisis descriptivo, estudio correlacional y el análisis multivariado. Para lo anterior nos dimos a la tarea de identificar las empresas manufactureras de la ciudad de Morelia que cumplieran el requisito de ser PyME, para que una vez con esta población obtener el tamaño de muestra que nos permitiera hacer inferencia hacia la población.

Una vez con las empresas seleccionadas que fueron objeto de estudio se les aplicó un cuestionario previamente elaborado, el cual fue verificado su confiabilidad y validez. Teniendo la información recopilada procedimos a realizar el análisis descriptivo de cada una de las variables para dar respuesta a las preguntas respectivas de la investigación, realizamos el estudio de correlación de las variables identificadas, a fin de conocer la relación existente entre estas variables y la variable gestión del conocimiento objeto de nuestro estudio y realizamos por último un estudio

multivariado a fin de conocer la causalidad de las variables independientes con la variable gestión del conocimiento.

## RESULTADOS

Se cumplió el objetivo general dado que:

- a) Se diseñó una propuesta de un modelo conceptual de Gestión de Conocimiento para las PyMES manufactureras de la Cd. de Morelia Mich., Mex.
- b) Se confirmó empíricamente la propuesta del modelo conceptual de Gestión del Conocimiento para las PyMES manufactureras de la Cd. de Morelia Mich., Mex.
- c) En cuanto a el estudio correlacional del modelo propuesto las variables consideradas explican en un 100% la variabilidad de la Gestión del Conocimiento, así mismo se encontró los coeficientes de regresión que maximizan la Gestión del conocimiento tal como se observa en la siguiente ecuación:  

$$G.C. = -4.66 E-14 + X_1 + X_2 + X_3 + X_4 + X_5 + X_6 + X_7 + X_8 + X_9 \quad (1)$$
 Donde  $X_1$  es cultura,  $X_2$  detección,  $X_3$  generación,  $X_4$  codificación,  $X_5$  transferencia,  $X_6$  captura,  $X_7$  utilización del conocimiento,  $X_8$  capital estructural y  $X_9$  capital relacional.

Respecto a la caracterización de las PyMES manufactureras de la Cd. de Morelia Michoacán., México, el comportamiento de las variables incluidas en el modelo es el siguiente:

- a) Se identificó que la cultura residente en este tipo de empresas es un elemento que facilita y propicia la Gestión del conocimiento, con respecto a la correlación entre estas dos variables se observa que la cultura explica en un 64% la variabilidad de la Gestión del conocimiento.
- b) Del análisis de la afectación del estilo de dirección en el proceso de gestión del conocimiento, podemos decir que el estilo de dirección propicia la generación, transferencia y uso del conocimiento, mientras que ocasionalmente influye en la detección, captura y codificación del conocimiento, al observar que este proceso debe ser un proceso integral podemos decir que en la PyMES manufactureras de la Cd. de Morelia Michoacán, existe pérdida de conocimiento que no es detectado, codificado y capturado en la consecución de ventajas competitivas. En cuanto al estudio correlacional de esta variable encontramos que el estilo de dirección explica en un 97.6 % el proceso de gestión del conocimiento, así mismo se logró encontrar los coeficientes de regresión para la maximización del proceso de gestión en función del estilo e dirección en función del estilo de dirección como se describe a continuación:  

$$Y_i = 1.97 + 1.35X_1 + 1.22X_2 + 0.96X_3 + 1.83X_4 + 0.90X_5 + 1.05X_6 \quad (2)$$
 Donde:  $X_1$  detección,  $X_2$  generación,  $X_3$  codificación,  $X_4$  transferencia,  $X_5$  captura,  $X_6$  utilización del conocimiento.
- c) En el análisis de la variable Capital estructural se observa que en PyMES manufactureras de la Cd. de Morelia Michoacán, se procura fortalecer la inversión de medios de almacenamiento y flujo de información. En relación a la documenta que soporta las actividades de este tipo de empresas, se observa que está en muy poca, lo que conlleva que este conocimiento radique en las personas y que este no sea propiedad de la

- organización, en consecuencia que la ventaja competitiva pueda no ser sostenible con el paso del tiempo.
- d) Se detecta que la relación con el entorno (proveedores, clientes, gobierno, cámaras empresariales etc.), de este tipo de empresas es buena lo que propicia una retroalimentación de sus productos, permitiéndole a este tipo de empresas incrementar el conocimiento hacia la mejora y la obtención de ventajas competitivas.
  - e) El proceso de gestión del conocimiento en este tipo de empresas como proceso integral no se desarrolla en su totalidad, ya que las actividades tales como: generación, transferencia y uso del conocimiento se realizan frecuentemente, caso contrario con la detección, captura y codificación que se desarrollan de manera esporádica aunque existe evidencia de una tendencia a realizar estas actividades frecuentemente. De lo que podemos deducir que el proceso de gestión del conocimiento forma parte de las actividades cotidianas de este tipo de empresas pero de manera parcial, lo anterior se observó al operacionalizar las variables en forma independiente, mas sin embargo al operacionalizar estas en conjunto se observó que la práctica de gestión del conocimiento se realiza ocasionalmente.
  - f) Este tipo de empresas aprovecha el conocimiento residente a fin de solucionar los problemas que enfrenta, esto por la práctica de la generación, transferencia y uso del conocimiento, por consiguiente si bien la gestión del conocimiento se da en forma parcial estas empresas aprovechan el conocimiento gestionado.
  - g) La transferencia del conocimiento en este tipo de empresas se realiza principalmente por medio de la comunicación cara a cara, así como la capacitación entre los mismos compañeros de trabajo (mentoring), estos procesos antes mencionados se ven favorecidos por la misma distribución de espacios físicos de la empresa y la facilidad que otorga el gestor propietario.

## CONCLUSIONES

La utilización de modelos de gestión de conocimiento para las empresas les proporciona una ventaja competitiva, consideramos que la aplicación del modelo propuesto para las PyMES manufactureras de la cd. de Morelia Mich., Mex., de igual manera permitirá la generación de ventajas competitivas para este tipo de empresas. De los elementos facilitadores de la gestión del conocimiento, se observa la necesidad de contar con una cultura organizativa abierta, donde el gestor propietario de este tipo de empresas motive a los miembros de la organización a buscar nuevas formas de hacer las cosas, dé valor a la transmisión del conocimiento, concientizando al personal de que el verdadero poder no es la información sino la sinergia que produce el compartir el conocimiento útil que se posee. Para ello habrá que diseñar sistemas de reconocimiento a la transmisión del conocimiento individual y a la configuración de un conocimiento colectivo. Es necesario una cultura organizativa basada en valores como la confianza, la transparencia, la honestidad, la participación, la responsabilidad y la tolerancia, que fomente el incremento e intercambio de los conocimientos de los empleados, que otorgue fuerza a los compromisos individuales y que dé sentido a las actuaciones colectivas (trabajo en equipo), que cree el contexto necesario para la interacción social necesaria y determinante para que en una organización se produzca la detección, generación, creación, transmisión codificación y utilización del conocimiento.

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# PERSPECTIVA ECONÓMICA PARA EL CRECIMIENTO SUSTENTABLE EN LOS ORGANISMOS PÚBLICOS OPERADORES DE AGUA POTABLE

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## RESUMEN

*El problema económico para muchas empresas públicas, encargadas de prestar el servicio de abastecimiento de agua a concentraciones humanas es de alto riesgo. Las debilidades y fortalezas del organismo y las amenazas y oportunidades que el medio ambiente ofrece, requieren de un análisis detallado para la toma de decisiones. Por lo que se refiere, al establecimiento del nivel de crecimiento del Organismo Operador de Agua Potable, Alcantarillado y Saneamiento (OOAPAS) deberá sustentarse de tal manera que disminuya sus riesgos. El proceso de descentralización y desincorporación de este tipo de organismos públicos ha propiciado condiciones totalmente nuevas a las empresas de agua. Este proceso implica llegar paulatinamente a la autonomía de los organismos públicos. En este trabajo se pretende mostrar un análisis financiero de un organismo operador de agua potable que sirva de base para lograr un crecimiento sustentable.*

**PALABRAS CLAVES:** Crecimiento, sustentabilidad y liquidez.

## ECONOMIC OUTLOOK FOR SUSTAINABLE GROWTH IN PUBLIC WATER UTILITIES

### ABSTRACT

The economic problem for many public companies, responsible for providing the water service to human concentrations is high risk. The weaknesses and strengths of the organization and the threats and opportunities that the environment offers, require detailed analysis for decision making. In regards to the establishment of the level of growth of the Utility of Water and Wastewater (OOAPAS) shall be supported so as to reduce their risks. The process of decentralization and divestiture of public bodies such conditions has led to completely new water companies. This process involves gradually reaching autonomy of public agencies. This paper aims to show a financial analysis of a body of water operator as a basis for achieving sustainable growth.

**JEL:** D24, G28, H41, H44

**KEYWORDS:** Growth, sustainability and liquidity

Fundamentos de la Investigación

Para el desarrollo de la investigación se emplea una metodología de tipo descriptiva, es decir, se realiza una caracterización del evento de estudio dentro de un contexto particular. Por medio de un ejemplo se pretende realizar el análisis de toma de decisiones, para la cual se considera un caso general de un Organismo Operador de Agua Potable, Alcantarillado y Saneamiento (OOAPAS). Para ello la sustentabilidad se convierte o habrá de convertirse en un factor de sobrevivencia, caracterizado por la capacidad que el organismo tenga de aprender y adaptarse (NAFIN-IMEF, 1994). Este organismo presenta recaudación con crecimiento “lento”, expansión en términos de cobertura “limitada” e indicadores de gestión financiera con fuerte “deterioro” (Moreno, 1990). Los coeficientes de liquidez apuntan a una caída sostenida en los últimos años, situación contraria a los índices de endeudamiento que crecen de manera sostenida. Todo lo anterior se manifiesta en la falta de liquidez del organismo. El adecuarse a los cambios económicos, tecnológicos, financieros, administrativos y políticos de las empresas y de la sociedad en general, estaremos en condiciones de satisfacer sus necesidades de información, a través de un adecuado registro y valuación de las transacciones realizadas, correctamente presentadas y expresadas por medio de estados financieros que contengan tanto información financiera y económica como de otro tipo, que sea el sustento para la toma de decisiones acertadas para lograr los objetivos (Romero, 2004).

### El Problema de Liquidez

Para hacer frente a sus necesidades cotidianas y de inversión el OOAPAS deberá disponer de dinero, lo cual se conoce como liquidez. La falta de liquidez significa para la empresa la pérdida de su independencia en la toma de decisiones. Una manera simple de expresar la liquidez es por medio del flujo de caja, éste tiene como principal fuente el pago que realizan los usuarios por el servicio. La entrada de recursos puede verse incrementada por ampliaciones en el servicio, en la recaudación, nuevos créditos, ventas de activos que no sean de utilidad para la empresa y subsidios. Las salidas o egresos más significativos en este tipo de empresas lo conforman los pagos a proveedores a través de cuentas por pagar, los salarios y los gastos por explotación (producción). Existen otros factores que no necesariamente se refieren a la explotación del recurso, como lo son el pago de impuestos, los intereses y las inversiones en activos. Es importante identificar en primera instancia cual es la situación que guarda el OOAPAS con respecto al flujo de caja. Para ello se recurre al indicador de gestión financiera de liquidez, que relaciona el superávit de los activos a corto plazo sobre los pasivos a corto plazo con el flujo de caja bruto de explotación.

$$\frac{\text{Activo circulante} - \text{Pasivo circulante}}{\text{Ventas}} = 100 \%$$

A la relación anterior, expresada en porcentajes, se la conoce como indicador de capital de trabajo sobre ventas. Los indicadores de liquidez pudiesen ser engañosos, sobre todo cuando se manejan de manera aislada o puntual. Consideremos, por ejemplo, el caso de los organismos donde el crédito del proveedor en muchas ocasiones es mayor a los que el OOAPAS tiene por el pago de los consumidores. En este caso, el indicador no refleja plenamente la verdadera posición en que se encuentra la empresa. Tres de las soluciones más comunes a un problema semejante al que se plantea, cuando los resultados buscados no se centran en el crecimiento y la oportunidad que cada alternativa ofrece al crecimiento sustentable son las siguientes. Primera solución.- Reducir créditos en el corto plazo. El organismo no deberá permitir que haya más créditos a corto plazo. Por medio del manejo eficiente de recursos, se deberá reducir el número de créditos. Segundo solución.- Reducir inversiones en el activo circulante. Es recomendable que esta reducción sea

absoluta, o en un porcentaje menor que los ingresos por el pago del servicio. Tercera solución.- Incorporar obligaciones a largo plazo. La forma de incorporar pasivo a largo plazo es por medio de créditos del mismo organismo o bien por el incremento de capital.

La opción de reducir los activos circulantes con respecto a los ingresos por el pago del servicio, requiere de ejercer presiones sobre el consumidor, caso que no siempre es posible aplicar cuando la fuente de consumo es comunitaria, o los niveles de pobreza de los consumidores son de subsistencia y no es posible exigirles un sacrificio extra o, en su caso, cuando predomina la cultura del no pago.

Respecto a la posibilidad de incrementar los fondos a largo plazo, debe tomarse en cuenta que las condiciones no permitirán el pago de créditos si los indicadores de gestión de liquidez muestran una baja constante. Los planteamientos tradicionales aquí presentados señalan si acaso soluciones a corto plazo, con un enorme riesgo para la sobrevivencia financiera del organismo. A continuación se presenta una propuesta para que el OOAPAS busque su crecimiento sustentable desde la perspectiva financiera.

### crecimiento

Cuando se hace referencia a la sustentabilidad de un OOAPAS, se habla antes que nada de su equilibrio financiero. Desde esta perspectiva, el crecimiento deberá asociarse de manera armónica a los activos y, por supuesto, a los beneficios. Una de las primeras controversias en las empresas encargadas de prestar un servicio público, y en especial las empresas del agua, es el crecimiento y el desarrollo. No es posible hablar de economías de escala cuando una buena parte de la población no dispone del servicio o cuando la cobertura se ve desfasada por el crecimiento de la mancha urbana. Por lo anterior, es necesario que los OOAPAS amplíen coberturas, modernicen equipo e instalaciones, desarrollen y apliquen programas para hacer más eficientes los procesos, atiendan de manera sistemática las necesidades de operación y mantenimiento, dinamicen su estructura administrativa e incrementen la recaudación mejorando el servicio. Por supuesto que todo esto requiere de recursos financieros que los OOAPAS generalmente no disponen. Desde una perspectiva financiera, el Organismo Operador deberá buscar de inmediato la sustentabilidad en el equilibrio concordante con los activos y con los beneficios.

El crecimiento del organismo, habrá de manifestarse en un incremento tanto en el activo circulante como en el pasivo circulante. Para definir los activos se recurre a los estados financieros, que son las herramientas de análisis financiero de cualquier empresa. De una manera simple se puede decir que los usos de los recursos son los activos y las fuentes los pasivos. De manera generalizada, se presenta en la Tabla 1 un ejemplo típico del balance de un OOAPAS

Tabla 1: Balance General

Activo Circulante	Caja
	Bancos (existencias)
	Deudores por consumo (Cuentas por cobrar)
	Almacén
Activo fijo	Terrenos
	Edificios
	Equipo de transporte
	Equipo de cómputo
	Depto. de sistema
	Planta de tratamiento

Pasivo circulante	Depto. del equipo de detección de Fugas Sistema de alcantarillado Depto. del sistema de distribución
Créditos a largo plazo	Acreedores diversos Impuestos por pagar IVA por pagar
Recursos Propios	Capital

El balance General se compone de cinco rubros fundamentales para los OOAPAS: Activo circulante, Activo fijo, Pasivo circulante, Créditos a largo plazo y Recursos propios. Fuente: Elaboración propia.

En un sentido estricto, a lo que toda empresa privada aspira, y también las empresas publicas que obtienen recursos por sus actividades productivas, es a lograr beneficios por el mayor tiempo posible. Para su identificación, se recurre al Estado de Pérdidas y Ganancias, que es el identificador de ingresos y gastos totales en un periodo. De igual manera, es el enlace con el balance de apertura y cierre de un periodo contable. En la Tabla 2 se presenta un ejemplo donde se aprecian los elementos más significativos de un estado de pérdidas y ganancias para un OOAPAS.

Tabla 2: Estado de Pérdidas y Ganancias o de Resultados

<b>+ Ingresos</b>	
	+Ingresos operativos
	Ingresos por servicios de agua potable y alcantarillado Contratos Instalación de aparatos medidores Multas Reconexiones
	+Otros ingresos
	Rendimientos sobre inversiones Aportación para obras
<b>- Egresos</b>	Servicios de personal Abastecimiento y suministros Conservación y mantenimiento Energía Eléctrica
Utilidades	-Intereses -Impuestos
Utilidades netas	

El estado de Resultados o de Pérdidas y Ganancias identifica los Ingresos, Egresos y la Utilidad. Fuente: Elaboración propia.

Del estado de pérdidas y ganancias se pueden identificar cuatro apartados que relacionan la forma en que se distribuyen los beneficios. Un concepto alternativo al planeamiento clásico para la determinación de los beneficios, se presenta en la Tabla 3:

Tabla 3: Determinación de los Beneficios Retenidos

<b>Ingresos totales</b>
- Gastos totales

	<ul style="list-style-type: none"> <li>- Intereses</li> <li>- Impuestos</li> <li>- Dividendos</li> </ul>
= Beneficios Retenidos	

Los beneficios retenidos son los ingresos después de pagar dividendos. Fuente: Elaboración propia.

### Sustentabilidad

Los elementos críticos del principio de equilibrio, como se ha venido manejando, son las ventas, el activo circulante y los beneficios retenidos (Lesur, 2010). Entre ellos existen fuertes interrelaciones que definen la problemática. Para lo anterior, es necesario recurrir a los siguientes indicadores de gestión:

$$\left( \frac{\text{Beneficios retenidos}}{\text{Ventas o ingresos operativos}} \right) = \text{Beneficios retenidos respecto a los ingresos por servicios}$$

$$\left( \frac{\text{Activo Circulante}}{\text{Ventas}} \right) = \text{Asociación del activo circulante con las ventas}$$

La relación de estos dos indicadores genera otro, llamado indicador de crecimiento en el activo circulante, mismo que bajo la preceptiva de crecimiento puede financiarse directamente con la retención de beneficios.

$$\frac{\left( \frac{\text{Beneficios retenidos}}{\text{Ventas}} \right)}{\left( \frac{\text{Activo Circulante}}{\text{Ventas}} \right)} (100) = \text{Indicador de Crecimiento anual}$$

Este índice refleja el porcentaje de crecimiento del organismo que se ha financiado con recursos propios.

Otro indicador de importancia para establecer los criterios de crecimiento para el OOAPAS, es el crecimiento histórico anual de recaudación, conocido como crecimiento histórico de las ventas.

$$\left( \frac{\text{Ventas (al final)}}{\text{Ventas (al inicio)}} \right)^{\left( \frac{1}{n} \right)} = \text{factor historico del crecimiento anual de las ventas durante el periodo (n)}$$

Con los índices antes determinados es posible asociar los tres elementos críticos: las ventas, el activo circulante y los beneficios retenidos, con el fin de determinar la posición de flujo de caja (P). El indicador queda definido de esta manera:

$$\frac{\left(\frac{\text{Beneficios retenidos}}{\text{Ventas}}\right)}{(\text{Crecimiento hist3rico anual de las ventas}) \left(\frac{\text{Activo Circulante}}{\text{Ventas}}\right)} = P$$

Se tienen establecidas tres situaciones para expresar la condici3n de la empresa en funci3n del flujo de caja misma.

Flujo de caja positivo > 1, la disponibilidad de recursos es superior a los compromisos y necesidades.

Flujo de caja neutro = 1, Se generan recursos s3lo para pagar la Operaci3n.

Flujo de caja negativo > 1, no se generan los suficientes recursos que financien las operaciones del organismo. Del problema presentado para los OOAPAS, se plantean diversas estrategias de soluci3n que puede basarse en la modificaci3n particular o conjunta de las tres situaciones. Claro est3 que cada organismo presenta sus propias caracteristicas y desarrollo hist3rico, y por supuesto que cada uno afronta una problem3tica particular. Para generalizar el 3ndice, se parte de la condici3n de que el flujo de caja es neutro (P=1), esto es, que en el OOAPAS se est3n generando los recursos necesarios para pagar la operaci3n:

$$\frac{\left(\frac{\text{Beneficios retenidos}}{\text{Ventas}}\right)}{(\text{Crecimiento anual}) \left(\frac{\text{Activo Circulante}}{\text{Ventas}}\right)} = 1$$

Despejando el crecimiento, se tiene que:

$$\frac{\left(\frac{\text{Beneficios retenidos}}{\text{Ventas}}\right)}{\left(\frac{\text{Activo Circulante}}{\text{Ventas}}\right)} = \text{Crecimiento anual}$$

Como se dijo antes, el problema estudiado presentaba caracteristicas propias, y en esa direcci3n se hizo el planteamiento. Ahora se pretende generalizar, y para ello se hace necesario hacer un par de consideraciones: Primero, permitir un financiamiento equilibrado, sujetando cr3ditos a capital e Incluir todos los activos que se ven afectados por el crecimiento.

El crecimiento afecta de manera directa no solo a los activos a corto plazo, sino a los de un periodo mayor. Se pretende as3 establecer un 3ndice que relacione el endeudamiento permisible con los beneficios retenidos.

$$\frac{\left(\frac{\text{Beneficios retenidos}}{\text{Ventas}}\right)}{\left(\frac{\text{Capital}}{\text{Ventas}}\right)} = \text{Crecimiento anual}$$

Lo anterior podr3 responder una pregunta fundamental con respecto a la cantidad permisible de endeudamiento, considerando el crecimiento de la recaudaci3n y ajust3ndose al crecimiento que presentan los activos fijos como circulantes. En este caso, se hace la consideraci3n de que para el financiamiento del crecimiento no es v3lido recurrir a fondos superiores al capital. Para ilustrar

esto, se presenta un ejercicio basado en los datos reales de los estados financieros de un OOAPAS.

Por razones obvias, se presenta tan solo la información requerida. El balance resumido del organismo se encuentra en la Tabla 4:

Tabla 4: Balance General Practicado al 31 de Diciembre de 2012 de un OOAPAS

AÑO 2012			
ACTIVO		PASIVO	
Activo circulante	\$ 21'248,559.68	Pasivo circulante	\$ 3'714,369.34
Activo fijo	155'367,264.13	Créditos a largo plazo	4'732,972.68
Total activo	\$ 176'615,823.81	Recursos propios (capital)	168'168,481.79
		Total pasivo mas capital	\$ 176'615,823.81

*El Balance General muestra los cinco rubros fundamentales para los OOAPAS: Activo circulante, Activo fijo, Pasivo circulante, Créditos a largo plazo y Recursos propios. Fuente: Elaboración propia.*

En cuanto al Estado de Pérdidas y Ganancias se presenta el arreglo que establece la determinación de beneficios retenidos, en la Tabla 5:

Tabla 5: Estado de Resultados del 1° de Enero al 31 de Diciembre de 2012 de un OOAPAS

<b>Ingresos totales</b>	<b>39'137,992.07</b>
-Gastos totales	34'977,623.51
- Intereses	861,035.82
-Impuestos	1'580,940.05
-Dividendos	915,281.08
Beneficios retenidos	803,111.61

*Concepto alternativo a la determinación clásica, para determinar los beneficios retenidos. Fuente: Elaboración propia.*

Para la determinación del crecimiento, se recurre a la información histórica de las ventas. La información disponible data de 2008 y se presenta de la Tabla 6:

Tabla 6: Comportamiento Histórico de las Ventas

Año	Ventas
2008	30'260,187.16
2009	31'621,895.60
2010	32'791,905.72
2011	36'005,512.48
2012	39'137,992.07

*Crecimiento de las ventas de los últimos cinco años de un OOAPAS. Fuente: Elaboración propia.*

El crecimiento del organismo se determina recurriendo a la información del crecimiento histórico de las ventas, y con la aplicación de la siguiente fórmula:

$$\left( \frac{\text{Ventas (al final)}}{\text{Ventas (al inicio)}} \right)^{\left(\frac{1}{n}\right)} = \left( \frac{39'137,992.07}{30'260,187.16} \right)^{\left(\frac{1}{4}\right)} = (1.293)^{\left(\frac{1}{4}\right)} = 1.06634 = 6.634\%$$

Lo anterior significa que el OOAPAS tiene un crecimiento anual del 6.634% en ventas. El resto de los indicadores de gestión relacionados a las ventas se pueden ver a continuación:

$$\left(\frac{\text{Beneficios retenidos}}{\text{Ventas}}\right) = \frac{803,111.61}{39'137,992.07} = 0.0205$$

$$\left(\frac{\text{Activo Circulante}}{\text{Ventas}}\right) = \frac{21'248,559.68}{39'137,992.07} = 0.5429$$

Los beneficios retenidos con relación a las ventas significa que por cada peso de ventas (ingresos por pago del servicio) se generan 0.0205 pesos de beneficios retenidos, que van a parar al pasivo del balance.

Cada peso extra de ventas requiere de 0.5429 pesos, por lo que se requieren 0.4571 pesos de ventas de este año para financiar un peso de ventas extras el próximo año. Al relacionar ambos factores se tiene que:

$$\frac{\left(\frac{\text{Beneficios retenidos}}{\text{Ventas}}\right)}{\left(\frac{\text{Activo Circulante}}{\text{Ventas}}\right)} (100) = \frac{0.0205}{0.5425} (100) = 3.77\%$$

El indicador de crecimiento en el activo circulante que puede financiarse directamente con la relación de beneficios, señala que el 3.77 % puede hacerse con recursos propios. Como se pudo apreciar en el índice de crecimiento anual, de un 6.634%, se desprende que un 2.864% del crecimiento se ha financiado con créditos externos. Ahora se aplica la ecuación de crecimiento:

$$\frac{\left(\frac{\text{Beneficios retenidos}}{\text{Ventas}}\right)}{(\text{Crecimiento histórico anual de las ventas}) \left(\frac{\text{Activo Circulante}}{\text{Ventas}}\right)} = P$$

Al sustituir las tres relaciones críticas antes vistas en la ecuación del crecimiento equilibrado, se tiene que:

$$P = \frac{0.0205}{(0.06634)(0.5429)} = 0.5692$$

Debido a que el flujo de caja es negativo ( $P < 1$ ), significa que no se están generando los suficientes recursos que financien las operaciones del organismo. El valor de 0.5692 es la parte del crecimiento que se está financiando por la retención de beneficios.

## CONCLUSIONES

Para dar respuesta a la creciente demanda de los servicios de agua potable y alcantarillado por parte de las concentraciones urbanas, se requiere de cuantiosas inversiones económicas en los

Organismos Operadores de Agua Potable. Para el logro de la sustentabilidad que permita la ampliación de la cobertura, la mejora y eficiencia del servicio de agua potable y alcantarillado, así como la profesionalización del personal técnico y administrativo encargado de la operación y mantenimiento, se requiere como condición inicial que el Organismo Operador de Agua Potable mantenga un sistema financiero sano y estable, que garantice por sí mismo su crecimiento y desarrollo. Sin duda, muchos son los cambios y condicionantes requeridos en el orden técnico, administrativo y legal que deberán realizarse dentro de los OOAPAS para afrontar este formidable reto.

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# LA IMPORTANCIA DE LA EDUCACIÓN EN EL PROGRESO SOCIAL

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## RESUMEN

*Las competencias educativas que se trabajan en la educación contemporánea incluyen además de fuertes contenidos temáticos, aspectos de tecnología que día a día están presentes en la sociedad en general y que en el ámbito educativo sirven para preparar a los futuros profesionistas para el desarrollo social en el mundo contemporáneo. La Educación es un importante medio para el progreso social, hablar de la educación en todos los países debe ser de interés público, ya que es un patrimonio individual y colectivo de la humanidad, debido a ella un pueblo puede progresar en su colectividad y proporcionar bienestar a sus habitantes. En nuestros tiempos enfrentamos crisis financieras, problemas de seguridad pública, pero sobre todo tenemos una crisis educativa, los pueblos deben entenderse mejor con mayor educación, con adecuada planeación social que involucra precisamente el campo educativo podemos dar pasos firmes hacia un mejor país y hacia una mejor convivencia en nuestra aldea global.*

**PALABRAS CLAVE:** Competencias, Educación, Evaluación, Tecnología

## THE IMPORTANCE OF EDUCATION IN SOCIAL PROGRESS

### ABSTRACT

*The Educational skills that work in contemporary education also include strong thematic content, aspects of everyday technology that are present in society in general and to the field of education includes the development of this aspect for the contemporary world. Education is an important means of social progress, talk about education in all countries should be in the public interest, as it is an individual and collective heritage of mankind, because it can progress a people in their community and provide welfare its inhabitants. In our times we face financial crises, public safety issues, but mostly we have an education crisis, people must be better understood with more education, with adequate social planning that involves precisely the educational field can take firm steps towards a better country and made a better living in our global village.*

**JEL:** I2, I20, I21, N3, N36

**KEYWORDS:** Competencies, Education, Evaluation, Technology

### INTRODUCCIÓN

El Propósito de este trabajo es compartir con colegas profesores y estudiantes una experiencia de investigación educativa que coadyuve al análisis reflexivo de aspectos educativos contemporáneos y despertar en los estudiantes que lo lean el interés por la temática tratada. El Progreso Social de un país va de la mano con su sistema educativo, con sus maestros, estudiantes

y comunidad escolar en general, los padres de familia y los medios de comunicación son también pilares importantes de dichos procesos.

La percepción de la sociedad sobre la educación es en relación del progreso y de la mejoría de una comunidad, esto debe ser una política de estado para cualquier nación que aspire a ser mejor.

## **REVISIÓN DE LITERATURA**

La Educación tiene una gran relevancia en los humanos, ya que adquirimos con el paso del tiempo conocimientos, pero estos sólo se impregnan en nosotros si tienen una relevancia, es decir si para cada uno de nosotros son significativos y útiles en nuestra vida cotidiana, así mismo la enseñanza de los docentes debe ser valiosa, significativa para los tiempos actuales, pertinentes para que sea eficiente y atractiva para los estudiantes, está inmersa en una política de bienestar y es un brazo ejecutor de el plan nacional que debe preocuparse por la ciudadanía y su bienestar colectivo.

El foro de Dakar de hace diez años mencionaba que un país sin educación es el que enfrenta retos mas fuertes, ya que no tiene un rumbo educativo cierto, y sus recursos humanos no son competitivos en la aldea global, esto trae consigo pobreza, explotación, problemas de salud pública, desesperanza, suicidios a la alza y problemas de paz social entre otras situaciones que pueden disminuir considerablemente con educación de calidad al pueblo.

La cobertura es un problema real para países en vías de desarrollo como el nuestro, ya que aunque existen escuelas con infraestructura de buen nivel con computadoras, proyectores, Internet, clima, pizarrón, entre otros, existen también lugares en zonas rurales adaptadas para ser la escuela, donde la carencia de servicios primarios es evidente, las condiciones de iluminación no son óptimas y que por el difícil acceso se enfrenta también el problema de que maestros de la ciudad no están dispuestos a ir a estos lugares, y los maestros son entonces escasos para las zonas rurales, ahora bien esto se convierte en un círculo des-educativo, ya que los pobladores de estas zonas al no tener educación, dependen del exterior, llámese gobierno a través de los programas de desarrollo social, de la secretaría de educación que les envíe maestros, ya que en el pueblo no hay quien sea maestro que ejerza en dicho lugar su profesión, y cuando llega a haber un maestro del pueblo, pide su cambio para mejorar su nivel de vida, ya que no comparte muchas ideas de los lugareños, debido en ocasiones a la gran disparidad en educación, ahora bien habría que hablar de los riesgos que corren los docentes ciudadanos al ir a las comunidades rurales, tales como acoso sexual sobre todo si quien es el maestro es de sexo femenino, infecciones estomacales al cambiar de hábitos alimenticios, diarreas, entre otros, problemas de espalda por las condiciones inapropiadas de las camas, soportar el calor o el frío sin las comodidades de la infraestructura ciudadana.

La cobertura debe ampliarse, esto es vital para el progreso social, una forma excelente de trabajar a distancia son los programas en línea, a distancia o bien los combinados llamados semi-presenciales, si el gobierno invierte un poco en foto celdas para alimentar las computadoras y con Internet satelital, se puede hacer mucho para el progreso educativo y social, de hecho se han realizado esfuerzos con televisión satelital, pero debe darse ya el siguiente paso, el Internet, se puede hacer un proyecto educativo de cobertura social desde niveles básicos hasta posgrados.

## **METODOLOGÍA**

Para realizar este proyecto de investigación se utilizará el método de grupo focal y encuestas a maestros de distintos niveles educativos, desde el preescolar hasta profesional que prestan sus servicios en escuelas de nuevo león, además de experiencias propias comentadas. Ejercicio reflexivo, analítico y hermenéutico que el espíritu humano a través de la palabra puede hacer gala para su expresión, así mismo se pretende sembrar la inquietud en el lector para su posterior profundización.

## RESULTADOS, TEMATICA

La recolección de encuestas se realizó en 2 grupos de Maestría en educación donde confluyen alumnos que tienen en común la carrera de la docencia, son educadores que participan en escuelas públicas y privadas, desde niveles preescolares hasta profesional.

### Encuesta Tipo

- 1-¿Cree usted que a mayor educación habrá bienestar social?  
 Si-----No-----No Existe relación entre ambas
- 2-¿En su experiencia personal ha encontrado bienestar con educación?  
 Sí-----No-----No hay relación entre ambas
- 3-¿Considera importante la educación para el progreso del país?  
 Si-----No----- Es indiferente
- 4-¿México debe preocuparse por un buen sistema educativo?  
 Sí-----No-----En la actualidad está bien el sistema
- 5- ¿La cobertura educativa es suficiente?  
 Sí-----No-----Debe incrementarse

Por su participación; Gracias. Esta es la encuesta que se aplicó, por razones de tiempo y muestreo se hizo con 2 grupos en forma escrita se presentó la encuesta y así mismo se recolecto. El grupo Focal se realizó con 2 grupos de maestría con maestros que laboran en el estado de nuevo león. Descripción de sesión: Se acomodaron por equipo los maestros distribuidos en mesas para que pudieran trabajar en el tema con las siguientes premisas: Tiempo: 2 horas Participantes por grupo: 25 (total 2 grupos=50 personas) Tema: La importancia de la educación en el progreso social. Con este tema se dejó en libertad a los participantes a que discutieran entre sí y obtuvieran conclusiones sobre este tema. En el salón de clase se cuenta con clima para que la estancia sea cómoda y puedan concentrarse en su trabajo. Procesamiento de datos Primarios y Secundarios, Cualitativos y Cuantitativos. Número de encuestas: 50 A la pregunta: ¿Cree usted que a mayor educación habrá bienestar social? 45 encuestados respondieron que sí y 5 respondieron que no existe relación entre ambos. A la pregunta: ¿En su experiencia personal ha encontrado bienestar con educación? 45 respondieron que sí y 5 que no existe relación entre ambas. A la pregunta: - ¿Considera importante la educación para el progreso del país? 50 respondieron sí. A la pregunta: ¿México debe preocuparse por un buen sistema educativo? 50 respondieron que sí. A la pregunta: ¿La cobertura educativa es suficiente? 10 contestaron que sí y 40 contestaron con No.

*Grupo focal:* En este se recogieron inquietudes de los docentes sobre la importancia y pertinencia de la educación para el progreso social. Los grupos llegaron a las siguientes conclusiones: La educación por sí misma es un paso adelante, pero debe ser integral y acompañada de valores

fundamentales como la disciplina, ética y autodeterminación de los actores del desarrollo para darse cuenta de su potencial y de echar las redes para pescar conocimiento y hacerse de él, lograr usar dicho conocimiento en la vida cotidiana para elevar su condición social y mejora el estilo de vida propio, el de sus familias y por ende de las comunidades que conforman la sociedad.

Se comentará adicionalmente un caso de experiencia tutorial. Luis y José son hermanos entre sí, hasta nivel de secundaria cuentan con los mismos antecedentes académicos, estudiaron en la misma escuela, muchos de los maestros que tuvieron les impartieron clase a los dos, lo interesante es que en la preparatoria uno de ellos reprobó y no quiso seguir estudiando, se puso a trabajar y empezó a ganar dinero, mientras que el otro siguió en la preparatoria, terminó y estudio una licenciatura, al término de sus estudios comenzó a trabajar ejerciendo su profesión, y ahora el que estudio tiene mejor nivel de vida, está contento con su trabajo, labora de lunes a viernes, mientras que su hermano trabaja arduamente y se arrepiente de no haber seguido estudiando, su nivel de satisfacción laboral no es muy bueno, este caso podrá ser aislado, sin embargo existen muchos casos similares a este, es entonces que podemos analizar y pensar que si hubiese estudiado este familiar, tal vez estaría en un trabajo que si le permitiera satisfacer su vida.

## CONCLUSIONES

Al analizar los resultados de esta investigación que se suma a un trabajo arduo con más instrumentos se observa en esta fotografía investigativa la importancia de la educación para el bienestar social, y que también es necesario desarrollar competencias tecnológicas en las personas, ya que la tecnología educativa sirve como medio para para impulsar la educación y ampliar la cobertura educativa en el país y en las provincias. Como se visualiza en la información obtenida existe una clara relación entre educación y desarrollo social, esto debe estar de relieve en la sociedad y en el gobierno para darle importancia y ejecutar planes de acción que lleguen a la sociedad para su educación y desarrollo. Desde que en los inicios de los años sesenta se acuñara el término «capital humano» como la capacidad productiva del individuo incrementada por factores como la educación, la teoría económica ha buscado evidencia empírica sobre la relación entre educación y crecimiento económico. Como ejemplo de la importancia de la educación está el modelo japonés, caracterizado por el impulso a la educación como elemento clave para el desarrollo económico.

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# ANÁLISIS DE LA RENDICIÓN DE CUENTAS EN MÉXICO Y PAÍSES DE LATINOAMÉRICA

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## RESUMEN

*En la presente investigación se realiza un análisis de México y diversos países de Latinoamérica en materia de rendición de cuentas. Se incluyen temas que giran en torno a la rendición de cuentas, como la fiscalización, acceso a la información pública, transparencia y democracia. Se inicia con antecedentes generales de diversos países, incluyendo los históricos, la definición de rendición de cuentas. La forma como la rendición de cuentas se utiliza como freno del abuso de poder y corrupción. La participación de Instituciones Públicas o Gubernamentales en la materia de estudio. La regulación de la rendición de cuentas en México y Países de Latinoamérica, sobresaliendo el marco jurídico o normativo de la misma. Se hace mención a los diversos organismos internacionales que intervienen en materia de transparencia y lucha contra la corrupción. Con el fin de lograr un análisis sobre la rendición de cuentas en México y países de latinoamericanos, previamente, se hace un estudio comparado, de toda la temática arriba mencionada, tanto de México, como de los países latinoamericanos. Lo anterior, con el fin de obtener sus semejanzas y diferencias, por medio de la técnica de investigación de derecho comparado y se concluye con el objeto de estudio del presente trabajo, es decir, el análisis de la rendición de cuentas en México y diversos países latinoamericanos.*

**PALABRAS CLAVES:** Rendición de Cuentas, Fiscalización, Acceso a la Información Pública, Transparencia, Democracia, Abuso de Poder y Corrupción

## ANALYSIS OF ACCOUNTABILITY IN MEXICO AND LATIN AMERICAN COUNTRIES

### ABSTRACT

*In this research, an analysis of Mexico and other Latin American countries in terms of accountability. It includes topics that revolve around accountability, as the audit, access to public information, transparency and democracy. It begins with general background of various countries, including the historic, defining accountability. The way accountability brake is used as abuse of power and corruption. The participation of public or governmental institutions in the field of study. The regulation of accountability in Mexico and Latin American countries, highlighting the legal or regulatory framework thereof. Mention is made of the various international organizations involved in transparency and anti-corruption. In order to achieve an analysis of accountability in Mexico and Latin American countries, above, is a comparative study of all the issues mentioned above, both of Mexico, and Latin American countries. The above, in order to get their similarities and differences, through the technique of comparative law research and concludes with the object of study of this paper, that is, the analysis of accountability in Mexico and several Latin American countries.*

**JEL:** H83

**KEYWORDS:** Accountability, Audit, Access to Public Information, Transparency, Democracy, Abuse of Power and Corruption.

## **INTRODUCCIÓN**

La presente investigación se basa principalmente en el tema de rendición de cuentas del poder público y diversos temas que giran en torno a él, como lo es fiscalización, acceso a la información pública, transparencia, democracia, abuso de poder y corrupción en México y países de Latinoamérica. Dentro del trabajo se hace una revisión de literatura en donde se definen las palabras claves y se desarrolla un tema en relación a él. La rendición de cuentas en América Latina de países como México, Argentina y Brasil presentaron avances en materia de fiscalización y acceso a la información y organizaciones sociales de Chile y Colombia los cuales presentan trabajos sobre transparencia y ejercicio del derecho de acceso a la información. Existen organizaciones internacionales que participan con los países latinoamericanos en materia de corrupción, como la Organización de Naciones Unidas (ONU), la Organización de Estados Americanos (OEA) y la Organización para la Cooperación y el Desarrollo Económico (OCDE).

En el caso México se hace referencia a la Secretaria de la Función Pública en materia de Políticas de Transparencia y Cooperación Internacional sobre temas de anticorrupción y el Instituto Federal de Acceso a la Información y Protección de Datos (IFAI) el cual tiene como misión garantizar el derecho a los ciudadanos a la información pública gubernamental y a la privacidad de sus datos personales, así como promover en la sociedad y en el gobierno la cultura del acceso a la información, la rendición de cuentas y el derecho a la privacidad. Se hace referencia a la Auditoría Superior de la Federación (ASF) la cual se encarga de fiscalizar, de manera externa, el uso de los recursos públicos federales en los tres Poderes de la Unión. En Costa Rica se cuenta con iniciativas en el ámbito de la transparencia y la rendición de cuentas como la red Interinstitucional de Transparencia. El Salvador cuenta con el Portal de Transparencia Fiscal del Ministerio de Hacienda del Gobierno de Salvador. Guatemala cuenta con la Comisión Extraordinaria Nacional por la Transparencia.

Por su parte Honduras creo el Consejo Nacional Anticorrupción y por su parte Nicaragua que es uno de los países más corruptos de Centroamérica cuenta con una iniciativa social digitalizada de Ética y Transparencia en colaboración con Transparencia Internacional. Panamá creo el Consejo Nacional de Transparencia y contra la Corrupción. Venezuela cuenta con la Asociación Civil denominada Transparencia Venezuela. Colombia en el tema de rendición de cuentas se refiere a la democratización, la modernización y la lucha contra la corrupción. En Perú existe el capítulo peruano de Transparencia Internacional. En Brasil se cuenta con un Tribunal de Cuentas y en Argentina existe un grupo de organización de la sociedad civil sobre la plena vigencia de una Ley Nacional de Acceso a la Información Pública. En Chile en materia de rendición de cuentas ha prevalecido una visión de ritual durante el tiempo que ha transcurrido desde la implementación de las leyes al respecto y en Febrero del 2011 se aprobó una Ley de Participación Ciudadana. La metodología que se aplica principalmente es el enfoque cualitativo basado en observaciones explicativas. Bajo las perspectivas descriptiva y explicativa. Sobresaliendo el marco teórico y las técnicas de investigación, como la documental. En resultados se muestra el ranking de países según su índice de percepción de corrupción (IPC) de diversos países latinoamericanos y se presenta una comparación de encuestas de Global Barómetros en relación al apoyo y confianza en la democracia.

## **REVISIÓN DE LITERATURA**

En la literatura sobre el tema se define lo que es rendición de cuentas. Entre las más sobresalientes se encuentra la señalada por (López Ayllón, Merino y Cejudo, 2010) En principio, sabemos que rendir cuentas significa literalmente entregar o dar cuentas ante alguien. De ahí que rendir cuentas sea siempre una acción subsidiaria de una responsabilidad previa, que implica una relación transitiva y que atañe a la manera en que se dio cumplimiento a esa responsabilidad. El término fiscalización de acuerdo a la Academia Mexicana de la Lengua Española, es criticar y traer a juicio las acciones u obras de alguien, en el caso que nos ocupa sería aplicado al sector público. Y democracia es el predominio del pueblo en el gobierno político de un Estado. Una de las Instituciones que participan activamente en contra la de la corrupción a nivel internacional es Transparencia Internacional (TI), el cual es la única organización no gubernamental a escala universal dedicada a combatir la corrupción, congrega a la sociedad civil, sector privado y los gobiernos en una vasta coalición global. Quizás la principal herramienta en la lucha contra la corrupción sea el acceso a la información y el Índice de Percepción de Corrupción (IPC), es la medida más utilizada para la corrupción en los países aquí analizados.

El Banco Mundial ha participado en el combate a la corrupción, el cual de acuerdo a información del mismo Banco, señala que ha puesto el problema de la corrupción en el centro del debate hasta convertirlo en un tema del desarrollo, tanto dentro como fuera de la institución. Cada país Latinoamericano presenta sus propias Políticas e Instituciones de Gobierno, en materia de rendición de cuentas, transparencia y estrategias contra la corrupción. En cuanto a la Transparencia de acuerdo a Gascó (2005, citado por Criado y Corojan, 2010) se dice que identificamos los gobiernos transparentes como aquellas 'instituciones abiertas que proporcionen suficiente información sobre los asuntos públicos' y sin que haya ocultación alguna. Ello implica tener acceso a todo aquello que permita conocer y juzgar a una institución' Jiménez (2009, citado por Criado y Corojan).

Por otra parte y en relación al tema de la corrupción, de acuerdo a la Real Academia Mexicana de la Lengua, se define que en las organizaciones, especialmente en las públicas, es la práctica consistente en la utilización de las funciones y medios de aquellas en provecho, económico o de otra índole, de sus gestores. Ligado con dicha definición se encuentra lo que se entiende por abuso de poder o de derecho, como el ejercicio de un derecho en sentido contrario a su finalidad propia y con perjuicio ajeno.

Los instrumentos internacionales multilaterales que se han elaborado por los distintos gobiernos del orbe para combatir globalmente la corrupción son:

Sobre la corrupción mencionada existen convenios a nivel internacional en los que México ha participado, tales como: La Convención de las Naciones Unidas contra la Corrupción (UNCAC), también conocida como la Convención de Mérida, por haber sido adoptada en esa ciudad de México, en diciembre de 2003, entró en vigor el 14 de diciembre de 2005, al reunir las 30 ratificaciones requeridas. Actualmente, se integra por 126 Estados miembros y sus dentro de sus objetivos, se encuentra: Fomentar la cooperación internacional y la asistencia técnica en la prevención y la lucha contra la corrupción y promover la integridad, la obligación de rendir cuentas y la debida gestión de los asuntos y bienes públicos. Asimismo la Organización de Estados Americanos en la Convención Interamericana contra la Corrupción la cual fue adoptada en Caracas, Venezuela el 29 de marzo de 1996, establece en referencia a la democracia y a la corrupción, que considerando que la democracia representativa, condición indispensable para la estabilidad, la paz y el desarrollo de la región, por su naturaleza, exige combatir toda forma de corrupción en el ejercicio de las funciones públicas, así como los actos de corrupción específicamente vinculados con tal ejercicio.

Por otra parte la Organización para la Cooperación y el Desarrollo Económico (OCDE) establece la Convención para Combatir el Cohecho de Servidores Públicos Extranjeros en Transacciones Comerciales Internacionales (Organización para la Cooperación y Desarrollo Económicos) como un acuerdo internacional suscrito por países que establecen medidas para disuadir, prevenir y penalizar a las personas y a las empresas que prometan, den o encubran gratificaciones a funcionarios públicos extranjeros que participan en transacciones comerciales internacionales.

Por otra parte, es importante mencionar que en materia de acceso a la información pública en México, existe el Instituto Federal de Acceso a la Información y Protección de Datos (IFAI) el cual tiene como misión garantizar el derecho de los ciudadanos a la información pública gubernamental y a la privacidad de sus datos personales, así como para promover en la sociedad y en el gobierno la cultura del acceso a la información, la rendición de cuentas y el derecho a la privacidad. El Marco Normativo del IFAI otorga el derecho de acceso a la información que favorece la transparencia en el gobierno y la rendición de cuentas de todos los servidores públicos, lo cual mejorará la eficiencia de las instituciones federales y la calidad de sus servicios. A partir del 12 de junio del 2003, la Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental obliga a todas las dependencias y entidades del gobierno federal a dar acceso a la información contenida en sus documentos, respecto, entre otras cosas, a su forma de trabajo, al uso de los recursos públicos, sus resultados y desempeño. Cualquier persona puede solicitar información a las instituciones federales y obtenerla en forma rápida y sencilla, sin necesidad de identificarse, ni justificar el uso que dará a la misma.

Cabe agregar que en el caso de México y en lo que respecta al tema de fiscalización existe la Auditoría Superior de la Federación (ASF) se encarga de fiscalizar, de manera externa, el uso de los recursos públicos federales en los tres Poderes de la Unión; los órganos constitucionales autónomos; los Estados y Municipios; y en general cualquier entidad, persona física o moral, pública o privada que haya captado, recaudado, administrado, manejado o ejercido recursos públicos federales. La fiscalización está sujeta, por ley, a los principios de anualidad y posterioridad. La anualidad se refiere a que la institución revisa las cuentas correspondientes a un año fiscal en específico, y la posterioridad implica que esta revisión se lleva a cabo una vez que los gastos fueron efectuados.

Por otra parte, existe en los países centroamericanos la corrupción como problema general en las instituciones centroamericanas. La preocupación por la corrupción y su entrada en la agenda gubernamental se hizo factible a partir de la Cumbre de las Américas celebrada en 1994. Parrado (2007, citado por Criado y Corojan, 2010). La necesidad de replantear los mecanismos de la transparencia de los gobiernos se ha recordado por la preocupante percepción de los ciudadanos con respecto al tema que se confirmó con los informes y estudios de Organización Transparency Internacional. De acuerdo a información de Transparencia Internacional (TI), Transparencia Mexicana, es la Delegación Nacional de Transparencia Internacional en México, que surge en 1999. En el 2001 es publicado el Índice Nacional de Corrupción y Buen Gobierno (INCBG) el cual sirvió para medir experiencias y percepciones sobre la corrupción. En el año 2009 Transparencia Mexicana creó la Iniciativa para el Fortalecimiento de la Institucionalidad de los Programas Sociales, a través de éste las dependencias federales y estatales rinden cuentas de sus programas sociales.

Criado y Corojan (2010) indica respecto lo siguiente de diversos países centroamericanos: Costa Rica cuenta con iniciativas en el ámbito de la transparencia y la rendición de cuentas como la Red Interinstitucional de Transparencia la cual fue creada en el año de 2004 por la Dirección de Control de Gestión Administrativa de la Defensoría de los Habitantes de la República de Costa

Rica. El Salvador por su parte cuenta con el Portal de Transparencia Fiscal del Ministerio de Hacienda del Gobierno de Salvador se fomenta una transparencia donde, se publican los aspectos más relevantes de las Finanzas Públicas de El Salvador. El portal tiene como objetivo ayudar al desarrollo de una cultura de transparencia y de acceso público a la información fiscal.

Guatemala cuenta con la Comisión Extraordinaria Nacional por la Transparencia (Acuerdo Legislativo 05-2005) es el principal órgano en el que se basa la lucha contra la corrupción y el desarrollo de la transparencia en las gestiones públicas. Para combatir y mejorar la situación de alta corrupción el Gobierno de Honduras creó el Consejo Nacional Anticorrupción (CNA) (mediante Decreto Ejecutivo 015-2001). Según el último informe de Transparencia Internacional TI (2009), Nicaragua tocó fondo en la lista de Países más corruptos de Centroamérica y es uno de los cuatro países más deshonestos de Latinoamérica. En Nicaragua no se ha podido apreciar iniciativa concreta que promueva la transparencia y la rendición de cuentas de los gobernantes lo que pone más en entredicho la predisposición de los actores implicados de gobernar y actuar conforma a los valores democráticos.

Panamá en cuanto a las iniciativas digitales para el aumento de la transparencia desde el gobierno nacional se creó el Consejo Nacional de Transparencia y Contra la Corrupción, adscrita al Ministerio de la Presidencia, con el principal objetivo de diseñar e implantar iniciativas nacionales para promover la transparencia en la administración pública.

En Venezuela existe la Asociación Civil denominada Transparencia Venezuela es una asociación civil que defiende el derecho de cada venezolano a vivir en un país libre de corrupción. Es el capítulo venezolano de Transparencia Internacional. Previene y disminuye la corrupción a través de distintos proyectos: Acceso a la información pública, Monitoreo de la corrupción, Gobierno sin corrupción, Educación Anticorrupción y Negocios sin corrupción.

En Colombia, Restrepo (2012) señala que el tema de la rendición de cuentas en Colombia ha trasegado por tres momentos: la democratización, la modernización y, hoy en día, la lucha contra la corrupción, dijo Marcela Restrepo, directora de la organización civil Área Sector Público, durante el panel sobre rendición de cuentas en Perú y Colombia dentro del Seminario Internacional Desafíos de la Rendición de Cuentas en América Latina. A principios del año 2000 en Perú Rotta (2012), de Proteica, capítulo peruano de Transparencia Internacional impulsó la rendición de cuentas. En 2002, se dio el principio de participación, que incluía la obligación de transparencia, se dio el código de ética de la función pública.

En Brasil de acuerdo a Fuentes (2012), cuenta con un Tribunal de Cuentas los cuales no imponen sanciones a los funcionarios ni a los gestores públicos que manejan o utilizan fondos o bienes públicos. Cuando se detectan irregularidades en la gestión, éstas se ponen de manifiesto en el correspondiente Informe, junto con la recomendación de las medidas que deben adoptarse para subsanarlas. En Argentina, Manchinelly (2011) en relación al tema de rendición de cuentas, señala que un grupo de organización de la sociedad civil que trabaja para la plena vigencia de una Ley Nacional de Acceso a la Información Pública en Argentina, lanzó la campaña “Saber es un derecho, ¡Que ahora sea ley!” para involucrar a la ciudadanía en el reclamo de su derecho de saber. En Chile para, Cunill (2012), asesora especial del Centro Latinoamericano de Administración para el Desarrollo (CLAD), en la rendición de cuentas en Chile “ha prevalecido una visión de ritual” durante el poco tiempo que ha transcurrido desde la implementación de las leyes al respecto.

## **METODOLOGÍA**

El desarrollo metodológico se enfoca en la perspectiva cualitativa principalmente en observaciones explicativas. No obstante, aunque no se presentan métodos cuantitativos en el estudio, los hallazgos son igualmente válidos, independientemente de su carácter predominante cualitativo. King y Sartori (1994, 1970, citados por Criado y Corojan, 2010) Dentro de este apartado se hace referencia a la selección de métodos y técnicas. Al definir como se trabajara el objeto de estudio, que es el análisis de la rendición de cuentas en México y países Latinoamericanos, se señala que se aplica el Método Cualitativo, el cual parte de la realidad a la teoría y trata de crear nuevas teorías, se tiene una visión interpretativa, el cual se realiza bajo las perspectivas: Descriptiva, ya que se trabaja sobre realidades de hecho y sus características fundamentales es la de presentar una interpretación correcta. Tal como se presenta en el objeto de estudio del presente trabajo de investigación. En donde el propósito básico es que el investigador describe situaciones y eventos. En el estudio que nos ocupa, se describe un acontecimiento sobre la rendición de cuentas en México y diversos países latinoamericanos y varios temas o tópicos que giran en torno al mismo, como lo es la corrupción y la transparencia.

La técnica de investigación utilizada presenta la estructura por medio de la cual se organiza la presente investigación. La técnica es la documental o teórica, ya que a través de la recopilación de información se utiliza para enunciar las teorías que sustentan el estudio de los fenómenos y procesos del tema aquí investigado. Incluyendo el uso de instrumentos definidos según la fuente documental consultadas a que se hace referencia (Leyes, Libros relacionados con el tema de investigación, Tesis Doctorales, Publicaciones, Revistas Especializadas, Documentales e Investigación de páginas de internet confiables científicamente) Mediante la mencionada investigación documental se elabora el marco teórico o jurídico conceptual para formar un cuerpo de ideas sobre el objeto investigado.

## RESULTADOS

Los resultados de la investigación antes desarrollada, se basan en lo expuesto por Emmerich (2004) el cual señala que desde el nacimiento mismo de los regímenes democráticos, la transparencia y la rendición de cuentas se han concebido como base de los mismos. Cuando, como quiere la doctrina democrática, el pueblo es soberano, los asuntos públicos deben estar abiertos al escrutinio social, y aquellos que los manejan deben rendir cuentas en forma oportuna y confiable. La transparencia y la rendición de cuentas dan legitimidad y credibilidad al sistema político democrático, permiten vigilar que éste sirva al bien común, y contribuyen a que gobernantes, legisladores y funcionarios públicos atiendan al interés general antes que a sus intereses particulares. En lo que respecta a los grados de corrupción de los países latinoamericanos se presenta la siguiente tabla.

Tabla 1: Ranking de Países Según Su Índice de Percepción de Corrupción (IPC)  
Publicado Por Transparencia Internacional

Posición 2010	País	Índice 2010	Índice 2009	Índice 2008	Índice 2007	Índice 2006	Índice 2005	Índice 2004	Índice 2003	Índice 2002
24	Uruguay	6.9	6.7	6.9	6.7	6.4	5.9	5.5	5.1	5.1
73	El Salvador	3.6	3.4	3.9	4.0	4.0	4.2	3.7	3.4	3.2
78	Colombia	3.5	3.7	3.8	3.8	3.9	4.0	3.8	3.7	3.6
78	Perú	3.5	3.7	3.6	3.5	3.3	3.5	3.5	3.7	3.4
91	Guatemala	3.2	3.4	3.1	2.8	2.6	2.5	2.2	2.4	2.5
98	México	3.1	3.3	3.6	3.5	3.3	3.5	3.6	3.6	3.6
105	Argentina	2.9	2.9	2.9	2.9	2.9	2.8	2.5	2.5	2.8

146	Paraguay	2.2	2.4	2.4	2.6	2.1	1.9	1.6	1.7
164	Venezuela	2.0	1.9	2.0	2.3	2.3	2.3	2.4	2.5
--	Belice		2.9	3.0	3.5	3.7	3.8	4.5	
69	Brasil	3.7	3.7	3.5	3.5	3.3	3.7	3.9	4.0

Fuente: Elaboración propia basada en la organización internacional Transparencia Internacional publica desde 1995 el Índice de percepción de la corrupción que mide, en una escala de cero (percepción de muy corrupto) a diez (percepción de ausencia de corrupción), los niveles de percepción de corrupción en el sector público en un país determinado y consiste en un índice compuesto, que se basa en diversas encuestas a expertos y empresa. Refiriéndose a países latinoamericanos del Índice 2002 al 2010.

En cuanto a la relación entre corrupción y falta de confianza en las instituciones democráticas. Ferreiro (1999, citado en Emmerich, 2004) señala que “el mayor costo político de la corrupción es el daño que provoca a la confianza pública en las instituciones y representantes, soporte fundamental de todo sistema político democrático” (Emmerich, 2004) Para verificar lo anterior es posible utilizar datos proporcionados por Latinobarómetro, organización chilena que realiza encuestas de opinión pública semejantes en la mayoría de los países latinoamericanos, con el objeto de medir los valores democráticos (o la falta de ellos) entre la población general. En la Tabla No. 2 se muestra diversas regiones en donde se compara el apoyo y la confianza a la democracia.

Desde sus primeras constituciones, América Latina adoptó el tipo de concepciones de división de poderes y de gobierno responsable. Sin embargo, no ha sido infrecuente en la región que la división de poderes se haga irrelevante por el predominio de los ejecutivos, y que gobernantes y legisladores (además de funcionarios designados) ejerzan sus funciones de manera irresponsable. La corrupción lisa y llana es una de la consecuencia de esta situación. (Emmerich, 2004)

Los gobernantes, mientras están en el ejercicio de su cargo y los legisladores no han tenido responsabilidad política alguna. En general, una vez elegidos pueden confiar en que, salvo situaciones verdaderamente extraordinarias, continuarán en sus cargos hasta el fin de sus mandatos, hagan lo que hagan, o no hagan nada. De ese modo, la rendición de cuentas que se establece en algunas legislaciones latinoamericanas (por ejemplo, los informes presidenciales) se convierte a menudo en meros informe sin ninguna trascendencia. (Emmerich, 2004)

Tabla 2: Comparación de Encuestas de Global Barómetros 2001

Región	Apoyo a Democracia (%)	Confianza en Democracia (%)
Unión Europea	78	53
Africa	69	58
India	60	40
Europa del Este	53	29
América Latina	48	25

Fuente: Elaboración propia basada en Latinobarómetro (2001). En la que se especifica por región el porcentaje de apoyo a la democracia y la confianza en la democracia.

## CONCLUSIONES

Existen diversas acepciones de la definición de rendición de cuentas, mas sin embargo, todas se refieren a rendir cuentas a alguien. En el sector gubernamental, es la obligación que tienen los gobernantes de rendir informes y que exista transparencia sobres sus actuaciones hacia sus gobernados. Los gobiernos transparentes son aquellas instituciones abiertas que proporcionan suficiente información sobre los asuntos públicos y sin que haya ocultación alguna. Sobre la corrupción, a nivel internacional existen diversos convenios o acuerdos en materia anticorrupción en los que participan los diversos países latinoamericanos. Entre los que se encuentra la ONU, OEA, OCDE y el Banco Mundial.

En México las principales Dependencias Federales que intervienen en la materia son la Secretaría de la Función Pública, El Instituto Federal de Acceso a la Información y Protección de Datos (IFAI) y la Auditoría Superior de la Federación (ASF). Una de las Instituciones que participan activamente en contra la de la corrupción a nivel internacional es Transparencia Internacional (TI), el cual es la única organización no gubernamental a escala universal dedicada a combatir la corrupción, congrega a la sociedad civil, sector privado y los gobiernos en una vasta coalición global. Los diversos países que pertenecen a Latinoamérica como lo es México, Brasil, Venezuela, Chile, El Salvador, Costa Rica, entre otros, todos tienden a combatir la corrupción, que exista la transparencia y la rendición de cuentas cada uno desde sus propias organizaciones civiles y públicas, perspectivas y normatividad.

A efecto de hacer un análisis comparativo de México y países Latinoamericanos, nos referimos a la tabla No.1 la cual demuestra el ranking de países latinoamericanos, según su índice de percepción de corrupción de los años del 2002 al 2010. En el año 2002 el más corrupto es Guatemala y el menos es Uruguay. En el año 2003 el más corrupto es Paraguay y el menos es Uruguay. En el año 2004 el más corrupto es Paraguay y el menos es Uruguay. En el año 2005 el más corrupto es Paraguay y el menos Uruguay. En el año 2006 el más corrupto es Paraguay y el menos Uruguay. En el año 2007 el más corrupto es Venezuela y el menos Uruguay. En el año 2008 el más corrupto es Venezuela y el menos es Uruguay. En el año 2009 el más corrupto es Venezuela el menos es Uruguay. En el año 2010 el más corrupto es Venezuela y el menos es Uruguay. Con lo anterior concluimos que el país que resulto más corrupto en diversos años lo fue Paraguay seguido de Venezuela y el menos Uruguay. Los países como México, Argentina, Brasil y Colombia al compararlos con los de más alto índice y el más bajo, se encuentran en términos medios de corrupción.

La tabla No. 2, se refiere a la comparación de encuestas que otorga Global Barómetro en donde la región de América Latina es la que presenta un menor porcentaje de apoyo y confianza a la democracia, con un 48% y 25% respectivamente. Y la de mayor porcentaje es la Unión Europea con un 78% y un 53% de apoyo y confianza a la democracia, respectivamente. La rendición de cuentas, el acceso a la información pública, transparencia, democracia y corrupción son temas y prácticas que se dan en todos los países. Y en el caso que nos ocupa los países latinoamericanos, por lo que de acuerdo a la investigación, cada uno dentro de sus posibilidades y proyectos factibles deberán de combatir la corrupción y lograr que en forma eficaz se dé la rendición de cuentas, la transparencia y la información pública, con el fin de que se vean fortalecidos en su democracia.

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# **TURISMO SOSTENIBLE Y EL USO DE ENERGÍAS RENOVABLES COMO ALTERNATIVA DE APOYO A LOS PUEBLOS INDÍGENAS DE MÉXICO**

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## **RESUMEN**

*México es un país donde los pueblos indígenas representan las raíces de su historia, costumbres, tradiciones y cultura; desde un enfoque turístico, los pueblos indígenas ofrecen todas sus cualidades y riqueza natural a los visitantes a través del turismo indígena y del turismo alternativo. En las últimas décadas México ha vivido una etapa de reformas jurídicas en materia de derechos indígenas y de igualdad de oportunidades. El sistema jurídico mexicano reconoce los derechos individuales y colectivos de los pueblos y comunidades indígenas determinando las políticas necesarias que garanticen su bienestar e impulsar el desarrollo regional de las zonas indígenas con el propósito de fortalecer las economías locales y mejorar las condiciones de vida. El turismo es la tercera fuente de divisas para México, sólo superado por la exportación de petróleo y las remesas de los trabajadores mexicanos en el extranjero. En México el Turismo Alternativo se presenta como una actividad económica con gran potencial y que aún no ha sido suficientemente desarrollada. La riqueza natural de México permite el desarrollo de energéticos renovables que permitirán al país contar con una mayor diversificación de fuentes de energía, ampliar la base industrial en un área que puede tener valor estratégico en el futuro, y atenuar los impactos ambientales ocasionados por la producción, distribución, uso final de las formas de energía convencionales así como la generación de empleo y disminución de costos indirectos en comunidades locales.*

**PALABRAS CLAVE:** Turismo Sostenible, Turismo Indígena, Turismo Alternativo, Pueblos Indígenas, Energías Renovables, Medio Ambiente

## **SUSTAINABLE TOURISM AND THE USE OF RENEWABLE ENERGY AS AN ALTERNATIVE TO SUPPORT INDIGENOUS COMMUNITIES IN MEXICO**

### **ABSTRACT**

*Mexico is a country where indigenous people represent the roots of our history, customs, traditions and culture. Indigenous communities offer all its qualities and natural beauty to visitors through the Indigenous tourism and alternative tourism. In recent decades, Mexico has experienced a period of legal reforms, indigenous rights and equity of opportunities. The Mexican legal system recognizes the individual and collective rights of indigenous people and determines the policies needed to ensure their welfare and promote regional development of some indigenous areas in order to strengthen local economies and improve the living conditions of their communities. Tourism is the third largest source of foreign investment in Mexico, surpassed only by oil exporting and remittances from Mexican natives working abroad. Alternative Tourism in Mexico is presented as an economic activity with great potential that has not been developed. The natural wealth of Mexico allows the development of renewable energy that will allow the*

*country to diversify energy sources , expanding the industrial base in an area that can have strategic value in the future, and mitigate the environmental impacts caused by the production , distribution, ending the use of conventional energy forms, the generation of employment and reduce indirect costs in local communities.*

**JEL:** L83, Q42, Q56, Q57, Q58 Y Q59

**KEYWORDS:** Sustainable Tourism, Indigenous Tourism, Alternative Tourism, Indigenous Communities, Renewable Energy, Environment.

## INTRODUCCIÓN

El turismo es un fenómeno de gran importancia y magnitud a nivel económico, social, cultural y político. El modelo de desarrollo turístico mexicano ha manifestado como premisa fundamental la búsqueda del beneficio de las localidades receptoras y obviamente de su población; sin embargo, durante los últimos 25 años en México se ha considerado planear el apoyo de la población para el desarrollo turístico cuando en realidad lo que se requiere es planear el desarrollo de las localidades mediante de la actividad turística.

México tiene varias zonas turísticas donde podemos encontrar destinos de playa o ciudad, en los cuales es notable el crecimiento de la población, y el crecimiento de la misma localidad receptora con las actividades económicas complementarias a la actividad turística, sin embargo también tiene algo más que ofrecer y es la diversidad cultural principalmente originaria de los pueblos indígenas, en México existe alrededor de 65 pueblos indígenas, pueblos que representan las raíces de los mexicanos con su cultura, historia, tradiciones y costumbres, donde su modo de vida depende íntimamente de los recursos naturales. Sin embargo la escasez de recursos e información induce su desaparición, pues muchos tienden a migrar de su localidad en busca de oportunidades y la modernización eventualmente penetra estas regiones dañando el medio ambiente.

Por esta razón, la siguiente investigación se enfoca en cómo se puede apoyar a los pueblos indígenas, y así mismo a comunidades rurales mediante la planeación y ejecución de la actividad turística pero de manera sostenible, es decir, protegiendo los recursos naturales generando un bajo impacto sobre el medio ambiente y preservando la cultura de esta población, al mismo tiempo se contribuye a generar ingresos y empleo para la población local, así como también el papel que juegan el uso de energías renovables en los proyectos de turismo sostenible. Esta investigación se presenta organizada de la siguiente manera: en la sección de revisión literaria se plantean los argumentos que sustentan la ejecución de programas de turismo sostenible y uso de energías renovables como apoyo a los pueblos indígenas que pertenecen a comunidades rurales. Posteriormente se presenta la metodología utilizada, en donde se identifican los beneficios y las razones de cómo las actividades de turismo sostenible pueden apoyar a esta población, así como qué tipo de energías renovables son viables en cada zona de la República Mexicana. Seguidamente de los resultados y conclusiones.

## REVISIÓN LITERARIA

En México, el 9.54% de la población es indígena, esto significa que 9 854 301 millones de personas son descendientes directos de linajes originarios. Mismos linajes ancestrales que a la fecha se recuerdan como tiempos de esplendor de civilizaciones mesoamericanas. La presencia de pueblos y comunidades indígenas, se concentran en el sur y sureste del país principalmente, con 46 grupos étnicos de los 65 que habitan en México y concentra el 74% de dicha población, de los cuales 6,986,413 de habitantes hablan alguna lengua indígena. El territorio de los pueblos

indígenas es un referente necesario para cualquier política que busque desarrollar la cultura, los recursos naturales y el bienestar de los pueblos indígenas. Cabe mencionar que México es uno de los 12 países con más diversidad en el mundo que albergan entre 60 y 70 % de la biodiversidad total del planeta, por ello los pueblos indígenas han sido reconocidos como sujetos sociales centrales para la conservación y el desarrollo sustentable.

En las últimas décadas México ha vivido una etapa de reformas jurídicas en materia de derechos indígenas y de igualdad de oportunidades. A partir de la reforma constitucional de 2001, el sistema jurídico mexicano reconoce los derechos individuales y colectivos de los pueblos y comunidades indígenas. El derecho al desarrollo y a la participación en las políticas y acciones de Gobierno está previsto en el apartado B del Artículo Segundo de la Constitución Política de los Estados Unidos Mexicanos. Dicho artículo establece que la Federación, los Estados y los Municipios promoverán la igualdad de oportunidades para los indígenas y buscarán eliminar cualquier práctica discriminatoria, determinando las políticas necesarias que garanticen su desarrollo e impulsar el desarrollo regional de las zonas indígenas con el propósito de fortalecer las economías locales y mejorar las condiciones de vida de sus pueblos indígenas. El Turismo sostenible es una alternativa para apoyar a los pueblos indígenas. México es un país donde los pueblos indígenas representan las raíces de su historia, costumbres, tradiciones y cultura; desde un enfoque turístico, los pueblos indígenas ofrecen todas sus cualidades y riqueza natural a los visitantes a través del turismo indígena y del turismo alternativo.

El turismo Indígena es aquel que se práctica en los territorios indígenas y en el cual las tradiciones, la cultura, los usos y las costumbres, o parte de ellas se encuentran presentes, es, asimismo, manejado, monitoreado y administrado por hombres y mujeres pertenecientes a un pueblo indígena, en este tipo de turismo los y las anfitrionas comparten con el visitante la riqueza natural y cultural, a través de actividades de recreación, esparcimiento y descanso, y en cuya distribución de los beneficios se encuentra la madre tierra, siempre viendo hacia el tan anhelado auto desarrollo, buen vivir y la revaloración cultural tanto al interior como al exterior de nuestros pueblos y comunidades.

Los Pueblos Indígenas destacan entre los protagonistas del medio ambiente en México. Su modo de vida depende íntimamente de los recursos naturales. Su economía está ligada a la naturaleza para la obtención de otros bienes, tales como alimentos, vivienda, medicamentos y productos de intercambio. Bajo estas condiciones, la supervivencia de los indígenas y la continuidad de su cultura, dependen absolutamente de la preservación de los recursos naturales. Para las empresas indígenas y rurales incursionar en la actividad turística representa entrar a un proceso continuo y permanente de desarrollo de habilidades y estrategias específicas, pues se reconoce que existe una lucha constante para tratar de no ser excluidas del mercado y, aunque su mayor fortaleza está en la diferenciación de lo que ofrecen y comparten con el turista, esta ventaja no es decisiva en el posicionamiento de la empresa, pues causas como la falta de ingresos constantes, de promoción, difusión y planeación, pueden reducir su tiempo de vida. Durante los últimos años surgen en el léxico y en la práctica del desarrollo turístico mundial pero en sentido comunitario, nuevos conceptos y experiencias denominadas “Turismo de base comunitaria”, “Turismo Indígena”, o “Turismo Comunitario”; que refieren en principio, a un nuevo paradigma de gestión turística, que se ha venido gestando a partir de la incorporación de nuevos actores en la actividad turística: las comunidades indígenas, campesinas y urbanas.

## **METODOLOGÍA**

En México, la Comisión Nacional para el Desarrollo de los Pueblos Indígenas (CDI), tiene como

misión formular e instrumentar la política gubernamental, para la promoción y defensa de los derechos y el desarrollo integral de los pueblos indígenas, promoviendo la participación social organizada y el respeto a sus culturas. Así mismo, gestiona recursos fiscales ante el Gobierno Federal y los instrumenta a través de Programas, Proyectos y Acciones sustantivas en beneficio de las colectividades indígenas. En este marco que, mediante el Programa de Turismo Alternativo en Zonas Indígenas (PTAZI), se atienden las solicitudes de apoyo presentadas por los núcleos agrarios, organizaciones y grupos de trabajo indígenas, para instrumentar o reforzar sus iniciativas en materia de ecoturismo.

#### Programa de Turismo Alternativo en Zonas Indígenas (Ptazi):

Este programa beneficia a núcleos agrarios (Ejidos, comunidades), organizaciones y grupos de trabajo conformados por indígenas. Y tiene como objetivo contribuir al desarrollo de la población indígena, mediante la ejecución de acciones en materia de turismo alternativo, en especial de ecoturismo y turismo rural, aprovechando el potencial existente en las regiones indígenas. Otorga apoyos para elaborar y ejecutar proyectos encaminados a la revaloración, conservación y aprovechamiento sustentable de sus recursos y atractivos naturales, y de su patrimonio cultural, así como para coadyuvar a la mejora de sus ingresos. El Tipo de apoyo que se otorga puede ser para infraestructura y equipamiento de sitios de Turismo Alternativo, para elaboración de un proyecto integral para nuevos sitios, para la elaboración de estudios, y/o pago de permisos ambientales, cuando se requieran, para la formación y fortalecimiento de capacidades para la operación, administración y procesos de certificación, de los núcleos agrarios, organizaciones y grupos de trabajo que cuenten con sitios de turismo alternativo de inicio, continuidad, o que se encuentran en operación y, para la ejecución de proyectos de difusión y promoción (comercialización) de sitios de turismo alternativo.

Los Núcleos Agrarios (ejidos y comunidades), organizaciones y grupos de trabajo, deben ser conformados por indígenas; entre los requisitos que deben presentar es una Solicitud de apoyo para proyectos de turismo alternativo que contenga: datos generales de los interesados, ubicación, nombre del proyecto, el monto de recursos solicitado para la elaboración o desarrollo del proyecto, desglosando los conceptos de inversión, etc.; también un documento que acredite su personalidad jurídica, en términos de la legislación aplicable; un documento que acredite la propiedad o posesión legal del o de los predio(s) involucrado(s), donde se llevará a cabo el proyecto, así como su extensión y límites geográficos; además se establecerá la temporalidad en la cual se planea desarrollar y operar el proyecto de turismo alternativo, de tal forma que den certidumbre jurídica a la población objetivo solicitante de los apoyos, además deben presentar un documento donde se manifieste la declaración expresa de los beneficiarios, por conducto de su representante, de que no han recibido apoyo económico de la CDI ni de otras dependencias de gobierno, para aplicar en los mismos conceptos para los que se solicita apoyo en el presente ejercicio fiscal y en años anteriores, así como el padrón de beneficiarios y una carta compromiso.

Existen asociaciones civiles en México trabajando a favor del turismo sostenible. La Red Indígena de Turismo Alternativo (RITA), por ejemplo, es una asociación civil de empresas diversas cuyo propósito es hacer que sus asociadas y asociados avancen y progresen mediante el ejercicio pleno de los derechos fundamentales y específicos de los pueblos indígenas, reconocidos en los ámbitos económico, social, cultural, ambiental y político. Integrando participativamente estrategias de fortalecimiento humano, social, económico y productivo. RITA, tiene como objetivo destacar la importancia de este tipo de propuestas para el desarrollo de las localidades y

de qué manera condicionan el desarrollo de este tipo de iniciativas en espacios rurales y como impulsan uno de los pilares de la economía en México, el turismo. Además se trabaja para impulsar a las empresas turísticas de RITA, a través de la gestión y administración de planes de negocios, diseño de productos de turismo indígena, calidad y comercialización, para lograr su fortalecimiento y consolidación.

La actividad turística se considera una ventana a través de la cual es posible identificar espacios de convivencia holística más allá de las actividades recreativas, los territorios donde se asientan las comunidades y pueblos indígenas tienen una gran riqueza cultural, paisajística y de biodiversidad que los hace únicos, por lo que representan una oportunidad de dar a conocer las formas en que la gente de esos lugares afronta realidades diversas, como resuelve problemas de alimentación, vivienda, energía, manejo de basura, etc. Por lo que es necesario contar con un área que aborde y desarrolle este enfoque. La actividad en espacios rurales necesita especial atención ya que siguen ligadas a actividades primarias, con esta propuesta se pretende continuar con los apoyos a este sector para que mejore su productividad y promueva su sustentabilidad. La práctica del turismo alternativo permite a los visitantes conocer las zonas rurales y apreciar los recursos naturales de los pueblos indígenas.

Para el desarrollo de Proyectos de Turismo Sostenible, las energías renovables juegan un gran papel. México cuenta con un gran potencial en cuestión de recursos energéticos renovables, cuyo desarrollo permitirá al país contar con una mayor diversificación de fuentes de energía, ampliar la base industrial en un área que puede tener valor estratégico en el futuro, y atenuar los impactos ambientales ocasionados por la producción, distribución y uso final de las formas de energía convencionales. Lo anterior permite reflexionar sobre los considerables beneficios ambientales que se pueden producir con el uso de energías renovables; el uso de la energía renovable económica y tecnológicamente viable, incluyendo una reducción en mantenimiento y en una mayor eficiencia energética.

Los programas de energía renovable son de fácil adopción por los Municipios y se pueden implementar en pueblos indígenas. Debe haber participación económica de los beneficiarios, para involucrarlos en la pertenencia de la tecnología y debe conjuntarse el trinomio: Institución, Beneficiario y Proveedor; con el fin de compartir esfuerzos y beneficios. Tomando como ejemplo los Ayuntamientos Municipales, hoy en día, su principal problema económico es el pago de la nómina, y en segundo lugar, generalmente, aparece el pago de la electricidad. Con el uso de energías renovables se obtienen ahorros sustanciales en el pago por consumo de energía eléctrica, lo que permitirá una mejoría en las finanzas públicas de los Ayuntamientos Municipales. La situación actual permite generar electricidad para autoconsumo, y en su caso vender el excedente; la tecnología con la que hoy se cuenta, a su vez, permite generar electricidad de diferentes fuentes y a costos muchos menores que hace apenas algunos años.

Es por ello que buscando aprovechar lo que hasta hoy sólo es un potencial, se plantea la necesidad de orientar a los Ayuntamientos Municipales para que exploren la posibilidad de suplir su propia demanda energética, contribuyan a la disminución de gases efecto invernadero y fomenten actividades productivas para un creciente progreso y a su vez, atiendan a sus comunidades rurales y pueblos indígenas apoyándolos para que integren las energías renovables en su localidad. Existen varios tipos de energías renovables con diferentes características, que aportan grandes beneficios y algunos de ellos pueden ser usados para el apoyo de los pueblos indígenas, donde es de vital importancia el cuidado y conservación de los recursos naturales, disminuyendo el impacto en el medio ambiente y garantizando su preservación para futuras generaciones. Dentro de la Guía de Programas de Fomento de Energías Renovables que publicó

la Secretaria de Medio Ambiente y Recursos Naturales (SEMARNAT), se hace referencia a las energías renovables a las que una población puede recurrir dependiendo de sus características dentro de las cuales mencionan: biogás de tiraderos municipales (En poblaciones de medianas a grandes), desarrollo del potencial de plantas mini hidráulicas, mayor uso de residuos agropecuarios para generación de electricidad, instalación de celdas fotovoltaicas y la energía eólica.

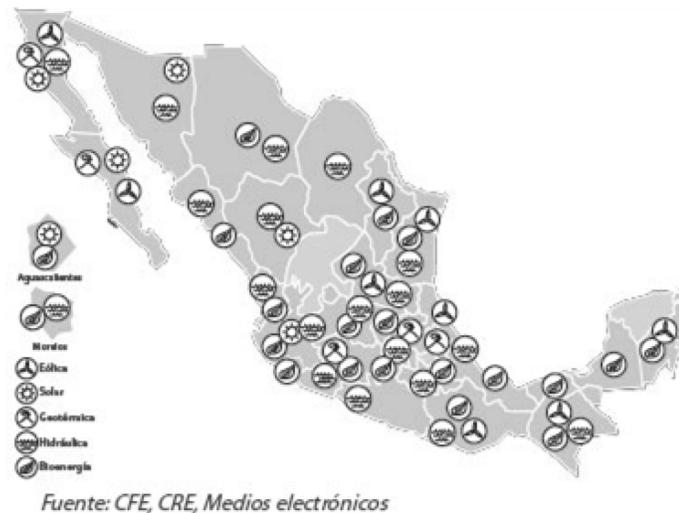
Cabe resaltar que cada tipo de fuente de energía no es limitativa de otra, en una zona geográfica pueden converger diversidad de recursos naturales que potencialicen la obtención de energía, lo que en suma resultaría en un incremento en la capacidad de generación, haciendo que la localidad no dependa de los recursos no renovables (generalmente combustibles fósiles) para obtener energía eléctrica, la cual es indispensable para el crecimiento y desarrollo de la comunidad. Adicionalmente, en función del tipo de energía renovable que se explote, se puede generar energía térmica que complementa las necesidades propias de las industrias o comercios que existan en los alrededores.

## RESULTADOS

Actualmente, varias Instituciones gubernamentales y no gubernamentales en México, promueven programas enfocados al desarrollo de proyectos de turismo sostenible, ofreciendo oportunidades a los pueblos indígenas para adoptarlos y de igual forma existen programas que apoyan la viabilidad del uso de energías renovables. Una problemática detectada en México, es la falta de información que los pueblos indígenas tienen sobre estos programas, es decir, tienen todas las cualidades para desarrollar proyectos de ésta índole y las tierras donde habitan, sin embargo muchos desconocen los programas e incluso no saben a qué instituciones dirigirse. Existen comunidades indígenas donde incluso varios integrantes, conservan su lengua y no hablan español, por tanto su desenvolvimiento se ve limitado. Las comunidades indígenas se interesan en nuevas alternativas para el cuidado del medio ambiente y otras alternativas que les permitan seguir su forma de vida de manera sustentable; muchos de ellos tienen el interés y disposición e investigan sobre dichos programas, acuden y los solicitan a las instituciones, también requieren de capacitación para implementarlos puesto que se trata de algo nuevo para ellos técnicamente pero también en el aspecto administrativo, pues se pueden generar empresas indígenas donde será necesario aplicar cuestiones administrativas para dirigirlos.

Se propone hacer difusión de los programas existentes en el campo de turismo sostenible y de energías renovables, que sean viables en los pueblos indígenas, recalando los beneficios que se producirían con proyectos de turismo sostenible tanto en el medio ambiente como económica y socialmente. El propósito es que los pueblos indígenas fortalezcan su comunidad y tengan oportunidades de integrarse al mercado en el sector turístico que hoy en día produce actividades económicas que más desarrollo tendrán en los años siguientes para México y muchos otros países del mundo. Se propone conjuntar la ética, la ciencia y la prosperidad económica, asociar estos tres elementos de forma eficaz como propósito del desarrollo sustentable en cualquier sector. La aceptación que tienen las energías renovables en comunidades rurales y pueblos indígenas las convierten en una opción atractiva para ser vista como una opción de desarrollo, la generación de empleo, la disminución de costos en los ayuntamientos locales y la disminución del impacto ambiental son algunos de los beneficios a corto y mediano plazo que podrían arrojar los primeros resultados. La propuesta para el desarrollo de energías renovables en el país no puede tener la misma estrategia en todas sus regiones ya que las condiciones climatológicas no son las mismas en el norte y en el sur del país. La figura 1 muestra las entidades federativas con capacidad instalada para generación de energía eléctrica de fuentes renovables.

Figura 1: las Entidades Federativas con Capacidad Instalada Para Generación de Energía Eléctrica de Fuentes Renovables



*En El Norte Del País Es Clima Desértico Y La Fuerte Reflexión Solar La Hacen Propicia Para La Captación A Través De Paneles Solares, Mientras Que En El Sur Las Ventajas Eólicas E Hidroeléctricas Son Las Predominantes. El Objetivo De Analizar Las Cuestiones Climatológicas Es Identificar La Viabilidad Para La Creación De Ciertos Proyectos De Energía Renovable De Acuerdo A Las Condiciones Que Prevalecen En La Región.*

## CONCLUSIONES

Crear proyectos de turismo sostenible es una alternativa de impulso al desarrollo de los pueblos indígenas, ya que busca generar ingresos económicos que intervengan positivamente en el nivel de bienestar de la población, promover la organización comunitaria, fortalecer el vínculo de las colectividades indígenas con sus territorios, y propiciar la revaloración, la conservación y el aprovechamiento sustentable de los recursos y atractivos naturales, así como del patrimonio cultural de los pueblos y comunidades indígenas.

Es posible establecer la conformación de circuitos y rutas de ecoturismo indígena para mejorar el posicionamiento de estas actividades en el contexto del mercado turístico nacional; y fortalecer las capacidades de las comunidades para que realicen el proceso de reconversión productiva (nuevas habilidades para la operación, administración y comercialización de productos y servicios) y que tengan condiciones de convertir al ecoturismo en una opción para el desarrollo. Con los proyectos de turismo sostenible los pueblos indígenas, pueden avanzar con un impacto económico como generador de empleos, fuentes de ingresos al recibir visitantes; así mismo se genera un impacto social al compartir con los visitantes su riqueza natural y cultural, se apoya a la conservación de costumbres y tradiciones además de darles difusión para no perder lo que es parte de nuestras raíces e historia. En cuanto a los recursos naturales, se tiene menor impacto sobre el medio ambiente, protegiendo y generando una consciencia de importancia y responsabilidad ante estos lugares. Los proyectos de turismo sostenible en los pueblos indígenas y comunidades rurales deben incluir actividades de turismo alternativo y turismo indígena, así como contar con la infraestructura para desarrollarlos y fomentar las actividades económicas necesarias para la actividad turística. Dichos programas combinados con la instalación de energías renovables en estas localidades coadyuvaran al desarrollo sostenible que hoy en día se busca no solo en México si no en muchos países alrededor del mundo.

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## RECONOCIMIENTO

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# LA NUEVA REFORMA EDUCATIVA MEXICANA UNA OPCION PARA EL CRECIMIENTO DE MEXICO EN INNOVACION Y RESPONSABILIDAD SOCIAL

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## RESUMEN

*Hoy en día, es común escuchar sobre la nueva Reforma Educativa, propuesta por el titular del poder ejecutivo federal Enrique Peña Nieto el 11 de diciembre del 2012, en México. Esta propuesta reforma y adiciona diversas disposiciones de la Constitución Política de los Estados Unidos Mexicanos en materia de Educación, contempla elementos que podrían marcar un antes y un después. Además, esta reforma contempla la responsabilidad social y la innovación (de productos, de servicios, de sistemas, de marcas, de la estrategia mercadológica, etc) cuestiones importantes, que influyen para llegar a otros mercados y beneficiar a nuestro país fenómenos importantes que influyen y benefician a nuestro país.*

*Tomando en cuenta que la historia de México en educación ha sido marcada por los intereses políticos de sus gobernantes, que ellos deciden, lo que deben saber los Mexicanos; aparte de no permitir el ingreso de Universidades extranjeras al país.. Ahora con esta reforma se pretende una mejora soportada en cuestiones como: Responsabilidad social, educación basada en competencias y la innovación; que es reconocida como el primer punto de oportunidad en nuestros mercados globalizados, para estar dentro de la agresiva competencia que implica la misma globalización. Entonces podríamos resumir la reforma educativa propuesta cómo: Desarrollo Sustentable, como resultado de aplicar la responsabilidad social empresarial, la competencia de las personas y la innovación.*

**PALABRAS CLAVE:** Reforma Educativa, Responsabilidad Social E Innovacion

## EDUCATION REFORM THE NEW MEXICAN AN OPTION FOR GROWTH OF MEXICO IN INNOVATION AND SOCIAL RESPONSIBILITY

### ABSTRACT

*Today, it is common to hear about the new educational reform, proposed by the holder of the federal executive Enrique Peña Nieto on December 11, 2012, in Mexico. This proposal reform and adds various provisions of the political Constitution of the Mexican United States in education, includes elements that could mark a before and an after. In addition, this reform provides social responsibility and innovation important phenomena that influence and benefit our country. Taking into account that the history of Mexico in education has been marked by political interests than their rulers in the last century it was considered that it is the best. Now this reform is to a remarkable improvement in the corporate social responsibility and invest in innovation, which is what a country needs for economic growth.*

**JET:** J24, I23, I25, I28

**KEYWORDS:** Reform Educatina, Social Responsibility And Innovation

## **ANTECEDENTES**

La Educación en México podría decirse que se divide en tres grandes etapas fundamentales:

Primera: La de 1921 a 1940 que podríamos llamarla rural o pos-revolucionaria.

Segunda: La de 1940 hasta 1976 que es la urbana capitalista.

Tercera: De 1976 hasta 2007 que corresponde a la globalización.

Cada período o etapa educativa ha correspondido estrictamente al modelo económico y político que se ha impuesto en el país obedeciendo siempre a los cambios nacionales sobre todo en las primeras dos y a los cambios internacionales para la tercera etapa, sobre todo a partir de 1940 y la segunda guerra mundial.

Podemos pensar que el proceso educativo mexicano sólo obedeció a la “supuesta” realidad nacional, dado que la economía del país, por lo menos desde 1940 ha sido muy dominada por el gobierno e inversionistas extranjeros y esta dependencia ha impuesto modelos económicos y valores culturales, la educación se subordinó La falta de competencia de los diseñadores de los programas educativos y la poca conciencia de los funcionarios públicos así como la presencia del sindicalismo al servicio de sus mismos líderes, el desinterés del gobierno por cuestiones educativas y el entorno social sin interés en la formación, sumando todo lo anterior ha repercutido al estancamiento y la caída de la educación mexicana; sin embargo no podemos culparlos solo a ellos, pues hay otros fenómenos de mayor peso que han determinado el rumbo y los retrasos educativos. Muchos países, como México, vivieron aislados del contexto internacional hasta la Segunda Guerra Mundial y del surgimiento de organizaciones internacionales como la ONU; por eso pudieron aplicar políticas que obedecían a sus dinámicas internas. Luego de los acuerdos internacionales, la suscripción de “apoyos” y préstamos, así como de objetivos y programas educativos que decimos educativos porque obedecían a intereses de países más poderosos. “Capitalismo”, llevaron a cambios esenciales a los que México no pudo, ni quiso, aislarse. Más bien aquellas recomendaciones internacionales se vieron como muy modernas.

Más bien aquellas recomendaciones internacionales se tomaron como observaciones importantes para la educación en México. La Educación Mexicana en sus primeros años de 1921 a 1940. Casi el 80 por ciento de la población vivía en el campo, y por eso recibía una educación que respondía a esas necesidades. Los planes, los programas, las asignaturas, giraban en torno al trabajo y a las necesidades de los hombres del campo. Las ideas de los funcionarios de gobierno y de los profesores obedecían a las necesidades de la agricultura. El profesor, el cura y el medico llegaron a representar la esperanza de los indios y campesinos. En los años 40, durante el gobierno del Presidente Ávila Camacho, se empezaron a registrar cambios educativos radicales que obedecieron esencialmente a circunstancias internacionales. En México cambió la orientación política del gobierno; en 1943 se transformó el texto del artículo 3 constitucional quitándole el objetivo “educación socialista” para ponerle “educación democrática”. Asumió Torres Bodet la secretaría de Educación y se fundó el Sindicato Nacional de Trabajadores de Educación (SNTE). Al concluir la segunda guerra mundial se creó la ONU y en 1946 se instrumentó la UNESCO. Las ciudades empezaron a crecer aceleradamente al mismo ritmo en que las inversiones en la

industria, el comercio, las carreteras y los transportes. Durante el gobierno de Miguel Alemán, en estrecha alianza con los inversionistas extranjeros, Los planes y los programas educativos, así como la orientación de los profesores, se fueron adecuando a las necesidades de estos.

La educación en México recibió un gran impulso educativo en los años sesenta con el Plan de Once Años de Torres Bodet (1959-1970) en la época del Presidente López Mateos y el segundo empuje de la época Echeverrista (con la creación e impulso a escuelas como: CCH, UAM, Bachilleres); sólo pusieron al día a la educación nacional que requería la industria del capitalista, para su desarrollo. La realidad es que lo único que se buscaba era capacitar mano de obra barata para integrarla a la producción a las incipientes industrias mexicanas y corporativos extranjeros (maquiladoras) y al mismo tiempo frenar la gran demanda educativa nacional en la escuela primaria de los sesenta y media superior y superior de los setenta. En aquellos sexenios el gobierno pudo frenar una parte del descontento que se estaba presentando, aunque el movimiento de 1968 anunció que algo grave pasaba. La tercera etapa es el proyecto neoliberal privatizador que se inicia con la gran producción petrolera, la crisis en 1981 y la firma en 1982 con la privatización de la banca. La educación de ahora sólo responde a los intereses el gran capital internacional que mediante la reconversión industrial impone la competitividad subordinada.

Las universidades desarrollaron sus planes y programas para beneficio de sus empleadores quienes obtuvieron una rentabilidad económica. A partir de 1982 con la imposición del neoliberalismo político y económico, la educación pública comenzó a desplomarse para dar paso a la educación privada. Con el proyecto de privatización de la educación (que no se ha consumado hasta ahora), que se inicia con el presidente De la Madrid, y se profundiza con los mandatos de Salinas, Zedillo, Fox y Calderón. Se buscaba identificar a la sociedad con los empleadores que son quienes con sus requisitos productivos, imponen el proyecto educativo. Logran que los profesores y los investigadores obedezcan a criterios de mercado, a lo que se llama criterios de rentabilidad económica. Con el argumento de que todos los egresados deben lograr empleo se orientan todas las carreras universitarias a las necesidades del mercado laboral y se abandona lo humanístico.

Con la carrera magisterial y los contratos de investigación con empresas privadas, se hizo a un lado la lucha colectiva y las batallas sindicales por conquistas comunes. En México desde 1984, junto con la firma del Tratado de Libre Comercio, se creó el CENEVAL con el argumento de que las evaluaciones ayuden a unificar programas y conocimientos con otros países. El centro de evaluación se convirtió en un gran negocio multimillonario privado al mismo tiempo que ha servido para rechazar de la escuela pública a millones de estudiantes y, al mismo tiempo encaminarlos a los negocios de los colegios privados.

### Reforma Educativa

Actualmente empieza una nueva etapa en la educación de México con la nueva reforma educativa se pretende: Primero. Crear el Sistema de Servicio Profesional Docente, el cual estará integrado por concursos de ingresos para docentes y para la promoción a cargos con funciones de dirección y de supervisión en la educación básica y media superior. Con dicha creación se estarían fijando los términos para el ingreso, la promoción y la permanencia en el servicio. Los criterios para determinar la promoción o el sistema de reconocimientos corresponderán exclusivamente al mérito y a la preparación de cada maestro. Como se sabe, este esquema hoy es manejado por el Sindicato Nacional de Trabajadores de la Educación (SNTE), mismo que determina plazas, salarios, cargos, etcétera. El Instituto Nacional para la Evaluación de la Educación (INEE) tendrá atribuciones para evaluar el desempeño y resultados del Sistema Educativo Nacional. Para esto, la reforma busca dotarlo de autonomía constitucional y con ello otorgarle facultades para diseñar y

realizar los cambios necesarios que vaya requiriendo el sistema educativo. Se buscará que el INEE esté formado por personas con reconocida capacidad y que sea un cuerpo colegiado el que realice la selección de estas, aunque el presidente de la junta de gobierno del INEE será propuesto ante el Senado de la República por el titular del Poder Ejecutivo nacional.

Segundo. Se busca que la evaluación magisterial, en primer lugar, no sea potestativa o voluntaria, sino obligatoria para todos los maestros. (Y solo con el fin, de encontrar puntos de oportunidad y practicar la mejora continua). Tercero. Que la evaluación no sea pactable. Se crean las escuelas dignas y escuelas de tiempo completo con criterios de calidad, equidad y autonomía de gestión de las escuelas, es decir, se busca darle a cada escuela, los medios necesarios para que cada director haga las mejoras de infraestructura, compre los materiales didácticos, equipe a las escuelas, etcétera. (A través de la construcción de un sistema de gestión de la calidad educativa, implementado por el mismo personal de la escuela). Cuarto. Se crea el Sistema de Información y Gestión Educativa. Este tiene como propósito realizar un censo de escuelas, profesores y alumnos, con el fin de corroborar datos, porque por increíble que parezca no se sabe con exactitud cuántas escuelas, alumnos, o maestros hay en el sistema educativo mexicano. Quinto. Se quiere impulsar el suministro de alimentos nutritivos y prohibir la comida que no favorezca a la salud de los educandos. Los alimentos que se proveerán tendrán que cumplir con las normas oficiales de la Secretaría de Salud. Además, por mandato constitucional se busca prohibir la comida 'chatarra'. Sin duda esto es una de las más grandes e históricas reformas de México. En esta reforma se modificaron los artículos 3°. Fracciones III, VII y VIII, y el artículo 73, fracción XXV; así como se adiciona la fracción IX al artículo 3°, de la Constitución Política de los Estados Unidos Mexicanos. Estos son algunos cambios que propone el Ejecutivo además de la evaluación docente:

- 1.- Servicio profesional Docente.
- 2.- Dotar de autonomía al Instituto Nacional para la Evaluación de la Educación.
- 3.- Crear un sistema de Operación y Gestión Operativa.
- 4.- La creación de hasta 40 mil escuelas de tiempo completo.

#### Postura del SNTE Por la Nueva Reforma Educativa

El dirigente del Sindicato Nacional de Trabajadores de la Educación (SNTE), Juan Díaz de la Torre, refrendó la conciencia de responsabilidad social del magisterio, su compromiso con el desarrollo nacional y respaldo a la reforma educativa. Los docentes de México están a favor de la reforma educativa, que concilie la mejora de la calidad de la enseñanza con el respeto a sus condiciones laborales y profesionales.

Durante una reunión con los secretarios generales de las secciones 8 de Chihuahua, Alejandro Villarreal Aldaz, y de la 37 de Baja California, José Alberto Martínez Carrillo, aseguró que los mentores están conscientes de su responsabilidad social y su alto compromiso con el desarrollo nacional. Díaz de la Torre destacó que el concurso de maestros, padres de familia, alumnos y la sociedad en general son indispensables para elevar la calidad de la educación, objetivo de la reforma, para que responda a las expectativas sociales. En un comunicado, el SNTE refirió que en el encuentro también se habló sobre la aspiración magisterial de contar con programas permanentes de actualización y superación profesional, prioritarios para cumplir de mejor manera la misión educadora y enlazar esquemas de revaloración social y retribución económica. Al final de la reunión, ambos secretarios generales expresaron su respaldo a Díaz de la Torre, y sostuvieron que es momento de demostrar la unidad y cohesión que ha caracterizado al gremio magisterial.

### La Reforma Educativa y la Reponsabilidad Social

México es un ejemplo donde las crisis económicas han provocado problemas de hambre y pobreza, el gobierno ha asumido el compromiso de emprender proyectos sociales en conjunto con la sociedad civil.

Con la nueva reforma educativa concatena muy claro la Responsabilidad Social, ya que plantea dos grandes objetivos, la calidad y la equidad en la educación, dando prioridad a las comunidades en condiciones marginadas y pobreza buscando disminuir las diferencias sociales en nuestro país. Calidad en la educación es hacer efectivo que los alumnos tengan mejores maestros que estén más tiempo en los planteles para que su formación sea más completa, que tengan acceso a una alimentación sana y nutritiva, que cuenten con mejores libros de textos y materiales educativos, que sus escuelas tengan instalaciones adecuadas y en buen estado. Es importante contar con políticas publicas que fortalezcan el sistema de los esquemas de Ciencia y Tecnologia, la capacidad de I+D+i (Invesigación, Desarrollo tecnológico e innovación), de las instituciones educativas publicas y privadas y el desarrollo y formacion del capital humano que puedan definir el éxito con que una economía absorbe un nueva reforma. Todavía existen innumerables cosas que resolver en Mexico, pero una forma de reducir la pobreza es generando riqueza, conocimiento y competencia, se necesita generar empleos, por lo tanto la seamos socilamente responsables y desde nuestras trincheras, hay que ayudar a generalos.

### La Reforma Educativa y la Innovacion

Historicamente la innovacion y creatividad se han vistos afectados por la inestabilidad de las politicas, sobre todo en al ambito presupuestario, donde distintos componentes adquieren mayor o menor relevancia a medida que cambian los gobiernos, y eso sucede con I+D+i; muy pocos presidentes en México han impulsado a la ecuación, sin embargo, ahora es una cultura de la globalización, dónde se sabe perfectamente que el negocio de la Innovación representa el 80% de los negocios de la globalización.

Aunado esto se ve un circulo vicioso en donde no hay demanda de tecnologia por parte de las empresas, y al mismos tiempo las Instituciones Educativas se alejan de la investigacion aplicada. Tomando en cuenta que las Instituciones Educativas tienen un papel protagonico en la gestion del conocimiento y si el sistema productivo y las empresas no lo demandan, seguiremos viviendo en la indiferencia.

En paises como Mexico los procesos de innovación son mas bien de adaptacion y de mejoras incrementales, con bajo peso en descubrimientos científicos y casi siempre sin propiedad intelectual.

La reforma educativa, tendrá un impacto positivo en los programas de investigación para la enseñanza de la ciencia dirigida a los niños y jóvenes, impartidos por Inovec (Innovación en la Enseñanza de la Ciencia), por la apertura que representará a los proyectos de este rubro en las escuelas. “La reforma es muy importante, porque ampliará las condiciones académicas de las escuelas y nos permitirá llevar los programas de ciencia y tecnología a más estados. Queremos que los niños puedan aprender y para eso hace falta que los maestros estén bien preparados para trabajar”, indica Fernández en entrevista para *Forbes México*. Existen algunos programas son voluntarios, en los estados se abre una convocatoria para las escuelas a través de la Secretaría de

Educación Pública (SEP), con el propósito de incorporar a sus planes de estudios los proyectos de ciencia y tecnología.

Con esta reforma se crean nuevos centros. Fumec por medio de Innovec ofrece el desarrollo de estos programas, impulsados con el financiamiento del gobierno federal que proporciona el 50% del mismo, en tanto que el gobierno estatal el 50% restante. El reto: combatir estereotipos y trabajar fuertemente para lograr la ecuación I+D+i. De acuerdo con OCDE, México ocupa el lugar número 40 en el ranking mundial en desarrollo de tecnología e innovación, en este sentido, el especialista afirma que el principal reto es evitar caer en estereotipos, impulsar ideas originales y creer en el talento mexicano. Asimismo, considera que es prioridad que el tecno Pyme posicione su marca dentro del mercado internacional, pues "la internacionalización significa una gran oportunidad, pero también un gran compromiso. Una empresa necesita estudiar e interactuar con personas que se manejen en otros mercados para conocer sus oportunidades de crecimiento, pero también sus deficiencias, a fin de ajustarse a las necesidades del mercado extranjero". "Los mexicanos tenemos un gran potencial en el mercado tecnológico, pero debemos creer que podemos hacer bien las cosas".

### Situacion Actual

La nueva reforma educativa, pretende elevar el nivel de la educación, es excelente esta propuesta, solo que hay un punto que falta evaluar. " Los padres de familia " con toda la historia redactada anteriormente donde observamos que cada etapa de la historia la educación ha sido dirigida de acuerdo a los gobernantes en turno, y al contexto internacional, así como a los sindicatos, considero que no podemos culparlos el 100%, ya que el principal apoyo para un estudiante es en casa, los profesores no podrán hacer nada si tienen estudiantes con hambre, con traumas psicológicos, etc. Cuando un alumno se encuentra en un ambiente hostil, donde los docentes están descontentos y la sociedad critica su actuar, el desempeño del estudiante y maestro es menos exitoso, por el contrario, si se encuentran en un entorno positivo, generan relaciones de confianza, transparencia, estables, permite entonces que la educación sea exitosa y el desarrollo sustentable para la educación.

### **CONCLUSION**

Como conclusión, para lograr un crecimiento concatenando, educación, responsabilidad social e innovación se debe tener una coordinación con políticas económicas y sociales y políticas educativas, para obtener un capital humano calificado y ser congruente con las exigencias de la estructura productiva y la demanda del sector privado. La batalla por una buena educación es tarea de todo el pueblo Mexicano y, para ello tenemos que trabajar todos en conjunto, como lo observamos anteriormente la historia nos dice que cada gobierno ha propuesto un modelo de educación diferente de acuerdo a lo que se cree más conveniente en el contexto político, internacional etc., Pero los padres, la familia tenemos la responsabilidad y la obligación que a pesar de cada sexenio cambien políticas educativas, seamos guías para la buena educación de nuestros hijos. La reforma va permitir la construcción de bases sólidas para que los niños al incorporarse a la sociedad tengan una visión de un mundo competitivo, globalizado, creativo, innovador y tendrán un esquema bien diseñado de la responsabilidad social con ellos mismos, con su medio ambiente y su propio país.

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# **FACTORES QUE IMPACTAN LA COMPETITIVIDAD DE EMPRESAS CONSTRUCTORAS DE VIVIENDAS EN MEXICALI, BAJA CALIFORNIA, MÉXICO**

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## **RESUMEN**

*La presente investigación es sobre las Micro, Pequeñas y Medianas Empresas, dedicadas a la construcción de viviendas en Mexicali, Baja California. Es un estudio de tipo descriptivo en el cual se identifican los factores que impactan la competitividad de las citadas empresas. Las variables estudiadas son la gestión estratégica y la competitividad. En la gestión estratégica se estudian la planeación, la organización, la dirección y el control. En la competitividad se estudian los distintos propulsores de la competitividad, las oportunidades, las fortalezas, las debilidades y las amenazas de las empresas. El propósito de este estudio es proporcionar información actualizada a los empresarios que pretenden establecer una empresa de este tipo, para que tomen medidas precautorias y las consideren en su plan de negocios. También se pretende que este estudio sea de utilidad para que los empresarios que actualmente tienen una empresa constructora puedan establecer un plan económico administrativo eficiente. Para lograr el propósito anterior, se entrevistan encargados de la Cámara Mexicana de la Industria de la Construcción en Mexicali, y se estudia una muestra no probabilística de 25 empresas constructoras de esta localidad. Los datos obtenidos se analizan a través de estadística descriptiva. Los resultados del estudio permiten plantear conclusiones.*

**PALABRAS CLAVE:** Competitividad, Empresas Constructoras

## **FACTORS THAT IMPACT THE COMPETITIVENESS OF HOME CONSTRUCTION BUSINESSES IN MEXICALI, BAJA CALIFORNIA, MEXICO**

### **ABSTRACT**

*This research is about the Micro, small and medium-sized enterprises, engaged in the construction of housing in Mexicali, Baja California. It is a descriptive study which identifies the factors that impact the competitiveness of these quoted companies. The variables studied include strategic management and competitiveness. Strategic management focuses on planning, organization, direction and control of the businesses. Competitiveness explores different propellers of competitiveness, opportunities, strengths, weaknesses and threats from the companies. The purpose of this study is to provide up-to-date information to entrepreneurs seeking to set up a business of this type, so that they may take precautionary measures and consider them in their business plan. It is also intended that this study will be useful so that employers who currently have a construction company can establish an efficient administrative economic plan. To achieve the previous purpose, interviews to managers of the Mexican*

*Chamber of the industry of construction in Mexicali are done, and a non-probability sample of 25 local construction firms is studied. The data obtained are analyzed through descriptive statistics. The results of the study allow to draw some conclusions.*

**JEL:** M10

**KEYWORDS:** Competitiveness, Construction Business

## INTRODUCCIÓN

Dadas las condiciones económicas de incertidumbre que se presentan en la actualidad en México, las empresas nacionales han tenido que establecer medidas que permitan sostener su crecimiento y, en algunos casos, permitir su subsistencia; sin embargo, tratándose de las micro, pequeñas y medianas empresas (MIPYMES), estas condiciones del mercado producen un alto riesgo de generar la desaparición de ellas. A decir de Horcasitas (2001) en la industria de la construcción al igual que en cualquiera de los sectores productivos en México, participan empresas familiares, las cuales nacen, se desarrollan y en ocasiones desaparecen sin alcanzar sus objetivos planteados a largo plazo, con la consecuente pérdida de recursos económicos, humanos y tecnológicos. Según datos proporcionados por el Instituto Nacional de Estadística Geografía e Informática [INEGI] (2011), la población total de empresas constructoras en México era en 2009 de 4363, mientras que según INEGI (2013), la población total de empresas constructoras en México en 2011 descendió a 3594, lo que refleja una disminución de 769 empresas. Es decir, hubo una disminución de 18% con respecto al año 2009.

El cierre de estas empresas pone de manifiesto que existen factores que inciden en su permanencia en el mercado. Por tanto resulta evidente que existe la necesidad de identificar estos factores para que las citadas MIPYMES puedan estar preparadas para anticiparse a estas problemáticas de una manera efectiva.

Las causas de esta mortandad de empresas podrían ser muy variadas. Factores tanto económicos como administrativos podrían haber repercutido. Según datos de la Cámara Mexicana de la Industria de la Construcción [CMIC] (2013), el índice de la actividad de la construcción ha registrado una variación porcentual real de 5.4 en (enero-marzo) 2012 a -2.3 en (enero-marzo) 2013. El citado organismo señala que esta disminución “fue reflejo de una caída en la demanda de materiales de construcción” (párr.1). Por otra parte la falta de una planeación estratégica de las empresas que conforman la industria de la construcción, puede también dar pie a la desaparición de las mismas. Al respecto, Quijano, Magaña y Argüelles (2013) señalan que...

El 90.3% de los socios fundadores han alcanzado una licenciatura como nivel máximo de estudios, donde predomina la profesión de ingeniero civil, no aplican la administración estratégica en sus empresas, lo que puede originarse de un conocimiento mínimo sobre administración empresarial (p.13).

Resulta evidente que la falta de una filosofía, misión, visión y objetivos que dirijan los pasos de las empresas constructoras puede llevarlas a una baja competitividad y eventualmente al colapso, pues no les permite prever los efectos de los diversos cambios económicos, que repercuten directamente en sus costos y gastos administrativos, afectando en mayor grado a las MIPYMES. Dado lo anterior, el presente trabajo se realiza con el propósito de proporcionar información actualizada a los empresarios que pretenden establecer una empresa de este tipo, para que tomen medidas precautorias y las consideren en su plan de negocios. Asimismo se pretende que este estudio sea de utilidad para que los empresarios que actualmente tienen una empresa constructora

puedan establecer un plan económico administrativo eficiente. El estudio se presenta a través de una sección de revisión literaria en donde se retoman algunas publicaciones sobre gestión estratégica, sobre competitividad y sobre los propulsores de la competitividad. Asimismo se presenta un apartado de metodología en donde se describen los sujetos de estudio, así como los materiales utilizados y el procedimiento empleado. Finalmente se presentan los resultados y conclusiones derivados del estudio.

## REVISIÓN LITERARIA

Para comenzar este recuento se inicia por definir qué son las micro, pequeñas y medianas empresas (MIPYMES) dedicadas a la industria de la construcción. A decir de INEGI (2013) son... la unidad económica y jurídica que bajo una sola entidad propietaria o controladora se dedica principalmente a la ejecución de obras de construcción, tales como: edificación residencial, ya sea vivienda unifamiliar o multifamiliar; a la edificación no residencial, como naves y plantas industriales, inmuebles comerciales, institucionales y de servicios; a la construcción de obras de ingeniería civil, como suministro de agua, petróleo, gas, energía eléctrica, telecomunicaciones, urbanización, puentes, carreteras, presas, vías férreas, centrales eléctricas y puertos; a la realización de trabajos especializados, como cimentaciones, montaje de estructuras prefabricadas, trabajos de albañilería, instalación en construcciones de equipos y materiales prefabricados, acabados en edificaciones, demolición, relleno de suelo, movimientos de tierra, excavación, drenado y otras preparaciones a los suelos (p. 3).

Sobre el tema de las MIPYMES dedicadas a la industria de la construcción se han realizado algunas investigaciones previas. Se encontró el estudio realizado por Quijano, Medina y Argüelles (2013) en la ciudad de Campeche, quienes comentan que para que las empresas logren sus objetivos, necesitan establecer planes estratégicos que les permitan integrarse al constante cambio empresarial que hoy día viven las empresas, los investigadores realizan un estudio sobre el nivel de conocimientos que poseen los propietarios de empresas constructoras familiares sobre administración estratégica y llegan a la conclusión de que los empresarios no elaboran planes estratégicos de negocios por lo que no cuentan con metas y objetivos definidos. Otro estudio realizado sobre el tema en comento, fue el llevado a cabo por Morales y Blanco (2007) el cual tuvo como objetivo determinar las necesidades y proyectos de infraestructura en las empresas constructoras, su financiamiento y las decisiones de las mismas. Los autores de este estudio llegaron a la conclusión de que no existe un predominio de los criterios técnicos y económicos en materia de infraestructura prevaleciendo los criterios políticos con los que se toman determinaciones que afectan gravemente la visión de la infraestructura que necesita el país.

Así también se revisó el estudio realizado por Gaytán (2003) sobre las grandes empresas constructoras de Monterrey en México, el cual es un estudio de tipo no paramétrico de consistencia en las determinantes de la productividad. El objetivo del estudio fue “determinar si las empresas constructoras grandes en el área metropolitana de Monterrey son consistentes entre sí al determinar la importancia de los diversos factores que se relacionan con la productividad (calidad, tecnología, administración y los recursos humanos)” (p.1). Algunas conclusiones a las que se llegaron en este estudio fueron que las empresas constructoras más importantes de Monterrey si son consistentes al considerar qué factores son importantes para la productividad, entre los que se encontraron “calidad, tecnología, recursos humanos y administración” (p. 61).

### Gestión Estratégica

La revisión de investigaciones previas realizada, dejó claro que las empresas requieren establecer planes estratégicos que las ayude a sobrellevar el vertiginoso y competitivo mundo empresarial. Sobre la gestión estratégica se encontró que De Gregorio (2003) afirma que... el principio que guía la gestión estratégica de la organización es el de maniobrar en el espacio delimitado por las oportunidades que facilita el entorno y las capacidades de la organización. El margen de maniobra incluye tanto la adaptación de la organización a su entorno como la capacidad de la organización para modificarlo. De esta manera, la capacidad que las organizaciones tengan para adaptarse a su cambiante entorno determina su supervivencia. Al hablar de las organizaciones, De Gregorio (2003) señala que “las organizaciones competitivas—no tan sólo en el sentido de mercado— destacan por su capacidad para definir con claridad sus finalidades y por implicar a todos sus miembros en su consecución” (p. 11). En el mismo sentido, Betancourt (2006) comenta que “Es importante señalar que la Gestión Estratégica es realmente una habilidad y una responsabilidad que debe poseer cada miembro de la organización en función gerencial” (p.27). De Gregorio (2003) precisa que la organización debe ser capaz de definir sus fortalezas y debilidades, o de lo contrario no podrá diferenciarse respecto de otras ofertas; he ahí la importancia de la realización de un diagnóstico interno. El antes citado autor destaca que “el contraste entre las capacidades de la organización y el análisis del entorno delimitará el espacio donde se deberán determinar las finalidades” (p. 15). De esta manera se facilita la estructuración de la organización y también su gestión. A partir del conocimiento de sus capacidades y del análisis de su entorno y mediante la gestión estratégica, la organización puede definir y sintetizar claramente sus finalidades, tomando en cuenta los cambios de su entorno. Este dinamismo de las finalidades fijadas supone una adaptación a las nuevas realidades que se presenten. Betancourt (2006) analiza dos estrategias que se requieren aplicar en la organización: las estrategias adaptativas y las estrategias anticipativas. De las primeras comenta que son aquellas que le permiten sobrevivir a la organización, pues suponen un mecanismo de reacción al entorno. De las segundas comenta que son estrategias que permiten a la organización ser competitiva, pues suponen la realización de procesos de anticipación a los cambios del entorno. Por tanto, Betancourt (2006) define a la gestión estratégica como “Arte y/o ciencia de anticipar y gerenciar el cambio, con el propósito de crear permanentemente estrategias que permitan garantizar el futuro del negocio” (27).

### Competitividad

Aunque podría pensarse que la competitividad es un fenómeno reciente ligado a la globalización, a decir de Hernández Laos (2000), se han encontrado como sus antecedentes el concepto de ventaja absoluta propuesto por Adam Smith en 1776 y a la teoría de la ventaja competitiva propuesta por David Ricardo en 1887. Con el transcurso del tiempo se ha buscado definir qué es competitividad, sin embargo a decir de Hernández Laos (2000), “no existe una definición universalmente aceptada de competitividad” (p. 23). El *World Economic Forum* a través del *Global Competitiveness Report*, un indicador de competitividad muy difundido internacionalmente, ha definido a la competitividad como “el grupo de instituciones, políticas y factores que determinan el nivel de productividad de un país.” (Sala-I-Martin, Blanke, Hanouz, Geiger y Mia, 2009, 4). Algunos otros estudiosos del tema han definido a la competitividad como “el motor del crecimiento, progreso económico y social” (Banco Interamericano de Desarrollo, 2001).

Hernández Laos (2000) identifica tres elementos existentes en las definiciones de competitividad “a) mantener —o acrecentar— la participación en el mercado; b) sin reducir utilidades; y c) operar en mercados abiertos y competidos” (p. 23). Asimismo el antes citado autor distingue dos tipos

de competitividad a nivel nacional, la del orden productivo y la del orden financiero. La primera “refleja la capacidad del país para competir efectivamente con su producción local de bienes y servicios vis a vis la oferta externa, tanto en los propios mercados como en el exterior” (Hernández Laos, 2000, p.40). La competitividad financiera por su parte “refleja la capacidad del país para atraer capital del exterior y retener al capital local dentro de las propias fronteras” (Hernández Laos, 2000, p.40). Por su parte la Organización para la Cooperación y Desarrollo Económico [OCDE] (2007) ha señalado que...

Las economías regionales dependen de la interacción entre diferentes factores. Algunos de estos factores son: la base de los recursos naturales, las infraestructuras físicas, el medioambiente, las empresas existentes y emergentes y, la capacitación de la población (p. 22).

En la actualidad, México ofrece a la industria mundial ventajas competitivas muy importantes, tales como bajos costos de fabricación, transporte y distribución eficiente como resultado de su ubicación estratégica, así como excelentes condiciones para elevar la calidad de la producción. La competitividad de las empresas mexicanas ha ido en aumento. Sin embargo, “según Porter, las naciones registran condiciones competitivas sólo en algunos sectores, en los cuales tienen éxito exportador y muestran condiciones dinámicas de productividad y eficiencia” (Hernández Laos, 2000, p. 22). Vistas de esta manera las naciones, se puede afirmar que nunca son competitivas de manera general, sino sólo en partes.

Según Deloitte (2010) existen diez propulsores en la competitividad manufacturera, los cuales reflejan la interacción esencial entre las fuerzas del mercado y gubernamentales. Los propulsores son: 1) innovación impulsada por talento; 2) costo de mano de obra y materia prima; 3) costo y políticas de energía; 4) sistemas económicos, comerciales, financieros y fiscales; 5) calidad de la infraestructura física; 6) inversión gubernamental en manufactura e innovación; 7) sistema jurídico y normativo; 8) red de proveedores; 9) dinámica local de negocios; 10) calidad y disponibilidad de la atención médica. Según la antes citada fuente, la innovación impulsada por el talento, se refiere a la calidad y a la disponibilidad de grupos de expertos en el país. Los grupos incluyen trabajadores capacitados, científicos, investigadores, ingenieros y maestros, quienes, en conjunto tienen la capacidad de una innovación continua, de lograr una mejora en la eficiencia de la producción.

Los costos de mano de obra y materia prima son dos factores importantes de producción, que incluyen todos los costos de desarrollo, cumplimiento normativo y prestaciones a los empleados, junto con el costo total de los materiales, que incluye costos de logística y de obtención de la materia prima. Este propulsor sigue siendo vital para la competitividad de la industria manufacturera. El costo y políticas de energía es también un propulsor importante en la actualidad. Así también en los próximos años el liderazgo particularmente en energía limpia y sustentable, será un componente destacado de la competitividad manufacturera de un país. Los sistemas económicos, comerciales, financieros y fiscales realizan un papel muy importante. Es evidente que la normatividad y políticas adecuadas en torno a sistemas fiscales, comerciales, de banca central y financieros en el ámbito corporativo, propician el clima de negocios necesario para que los sectores industriales de un país se desarrollen.

La calidad de la infraestructura física es otro propulsor de la industria de los países, pues se encuentra estrechamente vinculada con la calidad de su infraestructura física para el comercio. Así la disponibilidad eficiente en la transmisión de energía e información es un propulsor para que se integre el mercado local y para que éste se integre con mercados internacionales. La

inversión gubernamental en manufactura e innovación promueven la generación y difusión de conocimientos y ejercen un fuerte y positivo impacto en la competitividad a largo plazo del sector manufacturero. Aquí se incluyen por tanto, las inversiones gubernamentales en ciencia y tecnología, así como el apoyo a instituciones dedicadas a la investigación. Así también Deloitte (2010) sostiene que un sistema jurídico y normativo ejerce una influencia positiva en la productividad y eficiencia de las operaciones, pero precisan que en el mismo sentido, “un sistema jurídico y normativo complejo y gravoso, con altos costos de cumplimiento o una protección deficiente a la propiedad intelectual crea un obstáculo a la competitividad del sector manufacturero” (p. 12).

La red de proveedores es otro propulsor que contribuye de manera muy significativa al valor agregado del sector manufacturero. Los proveedores actualmente son de gran importancia como activos esenciales para la compañía manufacturera, pues promueve procesos que expanden la colaboración y el trabajo conjunto entre proveedores altamente calificados y fabricantes. La dinámica local de negocios es un propulsor que en años recientes cobra vital importancia para la industria manufacturera, dado el ambiente de incertidumbre actual. Para tener éxito, no sólo se requiere sobrevivir, sino también buscar de manera proactiva la eficiencia y la productividad, así como la innovación, elevando el nivel para la entrada de competidores futuros. Finalmente Deloitte (2010) señala que la calidad y disponibilidad de la atención médica es otro propulsor para la competitividad de la industria manufacturera, pues es esencial para que la fuerza laboral sea eficiente y productiva. Se ha visto que el ausentismo ocasiona pérdidas y una fuerza laboral inadecuada, así como un obstáculo para la competitividad.

## METODOLOGÍA

Es un estudio de tipo descriptivo en el cual se identificaron los factores que impactan la competitividad de las empresas constructoras de vivienda. Los sujetos de estudio fueron las empresas constructoras de vivienda ubicadas en Mexicali, Baja California. Se tomó una muestra no probabilística de tipo por conveniencia. Se realizó una encuesta a 25 empresas que aceptaron participar en este estudio. Las variables estudiadas son la gestión estratégica y la competitividad. En la variable gestión estratégica se estudiaron dimensiones como la planeación, la organización, la dirección y el control. En la variable competitividad se estudiaron dimensiones como los distintos propulsores de la competitividad, las fortalezas, oportunidades las debilidades y las amenazas de las empresas. Se realizó una revisión documental sobre el contexto de la industria constructora y de los estudios previos realizados sobre el tema en cuestión. Posteriormente se diseñó y aplicó un instrumento de investigación conformado por 41 preguntas, de las cuales 40 fueron preguntas cerradas dicotómicas y de opción múltiple. Asimismo se incluyó una pregunta abierta la cual dio pie a una entrevista, y de esta manera se pudo obtener información más amplia sobre la percepción de los encuestados. La encuesta se realizó de manera telefónica y personal, durante los meses de octubre y noviembre de 2013. Los datos se procesaron a través del programa *Statistical Package for the Social Sciences* (SPSS) y se analizaron a través de estadística descriptiva, aplicando medidas de tendencia central, como lo es la media. Con los resultados obtenidos se establecieron algunas conclusiones.

## RESULTADOS

Los resultados de la presente investigación se presentan de acuerdo a ocho categorías de análisis, a saber: planeación, organización, dirección, control, fortalezas, oportunidades, debilidades y amenazas.

### Planeación

Los resultados obtenidos a través de la encuesta realizada a empresas constructoras ubicadas en Mexicali, Baja California, mostraron que 88% cuenta con una filosofía propia y que el 88% aplica esta filosofía en sus actividades cotidianas. El 88 % manifestó que todos los empleados conocen su filosofía. El 84 % de los encuestados manifestaron que cuentan con una misión y 72 % dijo que su misión es conocida por sus empleados. El 68 % expresó que todos sus empleados buscan alcanzar la misión de la empresa. Por su parte 72 % respondió que la constructora cuenta con una visión. El 60% manifestó que todos sus empleados conocen la visión de la empresa y el 76 % dijo que la empresa verifica el logro de la misma. Asimismo 88 % de los encuestados manifestaron que cuentan con objetivos definidos. El 76 % dijo que verifica el logro de sus objetivos y 72 % manifestó que el objetivo general de la empresa es conocido por todos sus empleados.

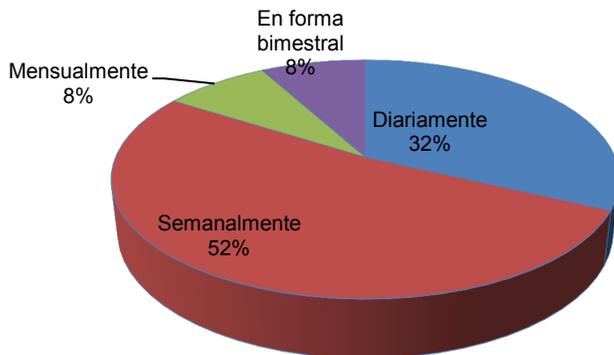
### Organización

En cuanto a su organización se obtuvo que 76 % contestó que la estructura organizacional de la empresa se encuentra definida en un organigrama. En tanto que 76 % manifestó que todos los empleados conocen la estructura organizacional de la empresa y el 84% expresó que todos sus empleados siempre respetan esta estructura organizacional. El 48 % manifestó que la empresa cuenta con un manual de funciones y el 84 % expresó que todos sus empleados conocen sus funciones. En congruencia con lo anterior, 88 % dijo que todos sus empleados cumplen con sus funciones.

### Dirección

El liderazgo ejercido en más de la mitad de las empresas encuestadas es autocrático, pues 56 % de los encuestados manifestó que la comunicación al interior de la empresa se da sólo de manera descendente. Esto podría significar que existe poca participación de los empleados en la toma de decisiones y en la consecución de las finalidades de la empresa. Sin embargo, se observa que para una gran mayoría el liderazgo se realiza buscando motivar a sus empleados, ya que 32% expresó que los directivos de la constructora consultan frecuentemente a los empleados para la toma de decisiones. El 76% manifestó que otorga beneficios adicionales a los estipulados por la Ley para motivar a sus empleados. El 68% manifestó que el principal medio por el que se comunica la gerencia de la constructora con sus empleados es la comunicación móvil, seguida por el correo electrónico con un 12%, altavoces internos con un 8% , de otras maneras como por ejemplo de manera personal verbal 8% y memorándums con un 4%. El resultado anterior no resulta consistente con la respuesta dada a la pregunta en torno a la periodicidad con que se reúne la gerencia con sus empleados, a la cual 52% de los encuestados contestó que lo hace semanalmente (Ver Figura 1).

Figura 2: Periodicidad Con Que Se Reúne la Gerencia con Sus Empleados



*En esta figura se muestra que en la mayoría de las empresas encuestadas existe una comunicación frecuente entre la gerencia y sus empleados.*

Si 32% de los encuestados se reúne diariamente y 52% lo hace cada semana, entonces el principal medio por el que se comunica la gerencia de la constructora con sus empleados debería ser el personal verbal.

Los resultados obtenidos dejaron claro que existe una estrecha comunicación entre los directivos de la empresa y sus empleados, lo anterior se confirmó ya que 56 % de los encuestados dijo que los directivos fomentan la participación de sus empleados en el logro de los objetivos de la empresa. Lo anterior también pone de manifiesto la existencia de un liderazgo democrático o participativo. El liderazgo democrático participativo resulta congruente con la existencia de empleados motivados para permanecer en la empresa. En este caso se observó que 64 % considera que sus empleados se encuentran siempre motivados para permanecer en la empresa. El 92 % manifestó que el factor que más motiva a sus empleados para desempeñar un mejor trabajo es el otorgamiento de beneficios económicos, como bonos, becas y demás.

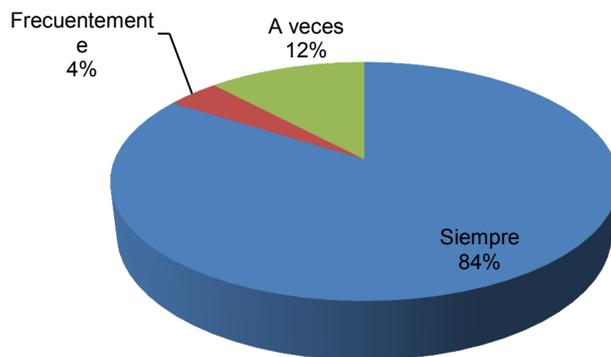
### Control

En relación a los controles operacionales que realiza la empresa, 52 % considera que siempre se lleva a cabo un control diario de las actividades realizadas por los empleados de cada área (Ver figura 2).

Asimismo 44% dijo que el encargado de vigilar la obra siempre elabora un reporte diario de incidencias.

Figura 2: Periodicidad Con Que El Área de Recursos Materiales Monitorea la Proveeduría de Material

de Insumos Necesarios Para la Actividad Diaria de la Empresa



En esta figura se observa que 12% de los encuestados manifestó monitorear sólo a veces la proveeduría de material e insumos, lo que puede provocar serios problemas en la actividad diaria de la empresa.

En cuanto a controles estratégicos, 56 % mencionó que la empresa aplica un sistema de monitoreo de logro de su visión, misión y objetivos. En tanto que 76 % de las empresas encuestadas dijo que aplica un sistema de control para el logro de los objetivos de planeación financiera. Los resultados en este rubro revelan que si bien en la mayoría de las empresas se realizan controles estratégicos, esta resulta una tarea perfectible. En cuanto a controles tácticos, 68% contestó que la empresa aplica un sistema de evaluación de desempeño de sus empleados. El 84% dijo que el área de recursos materiales monitorea la proveeduría del material e insumos necesarios para la realización de la actividad diaria de la empresa (Ver Figura 2). Asimismo 80% de los encuestados manifestó que el área contable siempre lleva controles sobre la fluidez de los recursos financieros necesarios para el trabajo diario de la empresa. Mientras que 68 % expresó que el área de obra y supervisión siempre aplica controles de diseño de proyectos y avances de obra.

*Fortalezas:* A decir de los encuestados la fortaleza más importante de la empresa es el prestigio, pues 64% así lo manifestó, seguida por experiencia 20%, equipo 12% y otra 4%.

*Oportunidades:* El 60% de los encuestados manifestó que las políticas de obra pública fomentan el desarrollo de su empresa constructora. El 76 % de los encuestados contestó que los proveedores de su empresa representan una oportunidad por su cercanía.

*Debilidades:* Los encuestados manifestaron que la debilidad más crítica de la empresa es la solvencia económica, pues 44% así lo manifestó. El 20% respondió que su debilidad más crítica es el prestigio, mientras que para el 12% de los encuestados es el equipo y para un 20% existen otras debilidades.

*Amenazas:* El 72% de los encuestados considera que la situación económica imperante en el país no impulsa el crecimiento de su empresa. El 76% señaló que las leyes fiscales no propician el crecimiento de su empresa. En tanto que 40% manifestó que las políticas de obra pública no fomentan el desarrollo de su empresa.

## CONCLUSIONES

La encuesta y entrevistas realizadas a los gerentes de las empresas constructoras, permitieron establecer las conclusiones que a continuación se presentan: La gestión estratégica que se realiza en las empresas constructoras encuestadas es en términos generales adecuada. La revisión

literaria mostró que las empresas que desean ser competitivas deben definir con claridad sus finalidades e implicar a todos sus miembros en su consecución. En el apartado de resultados se mostró como el 88% de las empresas tienen sus objetivos establecidos y el 72% cuenta con una visión definida. En el mismo sentido se observó que 72% de las empresas manifestó que todos sus empleados conocen el objetivo general y 60% dijeron que todos sus empleados conocen la visión. Asimismo se pudo observar que 68% de las empresas manifestaron que todos sus empleados buscan alcanzar la misión de la empresa.

El liderazgo que realizan las empresas estudiadas resulta ser consistente con la competitividad, pues los resultados del presente estudio muestran que sí existe un liderazgo participativo en donde se toma en cuenta a los empleados en la toma de decisiones y donde se tiene una comunicación muy frecuente con ellos, lo que favorece el involucramiento de todos en la consecución de las finalidades de la empresa.

Los controles estratégicos, tácticos y operativos resultan ser tendientes hacia la competitividad, sin embargo se observa que este rubro puede ser un área de oportunidad para las empresas. Se pudo observar que sólo 56% de las empresas dijo aplicar un sistema de monitoreo de logro de su visión, misión y objetivos; sólo 52 % manifestó que siempre se lleva a cabo un control diario de las actividades realizadas por los empleados de cada área; y únicamente 44% dijo que el encargado de vigilar la obra siempre elabora un reporte diario de incidencias

Los factores que impactan la competitividad de las empresas materia de estudio resultan ser diversos. El estudio mostró que las empresas constructoras en primer lugar consideran a la competencia como factor que impacta la competitividad de sus empresas; sobre todo la competencia desleal impacta de manera negativa, pues en ocasiones el abaratamiento al que algunas constructoras recurren sacrificando la calidad, provoca que los clientes por ahorrar un poco las prefieran, dejando a algunas empresas fuera del mercado. Por otro lado, la existencia en la región de constructoras con trayectoria más larga en el mercado, genera una fuerte competencia, con la consecuente preferencia dentro de la obra pública y privada. De ahí que para algunas empresas el prestigio se convierte en su principal fortaleza o su principal debilidad, como se observó en el apartado de resultados.

En segundo lugar consideraron como un factor muy importante al sector público, pues reconocen que es el motor que los mueve. Así lo reconoció 60% de los encuestados, al manifestar que las políticas de obra pública fomentan el desarrollo de su empresa constructora. Lo anterior cobra sentido si recordamos que uno de los propulsores de la competitividad es precisamente un adecuado sistema jurídico y normativo, pero como se mencionó en la revisión literaria, cuando este sistema se torna complejo y gravoso, con altos costos de cumplimiento o una protección deficiente a la propiedad intelectual se convierte en un obstáculo en lugar de propulsor de la competitividad.

También consideraron los entrevistados que un factor que impacta directamente a su competitividad es el factor económico. En el apartado de resultados se pudo observar que para un 44% de los encuestados la debilidad más crítica de la empresa es precisamente la solvencia económica y que para un 72% la situación económica imperante en el país no impulsa el crecimiento de su empresa. Los entrevistados mencionaron que si se quiere ser competitivo, hay que ofrecer un buen producto, para ello se requieren buenos materiales y esto conlleva a tener que lidiar con los altos costos de los mismos, con la consecuente disminución de sus utilidades. La creatividad y el buen manejo de recursos se torna, en consecuencia de vital importancia. Otro factor que impacta la competitividad de sus negocios, es la calidad del producto y del servicio especializado que ofrecen. A decir de los entrevistados el ofrecer trabajos de buena calidad

realizados con profesionalismo provoca que los clientes los prefieran. Sin embargo, reconocen que el bajo control de calidad de algunas empresas y su falta de visión, hace que los precios bajen en la industria de la construcción y disminuyan sus ganancias. Este factor está muy vinculado con otro factor que identifican, que es la experiencia. Los entrevistados consideraron que el tener experiencia en la construcción de vivienda impacta también en la competitividad, pues logra que los clientes los prefieran al ofrecerles un mejor servicio, al trabajar en tiempo y forma y al ofrecerles calidad y especialización de sus trabajadores.

Al llegar al término del presente estudio se hace la reflexión que el tema en comento presenta aún interesantes líneas de investigación. Futuras investigaciones podrán determinar cuáles han sido los problemas que han llevado a la quiebra a un gran número de empresas constructoras en los últimos años, o podrán identificar qué estrategias han puesto en práctica las empresas que aún se mantienen en el mercado, para poder sobrevivir, o tal vez describir las problemáticas que enfrentan las empresas pequeñas a diferencia de las empresas grandes. También sería interesante determinar si los factores que impactan la competitividad de las empresas constructoras son los mismos en todo el país.

### Limitaciones

Dentro de las limitaciones del presente estudio hay que resaltar, por una parte, que no existe un padrón de las empresas constructoras que se han ido a la quiebra, por lo que no fue posible entrevistarlas para poder ver las dos caras de la moneda. Asimismo se reconoce como limitante el que se tuvo que realizar un muestreo no probabilístico, ya que dadas las condiciones de criminalidad e inseguridad que imperan en México, no fue fácil que las empresas aceptaran dar información de su empresa.

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# CULTURA DE INNOVACIÓN EN LAS PEQUEÑAS EMPRESAS CONSTRUCTORAS DE PUEBLA, MÉXICO

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## RESUMEN

*La presente investigación es de tipo descriptivo, en el cual se realizó un estudio acerca de la percepción que tienen los administradores y/ o dirigentes de las pequeñas empresas constructoras ubicadas en Puebla México acerca de la innovación. A fin de caracterizar la variable innovación, como sustento teórico se analizaron diversos autores relacionados con el tema para después considerar algunos aspectos que fueron medidos a través de un cuestionario de 35 ítems en escala de likert a una muestra de 64 administradores de pequeñas empresas. El objetivo de la investigación fue analizar las percepciones que tienen los administradores, dirigentes o propietarios de las pequeñas empresas constructoras ubicadas en Puebla sobre la innovación y el desarrollo. Entre los hallazgos relevantes encontrados fue que los administradores consideran el área más importante para la innovación en de las pequeñas empresas constructoras es la de procesos.*

**PALABRAS CLAVE:** Innovación, Barreras de la Innovación, Pequeñas Empresas

## ABSTRAC

*This research is descriptive, in which we performed a study on the perception of administrators and / or managers of small construction companies located in Puebla Mexico about innovation. In order to characterize the variable innovation as theoretical support discussed various authors related to the topic and then considers some aspects that were measured via a questionnaire of 35 Likert scale items with a sample of 64 managers of small businesses. The objective of the research was to analyze the perceptions of administrators, managers or owners of small construction companies located in Puebla on innovation and development. . Among the relevant findings was that the administrators consider the most important area for innovation in small construction companies is the process.*

**KEYWORDS:** Innovation, Barriers to Innovation, Small Businesses

## INTRODUCCIÓN

Ante la acelerada ola de cambios, en las últimas décadas, como la apertura comercial entre las naciones, las empresas se encuentran inmersos en un contexto altamente competitivo, lo que está obligando a las mismas a replantear sus estrategias para poder cumplir con las expectativas que demanda el mercado nacional e internacional. En este contexto la innovación y desarrollo dentro de las pequeñas y medianas empresas en México, se ha convertido en una de las áreas prioritarias por considerarse como herramienta estratégica para optimizar su crecimiento y competitividad. Por lo tanto, la presente investigación tiene como objetivo; analizar la percepción que tienen los administradores, dirigentes o propietarios de las pequeñas empresas

constructoras ubicadas en Puebla México sobre la innovación. Dada la importancia de la pequeña y mediana empresa en México, debido a su valor colectivo con las micro empresas que suman el 99.8% de todas las empresas a nivel nacional y proporcionan el 72.1% de los empleos formales en México, aportando 52% del PIB de acuerdo a la Secretaría de Economía (SE) y el Instituto Nacional de Estadística y Geografía e Informática (INEGI).

La innovación y el desarrollo (i-d) es tema de estudio a partir de los primeros trabajos de Schultz (1953) y Griliches (1958) citados por Álvarez, et.al (2011:142). Desde entonces se ha generado un considerable volumen de trabajo empírico y teórico al respecto. En varios modelos teóricos recientes se ha atribuido un papel protagónico a la misma en el impulso de la productividad y, por ende, del crecimiento económico (Romer, 1990; Grossman y Helpman, 1991; Rivera-Batiz y Romer, 1991; Aghion y Howitt, 1992). En este contexto en México, Morales Estrella, Ruiz Heriberto y Corona Abraham (2003), abordan la experiencia de Japón sobre el desarrollo y la innovación, el caso de México en las manufacturas del Estado de Hidalgo. Guerra Pablo (2010), quien analizó las percepciones que tienen los dirigentes de las pequeñas y medianas empresas sobre innovación y desarrollo.

En este contexto la presente investigación está dividida en los siguientes apartados: en el primero trata de los aspectos teóricos de la innovación, tamaño e innovación, competitividad e innovación y pequeña empresa; en el segundo apartado se presenta el marco contextual del sector de la construcción en México; en el tercer apartado se presenta la metodología aplicada en este estudio; en el cuarto apartado se presentan los resultados del estudio empírico y por último las conclusiones.

## **REVISION LITERARIA**

### Conceptualización de Innovación

Al referirse sobre innovación tecnológica es sabido que trata de la transformación de ideas en nuevos y útiles productos y/o procesos, así como al mejoramiento tecnológico significativo de los ya existentes. Para realizar innovación, es necesaria la inversión en investigación, desarrollo, pruebas y mercadeo. La inversión a su vez debe promover otra clase muy importante de insumo, un insumo creativo y talentoso, el capital humano. Para Schumpeter (1912), citado por Guerra (2005: 246), consideró a la innovación “como el motor que dinamiza la economía en su trayectoria hacia el progreso constante”, y que el sistema económico tenía que basarse en la competencia y en la libertad, que éste no podía ser estacionario, que debía evolucionar hacia nuevos productos, hacia nuevas formas de producción, hacia lo que él denominó “el procesos de destrucción creadora”. El manual Oslo (OECD 2006), citado por Morales, et.al (2013:4), define a la innovación como “la introducción de un nuevo o significativamente mejorado producto (bien o servicio), de un proceso, de un nuevo método de comercialización o de un nuevo método organizativo en las prácticas internas de la empresa, la organización del lugar del trabajo o las relaciones exteriores”.

Resulta importante mencionar el concepto de innovación que presentan los investigadores Corona y Jaso (2005) que refiere, que las empresas abarcan tanto novedades como adaptaciones simples y complejas, de productos o ideas que se dirigen a un nuevo mercado. En un sentido amplio, la innovación está en todas partes, afirma Godin (2008), citado por Albornoz (2009:10) Está en el mundo de los bienes (tecnología) pero también en el mundo de las palabras: la innovación es discutida en la literatura científica y técnica, pero también en ciencias sociales como la historia, la sociología, la administración y la economía. La innovación es también una

idea central en el imaginario popular, en los medios y en la política pública. . En síntesis la función de Investigación y Desarrollo puede ser definida como una actividad productiva que apoya el crecimiento y el fortalecimiento de la empresa a través de beneficios tangibles y cuantificables. Una gestión que no sea efectiva, podría debilitar las oportunidades de permanencia y consolidación de la empresa en el mercado haciéndola perder participación en el mismo, lo cual la conduciría a disminuir sus ganancias y eventualmente a desaparecer.

### Tamaño E Innovación

La innovación se ha convertido en una importante variable empresarial estratégica. La necesidad de adaptarse a los cambios, e incluso generarlos a través de una política agresiva de innovación, la han convertido en una actividad determinante para la obtención de importantes ventajas competitivas. Esta circunstancia ha obligado a las organizaciones a introducir dicha variable dentro de sus planes estratégicos, de forma que permita la consecución de la necesaria competitividad para operar en el contexto actual. No obstante que los empresarios están conscientes de la necesidad de innovar, muchas de ellas encuentran grandes barreras al desarrollo de este tipo de actividades.

Esta situación se agrava en el caso de las pequeñas empresas, con reducida capacidad financiera y escaso personal calificado para llevar a cabo el proceso innovador. En este sentido, no se puede afirmar que las pequeñas empresas son menos innovadoras que las grandes, aunque sí podemos anticipar que su comportamiento es distinto en materia de innovación. Respecto a la relación entre el tamaño de empresa e innovación, se perfilan principalmente dos posturas. Por una parte están aquellos autores que, siguiendo una de las hipótesis planteadas por Schumpeter (1944) citado por González A. et al (1997: 94) y desarrollada posteriormente por Galbraith (1956), consideran que las grandes empresas presentan un comportamiento más innovador. De otro lado encontramos aquéllos que resaltan determinadas características de las pequeñas empresas que las hacen más adecuadas para la introducción de cambios. Su estructura organizativa flexible les permite experimentar y actuar como pioneras en la introducción de novedades tanto en el interior de la organización como en el mercado, (Quinn, 1986; Abernathy y Utierback, 1976; Fernández y Fernández, 1988).

Los diferentes esfuerzos que buscan establecer tipologías de las empresas innovadoras, se pueden ubicar en dos grupos (Perez H. 2008: 135):1) Basados en las encuestas de innovación y que usan análisis de cluster: a) Cessaratto y Mangano (1993) consideran únicamente los indicadores de innovación y realizan una caracterización de las empresas manufactureras en Italia.; b) Arundel, Paul, y Soete (1995) analizan los resultados de las encuestas a grandes empresas transnacionales europeas. Usan el análisis de cluster para clasificarlas con respecto a los indicadores de innovación y las fuentes de conocimiento; c) Arvanitis y Hollenstein (1988) analizan los datos de la Community Innovation Survey, de las industrias manufactureras Suizas y determinan tipos de innovación usadas: 2) Basado en encuestas de innovación y empleando modelos econométricos; a) Terziovski (2001), empleando los resultados de las Encuestas de Innovación de Australia para pequeñas empresa realiza un análisis factorial para extraer factores y a partir de éstos efectúa una regresión múltiple; b) Estrada y Terrés (2003) con base en los resultados de la encuesta de innovación de las empresas en Guanajuato construyen una variable denominada conducta innovadora y efectúan un análisis factorial para estimar un modelo logístico.

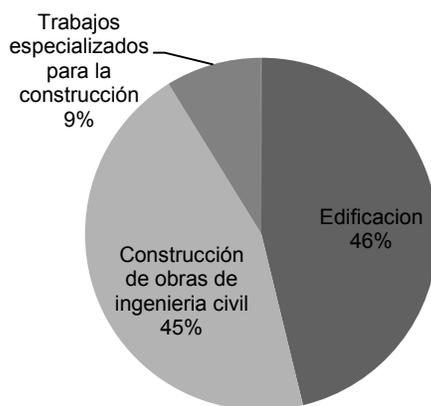
### La Competitividad y la Innovación

Para Schumpeter (citado por Morales, et.al.:4) competitividad es la capacidad y velocidad organizacional de aprender para innovar, por lo que innovación es la utilización productiva de un invento para lo cual nos menciona 6 tipos de innovaciones: a) Introducción de nuevos bienes o bienes sensiblemente diferenciados con nueva calidad.; b) Introducción de un nuevo método productivo; c) Apertura de un nuevo mercado; d) Nuevas fuentes de materias primas; e) Nuevas materias primas; f) Establecimiento de una nueva organización. En definitiva, nos encontramos en un entorno donde la evidencia de la globalidad de los mercados y los recursos es cada vez más notable, el fenómeno de la globalización junto con el paradigma tecno-productivo (C+I+D+i) ha puesto sobre el mismo terreno de juego a las empresas de todos tamaños y todos los lugares del mundo, al eliminarse las barreras económicas y los nichos geográficos. De tal forma, que el objetivo central de toda organización productora es la de hacer negocio a través de la generación de valor, donde la innovación junto con el conocimiento, la investigación y el desarrollo es determinante, para poder aportar al mercado productos, concepto y servicios nuevos, con alto valor agregado; lo que implica poner al consumidor siempre en el centro de nuestros planteamientos, desarrollos y evoluciones.

### La Industria Constructora en México

En este apartado se presentan datos estadísticas relevantes de la industria constructora en México proporcionados por el Instituto Nacional de Estadística, Geografía e informática (INEGI). Como se puede observar en el Figura 2, El valor de la obra construida por las empresas constructoras se concentró en Edificación con 46.2%, construcción de obras de ingeniería civil 45% y trabajos especializados para la construcción 8.8%..

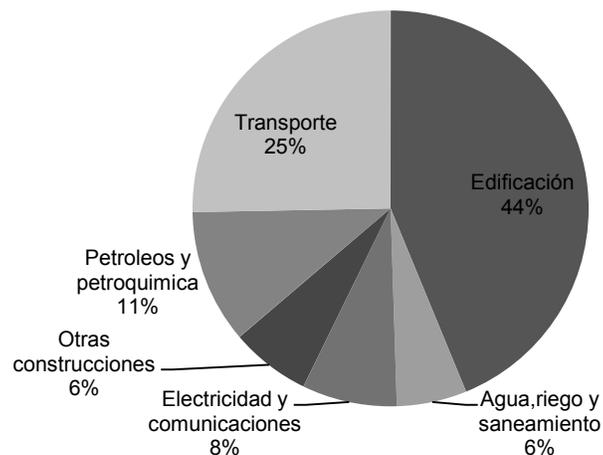
Figura 2: Composición de la Construcción Por Subsector, Durante Agosto 2013



*Esta figura muestra la distribución de la construcción por subsector en México en el cual se encuentran los trabajos especializados para la construcción, la construcción de obras de ingeniería y la que concentra una mayor participación es la edificación.*

Por tipo de obra, la edificación en general aportó como se puede ver en la Figura3, 42.9% del valor total, 24.8% , agua, riego y saneamiento 5.6% , electricidad y comunicaciones 7.6% Otras construcciones 8.4% y petróleo y petroquímica 10,7%.

Figura 3: Composición de la Construcción Durante Agosto 2013 Por Tipo de Obra



*Esta figura muestra la distribución de la construcción por tipo de obra destacando la edificación y el transporte representan en forma conjunta el 68% del valor total.*

## METODOLOGÍA

Esta investigación es de tipo descriptivo, en la cual se aplicó la investigación de documental para sustentar el marco teórico, conceptualizando la variable: innovación. Así como la investigación directa utilizando la encuesta para el estudio empírico Rojas Soriano (2008: 41). Para la recopilación de datos del estudio empírico; se utilizó un cuestionario con la finalidad de conocer la percepción que tiene los directores y /o dueños de las pequeñas empresas constructoras en Puebla, México, se diseñó un instrumento con 40 ítem en escala de Likert (1-5). Una vez diseñado el cuestionario fue necesario, antes de aplicar la encuesta, hacer una prueba piloto, que consistió en la aplicación de algunas encuestas al segmento de interés o grupo de estudio, a fin de verificar si el cuestionario se diseñó en forma correcta, así como estimar el tiempo de aplicación. Por lo tanto el cuestionario se aplicó primero a 10 directores de pequeñas empresas, encontrándose errores de semántica e interpretación que se corrigieron a la brevedad, eliminando 5 preguntas, por lo tanto el cuestionario que finalmente aplicado contenía 35 ítems. Se midió la fiabilidad del instrumento para lo cual se calculó Alpha de Cronbach utilizando el programa estadístico SPSS, de 0.884 que considera muy buena fiabilidad. La población objeto de estudio fue de en el Municipio de Tehuacán Puebla con datos del Instituto Nacional de Estadística Geografía e Informática (INEGI). La encuesta se aplicó a 64 pequeñas empresas.

## RESULTADOS

A continuación se presentan los resultados de la encuesta aplicada a 64 directores o dueños de las pequeñas empresas constructoras de Puebla, México.

Al preguntar, ¿Que lo motiva para ser innovador? Como se puede observar en la tabla 3, destacando para incrementar los ingresos, con media de 4,25 y desviación estándar 0.748, seguido de para maximizar el crecimiento del negocio con media de 4.17 y desviación estándar de 0.658 y el de menor promedio 2.15 y desviación estándar de 1.164 para tener un desafío.

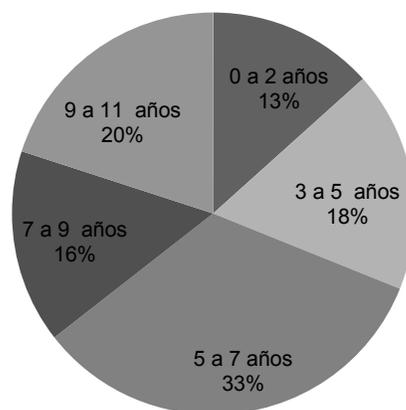
Tabla 3. Media y Desviación Estándar

Variable	Media	Desviación estándar
Para incrementar los ingresos	4,25	0.748
Para maximizar el crecimiento del negocio	4,17	0.658
Para incrementar las ventas y ganancias	4,04	1.155
Para ser más competitivos	3.47	1.070
Para dar un valor agregado a los productos	3,31	1.045
Para ser más eficientes	3,21	1.123
Para ser más productivos	3,21	1,012
Para tener reconocimiento público	3,03	1.056
Para tener un desafío	2,15	1.164
Otra	1,17	1,067

Esta tabla muestra, que para los encuestados lo que motiva a ser innovador es incrementar sus ingresos, con media de 4.25, en contraste con media de 2.15 para tener un desafío.

Al preguntar sobre el tiempo que han sido innovadores, como se puede observar en la Figura 4, el 33% de los encuestados respondió de 5 a 7 años, el 20% de 9 a 11 años, el 18% de 3-5 años, 13% de 0 a 2 años.

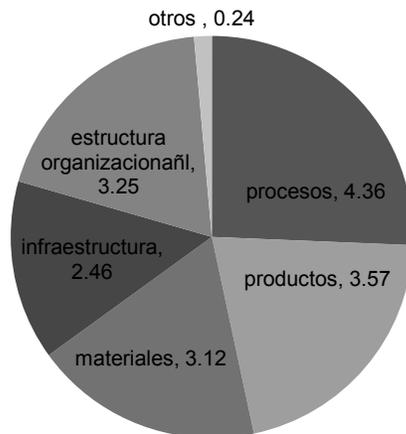
Figura 4: Años de Innovación



Esta figura muestra el tiempo en el que han sido innovadores los encuestados, el mayor porcentaje se encuentra entre 5 a 7 años, en contraste el 13% de 0 a 2 años.

Al preguntar sobre el área de más importancia para la innovación en su empresa, como se puede observar en la Figura 5, el promedio más alto corresponde a procesos de 4.36, seguido de producto con media de 3,57 como las más importantes.

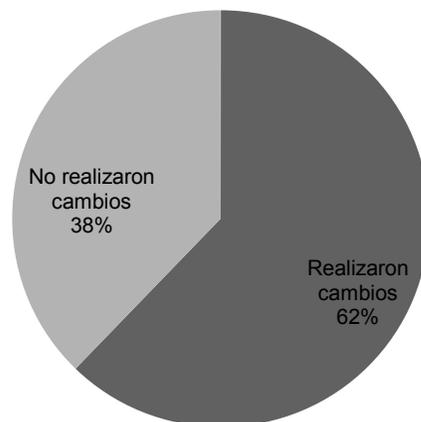
Figura 5: Áreas de Importancia Para la Innovación



*Esta figura muestra las áreas sobre las que consideran los encuestados en que se lleva a cabo la innovación, que es en procesos con una mayor media.*

Al preguntar sobre la situación de las empresas constructoras en cuanto a la realización de cambios en su estructura organizacional. Como se puede observar en la Figura 6, el 62% realizaron cambios en su estructura organizacional y el 38% no realizó ningún cambio.

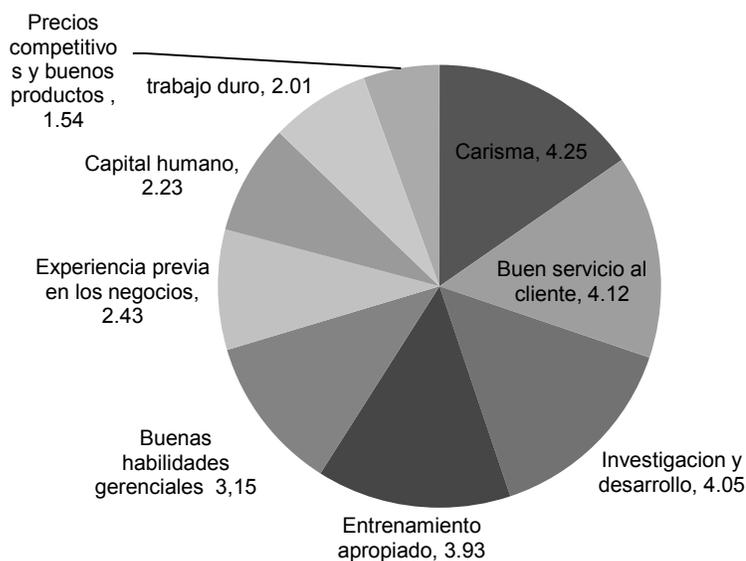
Figura 6: Cambios en la Estructura Organizacional



*Esta figura muestra si en las pequeñas empresas constructoras se han realizado cambios en su estructura organizacional*

Otra de las preguntas a los encuestados ¿Cuales son los factores que contribuyen para la innovación? Como se puede observar en la Figura 7., en las respuestas de los encuestados sobresale carisma con media de 4.25, seguido de buen servicio al cliente con media de 4,12 y con menor media de 1,54 precios competitivos y buenos productos.

Figura 7: Factores Que Contribuyen Para La Innovación



*Esta figura muestra que el factor que contribuye a la innovación en las pequeñas empresas constructoras es el carisma de los dirigentes.*

En lo que se refiere a los factores que contribuyen a la innovación, pudo observarse que la orientación al cliente es de interés en pequeñas empresas textiles, el carisma y el buen servicio al cliente es importante. Este se considera otro hallazgo importante ya que la mercadotecnia centrada en el cliente es un recurso de frecuente utilización en estas empresas. Al concluir el trabajo de campo pudo experimentarse que los administradores encuestados tuvieron la confianza en expresar su posición frente a la cultura de innovación sus respuestas nos muestran su percepción sobre lo que puede motivar como desmotivar la innovación en sus procesos operativos.

## CONCLUSIONES

Por último, en este apartado se discuten las principales implicancias teóricas y empíricas derivadas de la presente investigación. El objetivo que se planteó al inicio de esta investigación fue analizar la percepción que tienen los administradores, dirigentes o propietarios de las pequeñas empresas constructoras ubicadas en Puebla sobre la innovación y desarrollo, misma que se alcanzó como puede observarse en el apartado de resultados. En este sentido el desarrollo de esta investigación permitió apreciar la disponibilidad de los administradores y líderes de pequeñas empresas hacia la cultura de innovación, lo cual es consistente con el estado del arte (Morales et.al, 2003), (Lavia C., Otero B. Olazarán M.: 2011), la innovación es un elemento estratégico para detonar espacios territoriales competitivos. Por lo cual se sugiere que las pequeñas empresas constructoras impulsen las actividades de innovación como estrategia competitiva.

Por último, futuros trabajos podrían retomar esta investigación para abordar elementos que quedan pendientes de analizar, como la percepción de la cultura de innovación predominantes en el conglomerado de la micro, pequeña y mediana empresas (mipymes) del la industria de la construcción en el Estado de Puebla y en cada sub sector específico de actividad. O bien, se podría revisar y discutir la relación que se estudio en esta investigación, tomando como unidad de análisis cada sector o el tamaño de las empresas (micro, pequeñas o medianas); así como añadir variables de control, como el género de los líderes

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## **BIOGRAFÍA**

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# ANÁLISIS DE FORTALEZAS, OPORTUNIDADES, DEBILIDADES Y AMENAZAS EN EMPRESAS, COMO ESTRATEGIA DE CRECIMIENTO Y DESARROLLO

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## RESUMEN

*Esta investigación aborda el análisis de las fortalezas, oportunidades, debilidades y amenazas (FODA) de las micro, pequeñas y medianas empresas, como una estrategia administrativa recomendable para permanecer en el mercado y lograr un sano crecimiento y desarrollo. De acuerdo con los estudios realizados por diversos investigadores, nueve de cada diez empresas que se crean, no logran permanecer o sobrevivir el quinto año de existencia, de ahí la importancia de recomendar la aplicación de esta herramienta administrativa que permita a las empresas un sano crecimiento y además, ser competitivas. El presente estudio se desarrolló a través del método cuantitativo, es de tipo descriptivo, tiene como objetivo dar a conocer la importancia de aplicar el análisis FODA. Los sujetos de estudio fueron las micro, pequeñas y medianas empresas de Mexicali, Baja California, México, se determinó una muestra por conveniencia no probabilística, se entrevistaron a 65 empresarios quienes en forma voluntaria participaron. Se elaboró un instrumento de medición para recabar la información de campo, mismo que fue validado en su confiabilidad a través del programa estadístico alfa de Cronbach, la información obtenida se procesó mediante el programa Statistical Package for the Social Sciences (SPSS), se aplicó estadística descriptiva, los resultados permiten hacer recomendaciones.*

**PALABRAS CLAVES:** Análisis de Fortalezas, Oportunidades, Debilidades, Amenazas, Empresas

## ANALYSIS STRENGTHS, OPPORTUNITIES, AND THREATS WEAKNESSES IN BUSINESS, AS A STRATEGY FOR GROWTH AND DEVELOPMENT

### ABSTRACT

*This research addresses the analysis of the strengths, weaknesses, opportunities and threats (SWOT) of micro, small and medium enterprises, as a management strategy recommended to stay in the market and achieve a healthy growth and development. According to studies conducted by various researchers, nine out of ten companies created, do not remain or survive the fifth year of existence, hence the importance of recommending the implementation of this management tool that allows companies to healthy growth and also be competitive. This study was conducted through the quantitative method, is descriptive, and aims to raise awareness of the importance of*

*applying the SWOT analysis. The study subjects were the micro, small and medium enterprises in Mexicali, Baja California, Mexico, was determined non-probabilistic convenience sample, were interviewed 65 entrepreneurs who participated voluntarily. Developed a measurement instrument to collect field data, it was validated for reliability by Cronbach's alpha statistical program, the information obtained was processed using the Statistical Package for Social Sciences (SPSS) was applied statistical descriptive, the results can be recommended.*

**JEL:** M14

**KEY WORDS:** Analysis of Strengths, Weaknesses, Opportunities, Threats, Companies

## INTRODUCCIÓN

En la economía mexicana las micro, pequeñas y medianas empresas (MIPYMES), juegan un papel determinante para lograr un mayor crecimiento e incrementar el Producto Interno Bruto (PIB) del país. Sin embargo, Los constantes y sorprendentes cambios que sufren hoy en día los diferentes sectores económicos representan un reto para empresas e instituciones. En México la mayoría de las MIPYMES, utilizan una administración a nivel familiar basados en la experiencia del jefe de familia, quienes en la mayoría de los casos no se encuentran preparados para detectar los factores económicos internos y externos que repercuten e impactan su economía. De acuerdo con Ángeles (2007) las MIPYMES son una fuerza activa que apoya e impulsa el desarrollo económico de un país, organizadas en pequeños grupos de empresarios que unen sus esfuerzos para subsistir y participar con sus bienes y servicios en el mercado, a través de sus propios medios.

Estas empresas en la actualidad son las principales generadoras de empleo, además de contribuir con el pago de impuestos de acuerdo a lo establecido en las leyes tributarias, esto permite que el gobierno cuente con recursos económicos para satisfacer las necesidades de la población y mejorar el nivel de calidad de vida de los ciudadanos. Por consiguiente es necesario dar a conocer estrategias administrativas que ayuden a su permanencia y además coadyuven a que estas empresas sean más productivas y puedan competir en una economía globalizada. En la medida que se logre que las MIPYMES puedan crecer y desarrollarse, será el crecimiento y desarrollo de la economía mexicana y en consecuencia un mayor bienestar para la sociedad mexicana. Sin embargo, respecto de la sobrevivencia de la MIPYMES en México comenta Soriano (2005) que: “para Francisco Yañez (México) al cumplir 10 años, “solamente el 10% de las empresas maduran, tienen éxito y crecen”. De acuerdo con Cetro-Crece, también de México, “el 75% de las nuevas empresas mexicanas debe cerrar sus operaciones apenas después de dos años en el mercado. Para degerencia.com: “la experiencia demuestra que el 50% de las empresas quiebran durante el primer año de actividad, y no menos del 90% antes de cinco años”.

Por su parte Marker (2013) comenta que: “de acuerdo a las cifras difundidas por el Centro para el Desarrollo de la Competitividad Empresarial (CETRO-CRECE), sólo el 10% de las PyMEs mexicanas llegan a los diez años de vida y logran el éxito esperado, mientras que el 75% de las nuevas empresas del país fracasan y deben cerrar ...” Considerando las investigaciones anteriores, este estudio tiene como objeto dar a conocer los elementos esenciales que todo empresario debe analizar de su negocio, para que pueda tomar decisiones con base en el comportamiento real de las finanzas de su compañía. Por consiguiente, es necesario saber si ¿el empresario conoce y aplica el análisis FODA en apoyo a la permanencia y desarrollo económico de su empresa? El objetivo de esta investigación es recomendar a las MIPYMES en Mexicali, la realización del análisis de sus fortalezas, oportunidades, debilidades y amenazas (FODA), como una herramienta

administrativa que les permita permanecer en el mercado, ser competitivas y lograr un sano desarrollo y crecimiento.

## REVISIÓN LITERARIA

La falta de contar con una administración adecuada, pone de manifiesto lo vulnerable de estas empresas a los efectos negativos de los desajustes del mercado. Es necesario que se el empresario participe en programas de capacitación, que le den a conocer, orienten y apoyen, en la aplicación de herramientas financieras que les permitan conocer cuáles son sus ventajas, oportunidades, debilidades y amenazas; para que tome medidas precautorias y logre permanecer y aprovechar las ventajas de la economía global.

Entre los autores que exponen la aplicación de estrategias administrativas, se encuentra Celaya (2012) quien apoya la aplicación de la planeación estratégica matricial, al considerar que las MIPYMES tienen fortalezas y debilidades, mismas que al utilizarse en forma estratégica permitirán aprovechar oportunidades y a la vez disminuir amenazas, siempre y cuando se conozcan los factores que les dan origen. De acuerdo con Díez, García, Martín y Periañez (2001), La aplicación de la matriz Debilidades, Amenazas, Fortalezas y Oportunidades (DAFO), es de gran importancia pues busca combinar los factores internos de la empresa, para fortalecer las estrategias que se tienen establecidas en cada una de sus áreas, es de utilidad también para detectar amenazas o debilidades, con la finalidad de establecer nuevas estrategias que permitan alcanzar los objetivos. En el mismo sentido Thompson, Strickland y Gamble (2008), Consideran que el análisis FODA es de gran importancia para la empresa, le ayuda a conocer el comportamiento de los diferentes factores que la integran y su situación actual. Con el resultado del análisis de los factores se pueden establecer nuevas estrategias y tomar decisiones para disminuir las debilidades y amenazas, aumentar la competitividad y lograr los objetivos establecidos; lo anterior no fuera posible realizarlo sin llevar a cabo el análisis FODA.

Por su parte García y Valencia (2012) coinciden en que el análisis DOFA es esencial, describen las fortalezas y debilidades como factores intrínsecos de las empresas, que la identifican con relación a la competencia, además consideran las oportunidades y amenazas como factores externos no controlables. De la aplicación del análisis DOFA se recomienda establecer nuevas estrategias para aprovechar las oportunidades y fortalezas y mediante estas, minimizar las amenazas y debilidades de la empresa. En su aportación Hitt, Duane y Hoskisson (2008), destacan la importancia de realizar el análisis FODA, consideran que conocer los elementos internos y externos de la empresa, es la forma correcta para comprender su presente y contar con elementos suficientes para prever el futuro. Comentan que las oportunidades son condiciones presentes que deben ser explotadas por la empresa para generar estrategias competitivas. Si la empresa no cuenta con capacidades para obtener ventajas competitivas, debe adquirir los recursos que le permitan crear las competencias y las capacidades que necesita; como resultado verá disminuidas las amenazas y debilidades de la organización.

Como puede observarse los estudiosos del tema coinciden en la importancia de realizar el análisis FODA para las empresas. Aseguran que al conocer las fortalezas, oportunidades, debilidades y amenazas de la organización, se estará en la posibilidad de establecer estrategias de acción que de manera conjunta formen la sinergia que se requiere para lograr la apertura del mercado, potenciar las oportunidades y fortalezas y a través de éstas lograr disminuir las debilidades y amenazas. Por consiguiente la aplicación del análisis FODA, constituye una importante herramienta administrativa, permite conocer la situación actual de la empresa, establecer medidas correctivas, y establecer nuevas estrategias.

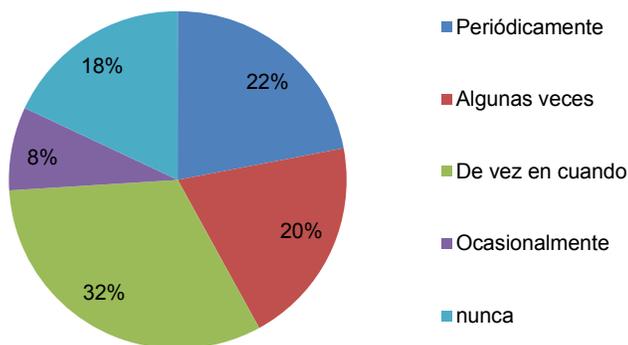
## METODOLOGÍA

El presente estudio es de corte cuantitativo, de tipo descriptivo documental, se obtuvo información sobre el comportamiento y situación actual de MIPYMES en México, la se revisaron libros de especialistas en administración para conocer su opinión sobre la aplicación del análisis FODA, la población de estudio se encuentra integrada por empresas de los diversos sectores económicos, se elaboró y aplicó un instrumento de medición para obtener la información, que permita saber si estas empresas realizan el análisis (FODA), mismo que fue validado mediante el programa estadístico Alfa de Cronbach, el cual se aplicó a 70 empresas en la ciudad de Mexicali. La información obtenida fue procesada a través de estadística descriptiva, se aplicó el programa, Statistical Package for the Social Sciences (SPSS) por sus siglas en inglés. Los resultados obtenidos fueron revisados e interpretados, se adquirieron elementos suficientes para recomendar a las MIPYMES realizar éste análisis administrativo.

## RESULTADOS

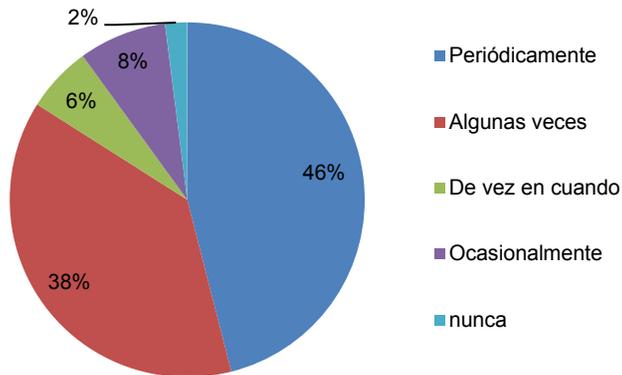
Una vez procesada la información obtenida a través de cuestionarios, se aplicó estadística descriptiva a variables representativas del análisis FODA, para conocer de manera directa en qué medida los Micro, Pequeños y Medianos Empresarios conocen y aplican este análisis, como una herramienta administrativa. A continuación se presentan algunas variables analizadas en este trabajo de investigación.

Tabla 1: en Mi Empresa Se Realiza el Análisis de Fortalezas y Debilidades



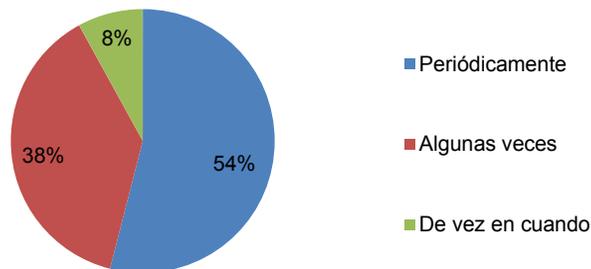
La tabla 1 muestra que del total de encuestados solo el 22% contestó que periódicamente realiza el análisis de fortalezas y debilidades en su empresa, un 20% más coincidió en que realizan este tipo de análisis algunas veces, mientras que un 32% coincidió en que lo realizan de vez en cuando, un 8% manifestó realizarlo ocasionalmente y el 18% restante dijo no realizarlo nunca.

Tabla 2: Necesito Capital Para Desarrollarme



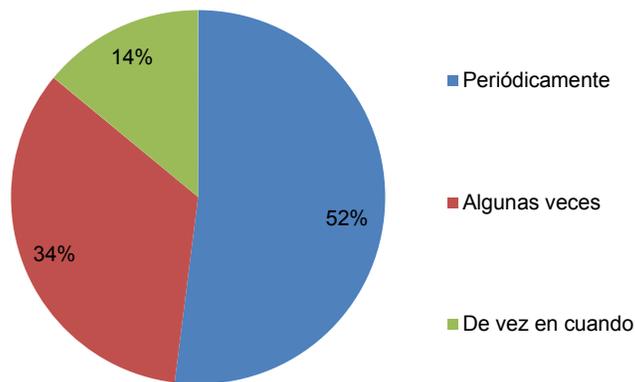
En la tabla 2 muestra que un 46% de los encuestados contestó que periódicamente necesita capital para desarrollar su actividad, un 38% más coincidió en que algunas veces requiere de capital, mientras que un 6% lo requiere de vez en cuando, un 8% lo requiere ocasionalmente y el 2% restante nunca requiere de capital para desarrollar su empresa.

Tabla 3: Tengo Experiencia Para Visualizar Oportunidades O Cualquier Falla en la Empresa



La tabla 3 muestra que un 54% de los entrevistados consideró que periódicamente su experiencia le permite visualizar oportunidades o cualquier falla en su empresa, mientras un 38% consideró que algunas veces su experiencia le permite visualizar estos eventos, por su parte el 8% restante manifestó que de vez en cuando su experiencia le permite percibir las oportunidades o fallas en la empresa.

Tabla 4: Estoy Atento a los Cambios de Política Fiscal



La tabla 4 muestra que el 52% de los entrevistados contestó que periódicamente está atento a los cambios de política fiscal, un 34% manifestó que en algunas veces está atento a este tipo de cambios, mientras que el 14% restante coincidió en estar atento a este tipo de cambios de vez en cuando.

## CONCLUSIONES

Los resultados del estudio muestran que solo el 22% de Micro Pequeños y Medianos Empresarios realizan de manera periódica el análisis FODA en su empresa; lo anterior permite concluir que a este porcentaje se reduce el número de empresarios que cuentan con información financiera oportuna y confiable, con la cual pueden establecer estrategias de desarrollo que les permita permanecer en el mercado, ser competitivos y lograr un crecimiento; esta es una de las debilidades que más pesan sobre las MIPYMES, mismas que luchan por sobrevivir. En cuanto a la necesidad de capital para el desarrollo de su actividad, puede observarse que un 46% de los entrevistados de manera periódica necesita capital y un 38% más lo requiere de vez en cuando, esta información permite deducir la escasez de fuentes de financiamiento para este tipo de empresas, mismas que por falta de recursos financieros están limitadas en su desarrollo y su permanencia en el mercado es todo un reto. Una de las fortalezas encontradas en este grupo de empresas es la experiencia de sus propietarios para desarrollar su actividad, esto se pone de manifiesto al haber afirmado el 54% que de manera permanente confía en su experiencia para manejar su empresa, mientras que un 38% más, manifestó que algunas veces se basa en su experiencia para detectar oportunidades o fallas en el desarrollo de su actividad; la experiencia de estos empresarios es una de las fortalezas que más contribuyen a que permanezcan en el mercado. Los cambios o fenómenos económicos externos tienen un efecto determinante en el desarrollo de este tipo de empresas, al respecto el 52% de los entrevistados manifestó estar periódicamente atento a los cambios de política fiscal, mientras un 34% más coincidió en estar atento algunas veces a este tipo de cambios. Lo anterior demuestra la preocupación constante del empresario a los cambios externos que pueden afectarle en el desarrollo y crecimiento de su empresa. En los resultados obtenidos, se aprecia un panorama económico no muy favorable para la mayoría de este tipo de empresas, determinado por algunas debilidades como son: la falta de una adecuada administración y de capital para desarrollar su actividad. Por tal motivo, se coincide con los datos presentados en este estudio de investigadores sobre la situación actual de las MIPYMES en México. Para que las MIPYMES puedan lograr su permanencia, desarrollo y además sean competitivas, se recomienda como una medida administrativa indispensable, realicen de manera permanente el análisis de sus fortalezas, oportunidades, debilidades y amenazas; como un primer paso para establecer estrategias de operación y evitar su desaparición.

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# LA ASOCIACIÓN COMO ESTRATEGIA, EN LA MICRO Y PEQUEÑA INDUSTRIA EN MEXICALI, BAJA CALIFORNIA, MÉXICO

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## RESUMEN

*La asociación empresarial es una figura que pretende elevar la competitividad de las empresas y convertirse en un mecanismo que les permita a las micro y pequeñas empresas (MIPES) permanecer en el mercado. Se realizó una investigación descriptiva transversal, con el objetivo de analizar la situación de la asociación como estrategia empresarial en la micro y pequeña empresa del sector industrial en Mexicali, Baja California, México, se aplicó un cuestionario a una muestra de 64 empresas, la información obtenida se procesó y analizó estadísticamente. Los resultados muestran una diferencia significativa, por tamaño de empresa, ya que la estrategia de asociación empresarial es más utilizada en la pequeña industria, con la intención de hacer frente a un mercado cambiante, demostrando con la asociación la reducción de costos y el incremento en ventas.*

**PALABRAS CLAVE:** Asociación, estrategia, MIPES

## THE ASSOCIATION AS A STRATEGY IN MICRO AND SMALL INDUSTRIES IN MEXICALI, BAJA CALIFORNIA, MEXICO

### ABSTRACT

*The business association is a figure that aims to increase the competitiveness of companies and become a mechanism that allows them to micro and small enterprises (MIPES) remain on the market. A descriptive investigation was conducted in order to analyze the situation of the association as a business strategy in the micro and small enterprises in the industrial sector in Mexicali, Baja California, Mexico, a questionnaire to a sample of 60 companies was applied, the information obtained was processed and analyzed statistically. The results show a significant difference, by company size, since the strategy of business association is used in small industry, with the intention of dealing with a changing market, demonstrating the association with reduced costs and increased sales.*

**KEYWORDS:** Partnership, Strategy, MIPES

### INTRODUCCIÓN

El desarrollo económico de México se ve afectado por la expansión del libre mercado, la eliminación de políticas proteccionistas, la liberalización y la volatilidad de los mercados financieros. Las micro y pequeñas empresas (MIPES) participan en estos fenómenos, como resultado de la globalización y apertura económica que han experimentado la mayoría de los

países; todo esto obliga a las empresas a cambiar sus esquemas de trabajo, a buscar nuevas formas de producción, subcontratación y asociación, que les permita mayor flexibilidad y competitividad ante las transnacionales y multinacionales que convergen en el mercado.

A nivel internacional las micro, pequeñas y medianas empresas tienen una amplia participación en la economía ya que representan el 95% de total de las empresas de acuerdo a datos de la Organización para la Cooperación y Desarrollo Económico (OCDE). A nivel Nacional la participación es similar, de acuerdo al Instituto Nacional de Estadística, Geografía e Informática (INEGI) en base al censo económico 2009 el 99% de los establecimientos son micros, pequeños y medianos los cuales demandan acciones para impulsarlos y ser más competitivos ya que es indudable la participación de estas empresas en el Producto Interno Bruto (PIB) y el empleo.

La información de los censos económicos 2009 indicaba que el sector manufacturero en México, es el más importante en la generación de producción bruta total con un 43.3%, concentrando el 10.9% de la unidades económicas y daba empleo a una de cada cuatro personas ocupadas; esto evidentemente demuestra su alta participación en el PIB y su importancia en la generación de empleo. Este sector se caracteriza por ser diversificado donde coexisten actividades altamente concentradas como la siderúrgica y la automotriz, a la par de actividades atomizadas, como lo son la fabricación de productos de herrería y elaboración de pan, entre otras.

En cuanto al tamaño de las empresas en la industria manufacturera, el comportamiento es similar que el resto de los sectores, existe una alta concentración de empresas micro y pequeñas; pero contribuyen poco a la producción total del sector.

Así como en el resto del país la micro y pequeña empresa en Mexicali es muy importante para el desarrollo económico, y en especial el sector industria, ya que se pretende que al integrarse a través de encadenamientos productivos, con la industria mediana y grande, genere un mayor desarrollo económico.

En la actualidad la falta de vinculación con los instrumentos para el desarrollo y la innovación tecnológica, el debilitamiento y desarticulación de cadenas productivas, son elementos que disminuyen la competitividad de la micro y pequeña industria, por lo que es necesario cambiar las formas de trabajo y asociarse como estrategia para permanecer en el mercado. El objetivo de esta investigación fue determinar si los esquemas de asociación empresarial, son utilizados en las micro y pequeñas empresas del sector industrial de Mexicali, así como identificar los elementos que motivan a participar en relaciones de asociación y cooperación.

## **REVISIÓN LITERARIA**

### La Estrategia

Sometidas a la competición internacional, las empresas locales se desarrollan en un marco que deben implementar estrategias para sobrevivir y crecer, al mismo tiempo que los consumidores reciben información global actualizada, con estilos de vida similares que ocasionan una amenaza y una oportunidad para las empresas.

En este marco de competición, Drucker (2003) enuncia el efecto de turbulencia en el que un empresario que a pesar de su talento y experiencia no logra conducir sus empresas sin riesgos y problemas en una zona de tormenta. La turbulencia en los negocios está compuesta por una serie de factores que traen inestabilidad y cambios. La intensidad y velocidad del cambio afectan a las

micro y pequeñas empresas, que tienen que tratar de dominar la turbulencia y aprender a crecer en ella; o simplemente mantenerse.

D'Aveni (1996) señala que existen diversas teorías, modelos y técnicas que definen la estrategia y su campo, ejemplo de estas son las competencias estratégicas y el modelo de fuerzas de Porter (1999), sin embargo, ninguna estrategia es sustentable, ya que el cambio en las organizaciones se presenta al desarrollar las situaciones y contextos actuales en lo que se conoce como esfera de influencia, presión competitiva, configuración competitiva, sistemas de poder. Dentro de la esfera de influencia se encuentran las alianzas a través por ejemplo de licencias, o franquicias a las que les llama “posiciones delanteras”.

Porter define la estrategia “como la creación de una posición singular y valiosa que requiere un conjunto de actividades diferentes al de los otros competidores. La esencia de la estrategia radica en decidir que no se va a hacer”(Porter, 1999).

La visión a largo plazo de cualquier empresa debe ser mantenerse en el mercado para posteriormente crecer, en el caso de las micro y pequeñas empresas es esencial el mantenerse en el mercado, por lo que la administración de las mismas implica tomar decisiones inmediatas o en el corto plazo. Tal como lo define Longenecker, Moore, Petty y Palichh (2010) “Una estrategia es en esencia un plan de acción que coordina los recursos y compromisos de una empresa para mejorar su desempeño”. Lo que implica acciones y actividades a realizar en el corto plazo.

El mercado no es un sistema predecible sino que es inestable y que cualquier equilibrio que se alcance en el largo plazo es el resultado de una gran cantidad de adaptaciones de corto plazo, lo cual para el mercado representa su fortaleza (Drucker, 2003).

Actualmente el mundo de los negocios caracterizado por crisis, desaceleración económica e inestabilidad, donde la preocupación de las empresas es la de mantenerse en el mercado y lograr continuidad, ha hecho que las empresas cambien sus formas de trabajo; y en lugar de ver a otras empresas como rivales en un determinado mercado, promuevan la idea de asociarse y conjuntar esfuerzos con la finalidad de sobrevivir en una creciente competitividad internacional.

Ante esta situación se requiere explorar formas de cooperación y colaboración empresarial, para hacer frente a la competitividad internacional. Marín, de la O y López (2009) mencionan que las relaciones de colaboración entre empresas van desde una actividad específica en un proyecto determinado, que puede convertirse en una relación estratégica, con posibilidad de llevar a la fusión de las empresas involucradas.

Los procesos cooperativos son visualizados estratégicamente como una oportunidad de realizar nuevos negocios, para disminuir la intensidad de las amenazas que una empresa puede enfrentar (Cleri, 2001).

### Modelos de Asociación

La asociación es la acción que realizan dos o más entidades para lograr un objetivo común, mediante la colaboración. A nivel macroeconómico la asociación puede ser la unión de países, o de organismos, a nivel microeconómico es la unión de empresas. El término asociación se considera como sinónimo de integración.

De acuerdo a López (2007) la integración es la acción de unirse dos o más entidades con el fin de hacer frente a distintas situaciones que ponen en riesgo su estabilidad en el mercado. La integración de empresas se da de manera lineal, horizontal y vertical.

Las empresas, sobre todo cuando su operación es estable y el entorno económico es favorable, tienen objetivos de crecimiento, para hacerlo se dispone de diversas alternativas o modelos.

La cooperación empresarial se refiere al establecimiento de relaciones de largo plazo entre las empresas, fundadas en la reciprocidad, beneficio mutuo y la consecución de un objetivo común (Lanusse 2001, en Arroyo 2002).

Schmitz (2000) establece que la cooperación tiene efectos positivos, como el aprendizaje a través de la interacción, permitiendo mejorar significativamente los resultados en las regiones de países desarrollados, y en países en desarrollo.

Existe un sinnúmero de estrategias de asociación y en última instancia tienen como finalidad el mejorar el desarrollo de las empresas, y en ese sentido, cuando se abordan los modelos de asociación se abordan también de forma implícita, las estrategias de desarrollo. El proceso de asociación empresarial se puede realizar mediante diferentes esquemas o modelos, entre los que destacan las empresas integradoras, cadenas productivas, clúster o distritos industriales y las redes de empresas.

## **METODOLOGÍA**

El método que se utilizó en esta investigación fue descriptivo transversal, ya que se analizó la situación actual y perspectivas de desarrollo de asociación empresarial en la micro y pequeña industria de Mexicali, y los datos se recolectaron en un solo momento. Se obtuvo la información mediante investigación documental y de campo.

La población de estudio está conformada por todas las micro y pequeñas industrias establecidas en la ciudad de Mexicali, que están incluidas en los directorios de CANACINTRA y el padrón del Sistema de Información Empresarial Mexicano 2011 (SIEM). La selección de la muestra corresponde a un diseño muestral probabilístico estratificado (Hernández et al. 2010) con la finalidad de que todos los giros estén representados, para la determinación de la muestra se utilizó la fórmula de poblaciones finitas con un nivel de confianza del 95% y un margen error de 5%. Determinándose un tamaño de muestra de 64 empresas.

Debido a las características de la investigación, se diseñaron dos instrumentos para recolectar la información en campo, con el propósito de identificar tanto los valores cuantitativos y cualitativos que la investigación encierra dentro de la comunidad de micro y pequeñas empresas industriales, los modelos de asociación utilizados, las expectativas de la asociación en el sector industrial y la participación de los organismos involucrados del sector empresarial y gubernamental. Se desarrolló una entrevista estructurada con personajes clave expertos en el tema, también se elaboró un cuestionario que se aplicó a la muestra seleccionada de la población de estudio.

Los cuestionarios y entrevistas se aplicaron con los sujetos de estudio, como los gerentes o dueños de las empresas y los líderes de cámaras empresariales, los informantes son personas relacionadas con el tema de investigación conocedoras y con amplia experiencia en la actividad que desempeñan, lo que proporcionó validez y confiabilidad a los datos recabados.

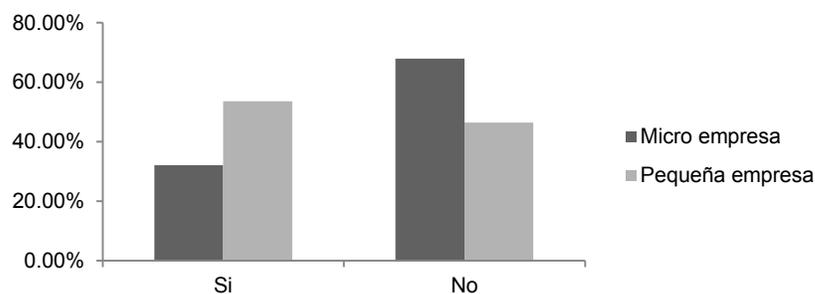
## RESULTADOS

A continuación se presenta el análisis de los resultados obtenidos en la aplicación del instrumento:

El 57% de los encuestados reconoce que las políticas del gobierno han permitido la asociación o integración de las empresas, el 43% no lo considera así, manifestando que no se ha promovido la asociación empresarial. Sin embargo el deseo de cooperación y la acción de asociarse debe ser un acto voluntario de las empresas participantes, surge como una estrategia empresarial con un objetivo específico y una planeación, no por promoción del gobierno. En contraste para poder colaborar y asociarse las empresas deben conocer las figuras o modelos de asociación de asociación, al respecto el 57% de las empresas menciona no conocer las figuras de asociación o cooperación empresarial.

El comportamiento por tamaño de empresa muestra una variante en la microempresa donde existe mayor desconocimiento de las formas de integración, como se refleja en la figura 1.

Figura 1: Conocimiento de las Figuras De Asociación Empresarial



Fuente: Elaboración propia

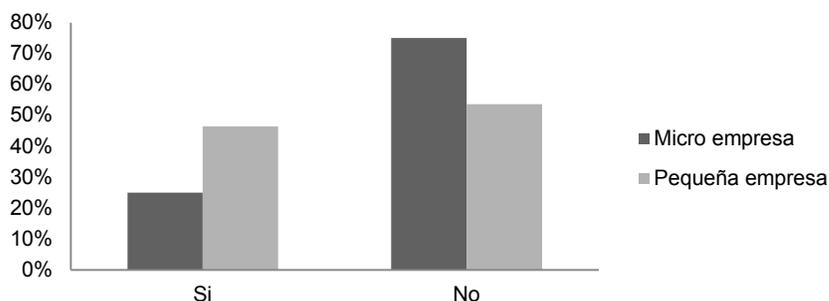
Esto reafirma el hecho de que las empresas no consideran a la cooperación y a la asociación con otras empresas, como una estrategia adecuada para incrementar sus clientes, siendo el motivo el desconocimiento de las figuras de asociación e integración empresarial, que se refleja principalmente por la microempresa.

Por lo que las empresas de mayor tamaño, en este caso la pequeña, por su estructura administrativa y conocimiento de los modelos de asociación estaría en mejor posibilidad de establecer relaciones de cooperación. La mediana y la pequeña empresa son las que realizan con mayor frecuencia alianzas y acuerdos de cooperación (Hernández y Sánchez, 2010).

En relación al establecimiento de alguna forma de asociación se tiene que el 36% del total de las empresas han realizado alguna forma de asociación o cooperación empresarial, lo que muestra un interés en integrarse con otras empresas para mejorar alguna área de su empresa, o con la intención de hacer frente a un mercado cambiante.

En cuanto a la participación por tamaño de empresa, la pequeña empresa muestra una diferencia significativa, ya que en el 46% de los casos ha realizado asociación con otras empresas, y la microempresa únicamente en 25% de los casos se ha asociado. Coincide con Schmitz( 2000), Hernández y Sánchez (2010) las empresas de mayor tamaño son las que realizan alianzas y acuerdos de cooperación.

Figura 2: Relaciones de Asociación



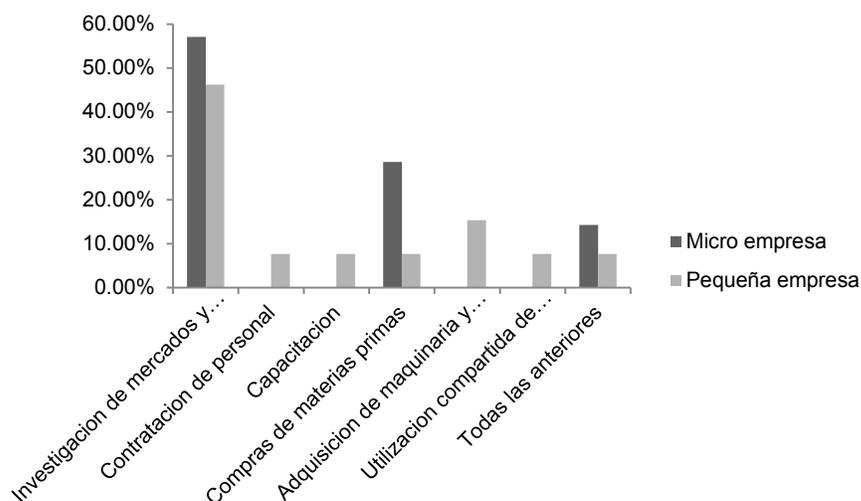
Fuente: Elaboración propia

En cuanto a las actividades realizadas en la asociación o integración empresarial, en el total de las empresas predomina la investigación de mercados y ventas con un 50%, seguido de compra de materias primas con 15%, adquisición de maquinaria y equipo con 10%, y un 10% de las empresas han cooperado en todas las actividades mencionadas.

Este resultado concuerda con lo que establecen Hernández y Sánchez (2010), los acuerdos y alianzas de cooperación que las MIPyMES mexicanas aplican en mayor medida son los relacionados con las compras y los orientados a la comercialización de productos.

Por tamaño de empresa el comportamiento es similar al general de empresas, existiendo variante en la compra de materia prima que es más utilizada en la microempresa, y la adquisición de maquinaria en la pequeña empresa como se muestra en la figura 3. Siendo la investigación de mercados y ventas la actividad donde han participado más las empresas asociadas, demuestra la preocupación de las mismas por mantenerse en el mercado y buscar un desarrollo y crecimiento. Al pertenecer a los estratos de micro y pequeña industria, las hace más flexibles y les permite más rápidamente adaptarse para aprovechar condiciones de mercado analizadas o estudiadas. Asimismo el comprar materia prima en asociación para obtener mejores precios, pretende reducir costos y manejarlo como ventaja.

Figura 3: Actividades en asociación por tamaño de empresa



Fuente: Elaboración propia

En cuanto al tipo de encadenamiento que ha predominado ha sido la subcontratación de servicios en un 35%, subcontratación para maquilar producción 25%. También se ha realizado integración horizontal en 20%, además de integración hacia enfrente con distribuidores en 10%. Coincide con Cleri (2001), que establece que la cesión a especialistas de aspectos del proceso productivo potencian la productividad y con ello la posibilidad de competir. La subcontratación es una forma de organización en red.

Las figuras formales de asociación que se han utilizado por el total de las empresas, que han buscado la asociación como estrategia, son empresa integradora 35%, unión de crédito 20%, subcontratación 20% y asociación en participación 15%. En cuanto al tamaño de empresa las variantes son que las figuras más utilizada por la microempresa son empresa integradora y unión de crédito, siendo empresa integradora y asociación en participación las utilizadas en la pequeña empresa.

Los objetivos que han motivado a las empresas a asociarse o realizar cooperación empresarial son diversos, siendo el principal la reducción de costos con 50%, el poder acceder a mercados internacionales 10%, poder de negociación con proveedores 10%, mejorar la calidad del producto 10%.

El comportamiento por tamaño de empresa es similar al general, siendo la variante que la micro empresa busca tener poder negociador con los proveedores, y el acceder a mercados internacionales no lo considera como un buen motivo para asociarse.

El objeto de la asociación no permite establecer comportamientos generales (Cleri, 2001) ya que depende del aspecto en que la empresa necesita la cooperación. También la asociación permite a las empresas mayor volumen de producción, mejores posibilidades de financiamiento y obtención de apoyos gubernamentales.

El 80% del total de empresas reporta mejoras significativas en la producción y el proceso productivo, como consecuencia de la asociación realizada, el 20% manifestó no tener mejoras en la producción. Por tamaño de empresa sustancialmente las mejoras en la producción han beneficiado a la pequeña en 92%, y a las micro solo en un 57%.

Se comprueba que la producción es el primer factor que se considera por las empresas para realizar alianzas, además de permitir la incorporación de innovación tecnológica con el objetivo de perfeccionar la capacidad de producción (Cleri, 2001). Al mismo tiempo con las alianzas y cooperación interempresarial se fomenta el aprendizaje que mejora los procesos (Schmitz, 2000).

En relación a la reducción en costos como resultado de la asociación se obtuvo que del total de empresas que se han asociado la mayoría obtuvo reducción de costos de producción y operación, el 40% en el rango de 10 a 20%, un 30% de 20% a 40% y el 10% de las empresas en el rango de 40 a 60%. Esto demuestra que la asociación cumplió su objetivo, ya que el motivo de reducción de costos fue el principal para buscar la asociación.

En lo concerniente a si las empresas mantienen la asociación se tiene que del total de empresas que han realizado algún tipo de asociación, el 90% continúa con la asociación y mantiene la colaboración, el 10% ya no sigue con la asociación.

Este resultado manifiesta que la asociación y cooperación tiene ventajas y efectos positivos, ya que las empresas continúan con la asociación. Es importante resaltar que el mantener la asociación requiere de habilidades administrativas (Schmitz, 2000) y fomentar los elementos de capital social sobre todo la confianza.

Los factores que han permitido el éxito de estas empresas al realizar cooperación empresarial son el tener un objetivo común 45%, reglas claras del manejo de la asociación 14%, y coordinación y comunicación entre los asociados 13%.

## CONCLUSIONES

La estrategia de asociación empresarial no es muy utilizada en la micro y pequeña industria de Mexicali, los esfuerzos de integración y cooperación no son suficientes ya que la mayoría de las empresas trabaja individualmente por desconocer las figuras de asociación.

Se encontró diferencias significativas por tamaño de empresa, siendo la pequeña empresa la que ha participado más en actividades de asociación, reflejo mayor crecimiento y obtuvo mayor beneficio al asociarse ya que aprovecho la reducción en costos. Lo que indica que la estructura administrativa y operativa formal y estructurada es un elemento importante al implementar la asociación como estrategia.

A pesar de mostrar interés en integrarse con otras empresas para mejorar alguna área de la empresa, o con la intención de hacer frente a un mercado cambiante, se carece de una visión a largo plazo y una planeación que permita establecer claramente el crecimiento de la empresa mediante la asociación y cooperación con otras empresas.

Siendo la investigación de mercados la actividad más recurrida por las empresas asociadas, esto no ha cristalizado en acceder a mercados internacionales, no se ha intentado la exportación de productos, por lo que es indispensable fomentar la exportación mediante los esquemas de asociación y cooperación empresarial, que traería oportunidades de crecimiento y desarrollo regional.

Al igual que en el sector empresarial en el gobierno no existe una visión y planeación a mediano y largo plazo, no hay continuidad en los programas, no se da seguimiento a los mismos para

determinar logros y fracasos, para en base a ello replantear un programa adecuado; acorde a las características de la micro y pequeña industria y a las necesidades del mercado.

La asociación y cooperación empresarial es resultado de varios factores como la confianza que debe existir entre las empresas, el tener un objetivo común, coordinación y comunicación entre los asociados, tener una cultura de asociación y un liderazgo que se realice una planeación a largo plazo y lleve a cabo los cambios necesarios.

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# PERCEPCIÓN DEL EMPLEADOR SOBRE LA COMPETITIVIDAD LABORAL DE ESTUDIANTES DE PROGRAMAS ACREDITADOS

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## RESUMEN

*La presente investigación aborda desde una perspectiva cuantitativa el tema de la acreditación de los programas académicos de educación superior, considera la importancia que la certificación tiene para las instituciones educativas en México. Sin embargo, es necesario conocer cuál es la percepción del empleador sobre la competitividad de los alumnos que estudian programas educativos certificados, si considera que un programa educativo reconocido les proporciona mejor preparación, desempeño, seguridad y conocimientos actualizados, forma al estudiante más competitivo para el desarrollo de su trabajo. El presente estudio es de tipo descriptivo documental. Esta investigación es de utilidad para el empresario, para el estudiante y para la institución educativa. La población sujeta a estudio en esta investigación son despachos de contadores públicos de la ciudad de Mexicali, por ser el vínculo natural entre el aprendizaje académico y la aplicación de los conocimientos adquiridos de manera profesional. Se elaboró un instrumento para recabar la información de campo, mismo que fue validado a través del programa estadístico alfa de Cronbach, aplicado en 70 despachos, los datos se procesaron mediante el programa Statistical Package for the Social Sciences (SPSS), mismos que fueron analizados mediante estadística descriptiva, los resultados permiten hacer conclusiones y recomendaciones a las interesadas.*

## ABSTRACT

### PERCEPTION OF EMPLOYERS ON COMPETITIVENESS OF STUDENT WHO ARE STUDING AT COLLEGE TO ACCREDITED PROGRAMS

## ABSTRACT

*This research addresses from a quantitative perspective the issue of accreditation of academic programs in higher education, considers the importance of the certification is for educational institutions in Mexico. However, it is necessary to know the perception of the employer on the competitiveness of students studying educational programs certificates, if it considers that an educational program recognized provides better preparation, performance, safety and knowledge updated, so the student more competitive for development of their work . The present study is descriptive documentary. This research is useful for the employer, for the student and to the school. The subject populations studied in this research are public accounting firms in the city of Mexicali, as the natural link between academic learning and applying the knowledge gained in a professional manner. An instrument was developed to collect field data, it was validated through Cronbach's alpha program, implemented in 70 offices, the data were processed using the*

*Statistical Package for Social Sciences (SPSS), which were analyzed using descriptive statistics, the results allow to make conclusions and recommendations to the stakeholders.*

**JEL:** M14

**KEYWORDS:** Percepción Empleador, Competitividad, Estudiantes, Programas Certificados

## **INTRODUCCIÓN**

Como una medida para demostrar que se está brindando un servicio de calidad y adquirir prestigio en el ámbito académico, las instituciones de educación superior buscan obtener la certificación de sus programas educativos. La certificación otorga el reconocimiento a las universidades de que sus programas educativos son de calidad, que están actualizados y acordes a las necesidades sociales, además confirma la existencia de instalaciones, equipo y tecnología apropiados para el desarrollo de las actividades educativas, así mismo garantizan la existencia de un grupo de docentes bien preparados y organizados para la enseñanza. Es necesario que los programas educativos estén actualizados, acordes a los constantes cambios sociales y económicos que experimentan los países hoy en día. Se requiere lograr una vinculación directa con los diversos sectores productivos, pues son precisamente éstos los receptores de los futuros profesionistas que se forjan en las aulas.

De acuerdo con los comentarios hechos por Morales, Torres, Zueck y Ramírez (2005), desde mediados de los setentas, las instituciones de educación superior, reunidas en la Asociación Nacional de Universidades e Instituciones de Educación Superior (ANUIES), en su lucha constante por ofrecer programas de calidad a la sociedad, planearon llevar a cabo la evaluación de sus programas en beneficio de cada institución y en conjunto de todo el sistema de educación superior. Acorde con lo anterior en 1978 se constituyó el Sistema Nacional de Planeación Permanente de la Educación Superior (SINAPPES), mismo que sirvió de punto de partida en esta importante meta. Más tarde en el periodo (1989-1994) se creó el Programa para la Modernización Educativa (PME) el cual incluyó a propuesta de la ANUIES la idea concretada en la Comisión Nacional de Evaluación de la Educación Superior (CONAEVA, 1989), consistente en fomentar la autoevaluación institucional y establecer procesos de evaluación interna y externa que permitan a las instituciones impulsar la calidad de la educación superior.

En el mismo contexto, de acuerdo con Rosario, Marúm, Vargas, Arroyo y González (2005), la acreditación y certificación de los programas académicos de las Instituciones de Educación Superior (IES), tiene como antecedente inmediato en México, el Encuentro Internacional para la Acreditación y Certificación de la Educación: Experiencias, Realidades y Retos para las IES, realizado en la ciudad de Guadalajara en Noviembre de 2005, convocado por un grupo de universidades del país. Este encuentro tuvo como objetivos: propiciar el diálogo entre los actores de la certificación y acreditación, analizar y compartir experiencias, promover la actualización, documentar los resultados obtenidos en materia de acreditación, hacer propuestas que contribuyan a mejorar en los proceso de acreditación y certificación.

Hoy en día las mejores universidades tanto públicas como privadas han logrado la acreditación de sus programas educativos, en beneficio de la comunidad académica y en general de la sociedad. Sin embargo, es necesario saber si: ¿el empleador conoce la existencia de programas académicos certificados?, ¿sabe en qué consiste la certificación académica?, ¿sabe si los estudiantes de programas educativos certificados están mejor preparados, si están más seguros de su trabajo, si tienen un mejor desempeño, si cuentan con conocimientos actualizados, si son más competitivos? Tanto para la institución educativa como para el alumno es muy importante conocer el punto de

vista del empresario o funcionario, pues, por una parte, entre la universidad, empresas e instituciones se fomenta la vinculación con los diferentes sectores económicos y por la otra, el alumno tendrá la seguridad de aplicar los conocimientos adquiridos en apoyo de la sociedad. Esta investigación tiene como objetivo principal determinar si desde la percepción del empleador los estudiantes universitarios que cursan programas educativos certificados cuentan con una ventaja competitiva para ser contratados al momento de buscar empleo.

## REVISIÓN LITERARIA

La acreditación de programas académicos es un medio a través del cual se reconoce la calidad de los programas que han cumplido con los estándares establecidos para tal efecto por organismos nacionales e internacionales, quienes se encargan de llevar a cabo la evaluación y hacer las recomendaciones pertinentes en su caso. Como es el caso de los Comités Interinstitucionales para la Evaluación de la Educación Superior (CIEES), el cual se forma de nueve cuerpos colegiados que abarcan las diferentes áreas educativas, integrados por docentes de las diferentes instituciones de educación superior del país, los cuales gozan de un alto reconocimiento de su labor profesional. Estos comités desempeñan su función con base en criterios por áreas disciplinarias.

La acreditación de los programas educativos es un anhelo que persiguen las instituciones educativas en México. A medida que logran este objetivo, están en posibilidad de obtener la certificación como unidades académicas. De acuerdo con Gil (2006), las instituciones educativas han buscado la certificación de sus programas como una forma de verificar la calidad de los mismos, sin embargo, se espera a mediano plazo que sirva de medio para propiciar nuevos programas, que promuevan la movilidad e intercambio entre el alumnado a nivel nacional o internacional, así como entre el profesorado de las instituciones. De acuerdo con la Asociación Nacional de Universidades e Instituciones de educación superior (ANUIES, 2010), la acreditación es una forma que permite a la sociedad reconocer la calidad de los programas educativos que ofrecen las IES, principalmente públicas, pues éstas no recurren a estrategias de mercadotecnia de otras instituciones que crean falsas expectativas entre los aspirantes a educación superior. Por consiguiente la acreditación de programas educativos es de gran importancia y da seguridad a la sociedad respecto de la calidad de los programas e instituciones.

Otro aspecto importante para las instituciones para acreditar sus programas, es la presión que ejerce el gobierno federal a las Instituciones de Educación Superior (IES), al establecer la posibilidad a un programa que ha sido evaluado y acreditado a tener acceso a mayores recursos financieros a través de programas creados para tal propósito de manera específica. En este sentido, si la condición para obtener mayores recursos es el acreditamiento de los programas, de ahí el gran interés de evaluarse. Comenta Gil que las universidades se han visto obligadas a cuidar más la forma que el fondo y a maquillar los procesos para alcanzar los estándares, situación que no propicia un cambio auténtico en la calidad de los programas. En el mismo sentido Rosario (2012), comenta respecto de los procesos de acreditación, la necesidad de revisarlos y repensarlos con base en las acciones que deben realizarse para obtenerla. Comenta la necesidad de tomar en cuenta la finalidad de los procesos de acreditación, consistentes en establecer procesos de evaluación para las instituciones de educación superior, a través de los programas educativos, con la finalidad de verificar el cumplimiento de sus fines fundamentales, respaldados con recursos que les permitan continuar cumpliéndolos en el futuro.

De acuerdo a lo escrito por los autores anteriores, la acreditación es de gran importancia para el gobierno, y para las IES; quien obtiene la acreditación de sus programas educativos, adquiere a la vez el reconocimiento de calidad de sus programas, además de recursos financieros para el programa acreditado. Sin embargo, ningún autor relaciona la acreditación con el empleador de los estudiantes o profesionistas formados por la institución educativa, ¿cuál es su percepción sobre la acreditación de los programas y su relación con la competitividad de los estudiantes que cursan esos programas, tienen alguna ventaja o preferencia al solicitar un empleo?

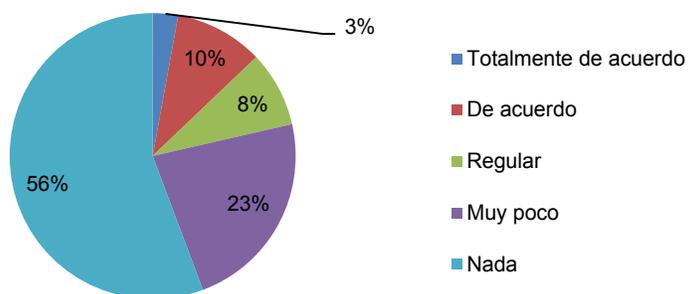
## METODOLOGÍA

La presente investigación es de tipo descriptivo documental, La población de estudio está constituida principalmente por los despachos de contadores públicos de la ciudad de Mexicali, los cuales fueron seleccionados al azar para recabar la información. Se investigó en libros que abordan el tema de la acreditación para conocer la opinión de expertos al respecto, se elaboró un instrumento de medición para recabar la información de campo, el cual fue validado en cuanto a su confiabilidad a través del programa estadístico Alfa de Cronbach, mismo que fue aplicado a 70 participantes. La información obtenida fue procesada a través del programa *Statistical Package for the Social Sciences* (SPSS), se analizó la información mediante estadística descriptiva para obtener los resultados de la investigación. Lo anterior permite contar con información confiable para emitir conclusiones y recomendaciones a los actores.

## RESULTADOS

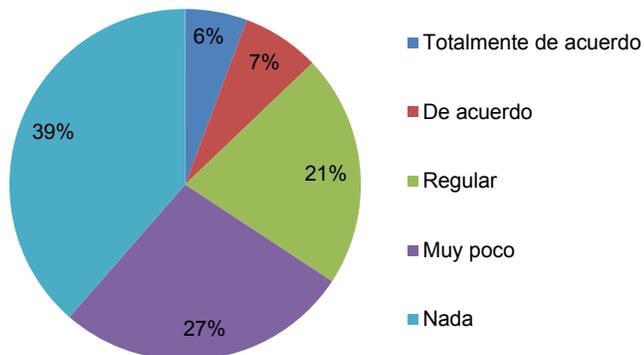
En este apartado se presentan los resultados obtenidos de la investigación de campo de algunas de las variables analizadas, sobre la percepción del empleador de la acreditación de los programas educativos, así como de la competitividad de los alumnos que estudian los programas mencionados.

Tabla 1: Conozco la Importancia de la Acreditación Académica



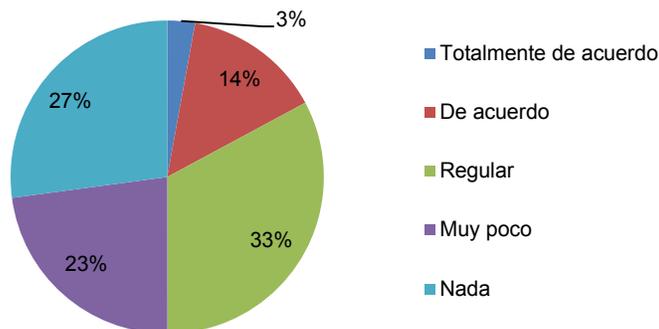
La tabla 1 muestra que del total de empleadores encuestados solo el 3% mencionó estar totalmente de acuerdo en conocer la importancia de la certificación académica, seguidos de un 10% más que aseguró estar de acuerdo en que saben la importancia de la certificación, mientras que un 8% dijo conocer de manera regular su importancia, el 23% coincidió en conocer la importancia muy poco, mientras que el 56% restante manifestó no conocer la importancia de la certificación académica.

Tabla 2: Conozco en Que Consiste la Acreditación Académica.



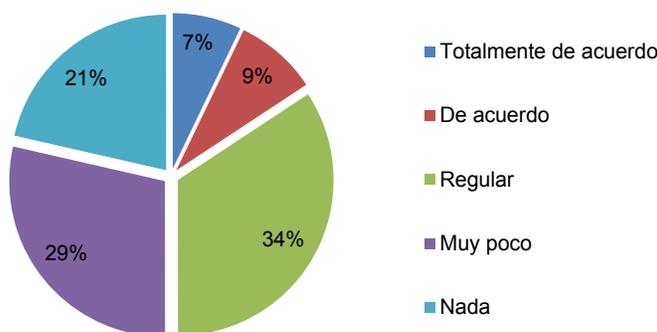
La tabla 2 muestra que solo el 6% de los empleadores encuestados aseguró saber totalmente en qué consiste la certificación académica, un 7% más dijo estar de acuerdo en saber en qué consiste, un 21% dijo saberlo en forma regular, en tanto un 27% dijo saber muy poco al respecto y el 39% restante dijo desconocer en qué consiste la certificación académica.

Tabla 3: Identifico las Universidades Que Tienen Sus Programas Académicos Acreditados



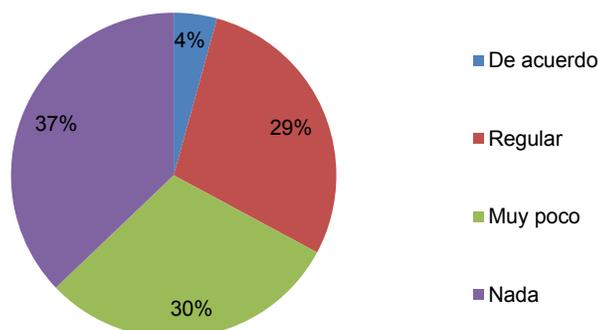
La tabla 3 muestra que de los empleadores, solo el 3% dijo identificar totalmente que universidades tienen sus programas académicos certificados, un 14% más dijo estar de acuerdo en identificarlas, mientras que un 33% las identifica de manera regular, un 23% las identifica muy poco y el 27% restante no las identifica.

Tabla 4: de Preferencia Contrato Estudiantes de Programas Educativos Certificados



La tabla 4 muestra que de los empleadores, el 7% afirmó estar totalmente de acuerdo en contratar de preferencia estudiantes de programas educativos certificados, un 9% más estuvo de acuerdo en preferirlos, para el 34% su preferencia es regular, mientras que un 29% tiene muy poca preferencia por estos estudiantes, por último, para el 21% restante de los empleadores entrevistados manifestó no tener preferencia por estos estudiantes.

Tabla 5: Recomendando la Contratación de Estudiantes de Programas Educativos Certificados



En la tabla 5, de los empleadores entrevistados el 4% dijo estar de acuerdo en recomendar la contratación de estudiantes de programas educativos certificados, un 29% los recomendaría de manera regular, mientras que un 30% los recomendaría muy poco y el restante 37% no los recomendaría.

## CONCLUSIONES

Una vez analizados los resultados de las variables en estudio se concluye que los empleadores de estudiantes de programas acreditados en instituciones de educación superior, desconocen en un alto porcentaje (82%) la importancia de la certificación académica; por consiguiente, también desconocen en que consiste la certificación académica, pues solo un (13%) contestó de manera afirmativa; en el mismo sentido los empleadores desconocen qué instituciones de educación superior tiene sus programas académicos acreditados, las respuestas afirmativas al respecto se limitaron al (17%); en cuanto a la preferencia por contratar estudiantes de programas de estudios acreditados, en respuesta a que pudieran estar mejor preparados o contar con mayores conocimientos, solo el (16%) manifestó tener preferencia por estos estudiantes; en correlación con lo anterior, solo el (4%) de los empleadores coincidió en recomendar a estos estudiantes para su contratación.

Los resultados de esta investigación realmente sorprenden. Por una parte se pone de manifiesto que el empresario está inmerso en el desarrollo de su actividad económica; por consiguiente, es mínimo el interés que tiene por el desarrollo de la educación superior y por los beneficios que ésta contiene para la sociedad. Por otra parte, se deja ver el gran reto que tienen las instituciones de educación superior, en el área de vinculación con los sectores productivos y la sociedad en general, de acuerdo al resultado de este estudio, aun cuando éstas logren acreditar sus programas educativos y así lo exterioricen, existe un enorme vacío de potencial desaprovechado,

precisamente por la falta de vinculación con los diferentes sectores de la sociedad, misma que es indispensable reforzar, en beneficio de la sociedad, del estudiante, del profesionista y de la propia institución académica.

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# IMPACTO DE LOS RESULTADOS DEL EGEL- CONTA DE LOS EGRESADOS DE LICENCIATURA EN LOS EMPLEADORES DEL SECTOR SERVICIOS

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## RESUMEN

*Este trabajo es parte de una investigación que se encuentra en desarrollo la cual tiene como objetivo determinar si los puntajes obtenidos en el EGEL-CONTA aplicado por CENEVAL a los potenciales a egresar de la Licenciatura en Contaduría, influyen para su contratación en empresas del sector servicios en Mexicali, Baja California. El diseño de investigación es descriptivo, no experimental, transversal. Utilizando como instrumento de medición un cuestionario el cual fue sometido a pruebas estadísticas a través del alfa de Cronbach para determinar su confiabilidad. Los participantes de la investigación a los cuales fue aplicado el instrumento son los empleadores de despachos contables. El número de cuestionarios analizados para la presentación de este trabajo fue de sesenta empleadores. En este avance se presentan los principales resultados obtenidos hasta el momento derivado de los cuestionarios aplicados, encontrando que en más del 65% de los casos, los empleadores no consideran los puntajes obtenidos en la aplicación de dicho examen para determinar la contratación de los egresados, derivado de ello es necesario establecer estrategias encaminadas a que los empleadores soliciten la acreditación del mismo para que los egresados se preparen de mejor manera y se preocupen por su aprobación.*

**PALABRAS CLAVES:** Empleadores, egresados, EGEL-CONTA, CENEVAL.

## IMPACT OF THE RESULTS OF THE EGEL-CONTA OF THE GONE AWAY ONES FROM MASTER IN THE EMPLOYERS OF THE SECTOR SERVICES

### ABSTRACT

*This work is part of an investigation that is being developed which aims to determine whether the scores obtained in the EGEL - CONTA CENEVAL applied potential to graduate from the Bachelor of Accounting, influence recruitment for service sector firms in Mexicali, Baja California. The research design was descriptive, non-experimental, cross. Using as a questionnaire measuring instrument which was subjected to statistical tests through Cronbach's alpha to determine reliability. The research participants to which was applied the instrument are the employers of accounting firms. The number of questionnaires analyzed for the presentation of this work was sixty employers. In this process presents the main results obtained so far derived from questionnaires and found that over 65 % of cases, employers do not consider scores on the application of this test to determine the recruitment of graduates, derived from it is necessary to*

*establish strategies for employers seeking accreditation of the same so that graduates are prepared to better and care about your approval.*

**JEL:** M490: Accounting and auditing: not specified

**KEYWORDS:** Accounting.

## INTRODUCCIÓN

En la actualidad se ha incrementado el número de jóvenes egresados de una licenciatura que buscan ser contratados inmediatamente en lugares donde puedan desarrollarse profesionalmente. Los despachos contables están considerados como una oportunidad de poner en práctica lo aprendido durante sus estudios, por lo que regularmente es su primera opción de trabajo. Por lo tanto los empleadores buscan a aquellos jóvenes que puedan demostrar su competencia para realizar las actividades propias de su profesión. El compromiso de una universidad es ofrecer a la comunidad, profesionistas con un alto nivel académico, por lo que se establecen estrategias para apoyarlos a sobresalir en el mundo laboral. Es común que los empleadores tomen como referencia los resultados obtenidos por los egresados en las diferentes evaluaciones aplicadas a los mismos, como un marco de referencia para su contratación, siendo uno de estos mecanismos los resultados obtenidos en el EGEL-CONTA (Examen General de Egreso de la Licenciatura en Contaduría) aplicado y valuado por el organismo denominado CENEVAL (Centro Nacional de Evaluación para la Educación Superior). La justificación para esta investigación se basa en el impacto que los resultados del EGEL-CONTA tienen en los empleadores al momento de seleccionar a egresados para su contratación.

### objetivo

El objetivo principal de la investigación es:

“Determinar si los puntajes obtenidos en el EGEL-CONTA por los egresados de la licenciatura en Contaduría, influyen para su contratación en empresas del sector servicios en la ciudad de Mexicali, Baja California, México”.

## REVISIÓN LITERARIA

El Centro Nacional de Evaluación para la Educación Superior, A.C. (CENEVAL) surge en 1994 - por mandato de la Asociación Nacional de Universidades de Educación Superior (ANUIES)- esta creación surge ante la necesidad de contar con un instancia de evaluación externa que ayude y promueva la mejora de la calidad educativa, mediante la generación de evaluaciones validas que contribuyan en los procesos de toma de decisiones de alto impacto de los centros escolares.

Desde su creación el centro de evaluación se ha caracterizado por ser una institución eminentemente técnica, la misión que ha desarrollado es promover la calidad de la educación mediante evaluaciones validas, confiables y pertinentes. Es importante resaltar que sus actividades se orientan, primordialmente, a evaluar los conocimientos y habilidades adquiridos por los individuos a través de procesos de enseñanza-aprendizaje formales o no formales de los sistemas de educación media superior y superior, esto según CENEVAL, A.C. Así mismo busca ofrecer servicios a instituciones educativas, organizaciones de profesionistas, así como a entidades privadas y gubernamentales con el afán de brindarle el mejor de los servicios posibles. El CENEVAL rige sus actividades con los siguientes principios básicos que le ayudan para cumplir con su misión:

- a) Imparcialidad: El centro no favorece a ninguna persona, organismo o institución en particular.
- b) Calidad técnica: Los procesos de diseño, construcción, aplicación, calificación y reporte de resultados de los exámenes están apegados a estándares de calidad reconocidos por agencias de evaluación nacionales y de otros países para garantizar su validez y confiabilidad.
- c) Actualidad: El centro busca que los exámenes sean revisados continuamente para ajustar los contenidos y que se evalúen los cambios que sobrevienen en las áreas disciplinares o profesionales.
- d) Confidencialidad: Para el cumplimiento de esta virtud, las personas y las instituciones evaluadas tienen derecho a que sus resultados no sean revelados sin su consentimiento.
- e) Transparencia: Los procesos concernientes a la elaboración, aplicación y calificación de los exámenes están abiertos a escrutinio, siempre y cuando no se contrapongan al principio de confidencialidad.

Como se menciona en la encuesta nacional para la validación social de los perfiles profesionales de los Exámenes Generales para el Egresado de la Licenciatura (EGEL), a partir de 2007 se inicia en el centro un intenso proceso de revisión y actualización de los 33 exámenes generales para el egreso de la licenciatura (EGEL) que venían operando y se fija el nuevo enfoque metodológico para su diseño y elaboración. Este nuevo enfoque se centra, básicamente, en la identificación de los puntos de encuentro entre los requerimientos del ejercicio de la profesión (mundo del trabajo) y las características y contenidos de los programas de las licenciaturas que administran las instituciones de educación superior (oferta educativa). En él se toman en cuenta, como en el enfoque anterior, los aspectos en común de los currículos de las licenciaturas vigentes pero teniendo como eje lo que las personas hacen al enfrentar y resolver situaciones y problemas característicos en el ejercicio de la profesión, un aspecto crucial de este método es la aplicación de una encuesta de validación social de los perfiles profesionales asociados a cada EGEL, en la que los profesionistas en ejercicio emiten su opinión sobre diversas tareas profesionales que pueden ser consideradas para la delimitación del contenido del EGEL.

#### Definición de los Perfiles Profesionales de los EGEL de Nueva Generación

Como se menciona por parte de Hernández y Maldonado en la encuesta nacional para la validación social de los perfiles profesionales, el EGEL de cada carrera profesional se diseña y elabora a partir de atributos de carácter cognoscitivo ligados a la competencia profesional del egresado. Esto es más que nada con un enfoque específico de los conocimientos y habilidades que se consideran esenciales o imprescindibles para el inicio del ejercicio profesional y que son resultado del aprendizaje de una formación profesional particular. Por lo que dichos atributos, no pueden ser identificados exclusivamente con los aspectos comunes de los perfiles profesionales de egreso, de la estructura disciplinaria de la profesión o del contenido de los planes y programas de estudio, sin considerar su influencia efectiva en el desempeño de las tareas características de la práctica profesional. En la siguiente tabla se muestran las definiciones y la estructura semántica con base a las cuales se llevó a cabo el proceso de identificación de cada uno de los aspectos del quehacer profesional relacionado con los EGEL en operación y en proceso de construcción.

Concepto	Definición	Pregunta guía	Estructura semántica
Función profesional	Conjunto de actividades profesionales, relativamente autónomas, con valor y significación precisas en el ejercicio de la profesión.	¿Cuáles son los ámbitos de actuación en que actualmente está organizado el ejercicio de mi profesión?	Sustantivo o verbo sustantivado

Actividad profesional	Desempeños complejos (procesos o procedimientos) que se involucran (que se desagregan) en diferentes tareas, aplicables a diversos contextos, susceptibles de ser observados, registrados y medidos.	¿Qué es lo que hace típicamente el profesionista en el ejercicio de la función?	Verbo en infinitivo + sujeto + complemento (contexto o condición)
Tarea profesional	Acciones que forman parte de lo que hace una persona para llevar a cabo una actividad y tienen un significado en sí mismas. Cada tarea tiene un significado discreto y diferenciado de cualquier otra y son esenciales para la realización de la actividad.	¿Qué acciones son indispensables que lleve a cabo el profesionista para realizar la actividad?	Verbo en presente + sujeto + complemento (contexto o condición)

Fuente: Exámenes del CENEVAL

### Características

La mayoría de los exámenes que desarrolla y aplica el CENEVAL son evaluaciones de alto impacto: las personas que los sustentan afrontan consecuencias directas de los resultados que obtienen. Esta particularidad compromete al centro a que cada uno de sus instrumentos de valuación cumpla con las siguientes propiedades:

**Validez:** Los instrumentos se diseñan y construyen para medir un dominio claramente identificado.

**Confiabilidad:** Los resultados de la evaluación son consistentes, de tal forma que diferentes puntajes reflejan diversos niveles de competencia de los sustentantes.

**Equidad:** Los instrumentos de medición se construyen de forma tal que no benefician a un grupo determinado, se establecen las medidas necesarias para evitar sesgos culturales.

**Pertinencia:** Los instrumentos de medición cuentan con un marco de referencia conceptual que sustenta la definición del constructo medido y cubre de manera representativa los dominios definidos como objeto de evaluación.

**Objetividad:** El concentrado de respuestas de los sustentantes se califica siguiendo el algoritmo autorizado para cada examen.

### Metodología CENEVAL

El CENEVAL se dio a la tarea de formalizar el modelo de evaluación institucional, recuperando lo hecho por las diferentes áreas de la organización y enriqueciéndolo con los conocimientos emanados de la literatura especializada. Entre los años 2001 y 2005 un proyecto conjunto del personal técnico tuvo la finalidad de compartir las prácticas de trabajo, y el resultado fue una primera documentación de los procesos inherentes a la construcción de los exámenes. El mayor impulso para la concreción de una metodología propia se ha desplegado en los últimos años. La normativa del CENEVAL se apega a las recomendaciones emanadas de entidades académicas como, American Educational Research Association (AERA), American Psychological Association (APA), National Council on Measurement in Education (NCME) y el Joint Committee on Standards for Educational Evaluations.

### El papel de las instituciones educativas

Es importante destacar que el sistema educativo Mexicano juega un papel fundamental en la transformación cultural y el desarrollo productivo del país, por ello es necesario identificar la problemática que emerge del binomio empleo-desempleo, así como la relación entre la formación profesional y la demanda laboral, entre otros factores. Derivado de esto, la pertinencia social es uno de los principales retos a los que se enfrenta la universidad, las demandas de agentes externos como los sectores social y productivo exigen a las instituciones de educación superior servicios

educativos de calidad que proporcionen a sus egresados una formación integral, basada en sólidos valores y conocimientos generales, disciplinares y tecnológicos.

En cuanto a la relación educación-empleo está determinada por estructuras sociales y políticas, situadas en espacios geográficos determinados, donde el mercado local e internacional se convierte en uno de los indicadores más importantes en la orientación de las demandas hacia la educación superior. En este sentido Díaz Barriga señala que “el adecuado funcionamiento del sistema educativo se refleja en la preparación puntual de sus egresados, de acuerdo con las exigencias de cada puesto en el mercado de trabajo” (Díaz Barriga, 2000). Hoy más que nunca la educación superior tiene como reto atender las demandas sociales: “se puede afirmar que el mercado de trabajo profesional es imperfecto, ya que la formación que se genera en el nivel superior es un proceso lento e independiente del mundo laboral” (Mungaray, 2001). Esto constituye un reto más para las instituciones de educación superior ya que enfrentan el compromiso de formar profesionales calificados en las distintas áreas del conocimiento, replanteando o generando nuevas carreras basadas en modelos educativos innovadores que coadyuven a la formación integral del educando.

### Opinión de Empleadores

Ángel Díaz Barriga, junto con otros autores, realizaron una investigación con empleadores de universitarios, por medio de una entrevista a profundidad aplicada a 60 empresas (1988 y 1990). Deseaban detectar los criterios y valoraciones que utilizan las empresas en la contratación, y encontraron que los criterios de selección en distintas empresas resultan ser variados, además de distinguir entre los egresados de universidades públicas y los de universidades privadas. Otra investigación relacionada con el estudio de empleadores aborda en particular el impacto de los posgraduados empleados en organizaciones sociales (Baz y Téllez, en Ortega 2001) desarrollada mediante un análisis cualitativo a partir de la técnica Grupo Focal. Se detectó que los posgraduados tienen mayor impacto en el ámbito académico y de investigación; sin embargo, en el sector industrial no parece una discriminación suficiente entre las ventajas comparativas de una formación de licenciatura comparada con una de posgrado. En el artículo presentado por la revista *Expansión* (2002) titulado “¿Cuál es el perfil ideal de los egresados?”, se pretendió conocer la opinión de los empresarios sobre el perfil de los egresados de carreras administrativas. Muestran resultados interesantes, según los empleadores, por encima del currículo y procedencia académica, buscan características y valores que son responsabilidad exclusiva de la persona, como el liderazgo, la creatividad, la ética, la flexibilidad, el conocimiento teórico y técnico, entre otros. Por lo que hay que considerar de vital importancia brindar una formación universitaria con calidad, que apoye en la incorporación oportuna al campo laboral. Esto solo podrá ser posible mediante una estrecha vinculación entre la universidad y el sector productivo a nivel regional y estatal.

### **METODOLOGIA**

La investigación que se presenta es no experimental, con un diseño de tipo transaccional o transversal. Esta investigación es no experimental en virtud de que no existe una manipulación de las variables, lo cual es una de las características de este tipo de investigación de acuerdo a lo establecido por Hernández & Fernández (2006) que definen a la investigación no experimental como cualquier investigación en la que resulta imposible manipular variables o asignar

aleatoriamente a los sujetos o las condiciones. Señalando que en un estudio no experimental se observan situaciones ya existentes, no provocadas intencionalmente por el investigador. Asimismo el diseño es de una investigación transaccional o transversal, es decir, los datos se recolectaron en un solo momento, es decir en un tiempo único, con el propósito de describir las variables y posteriormente analizar su interrelación.

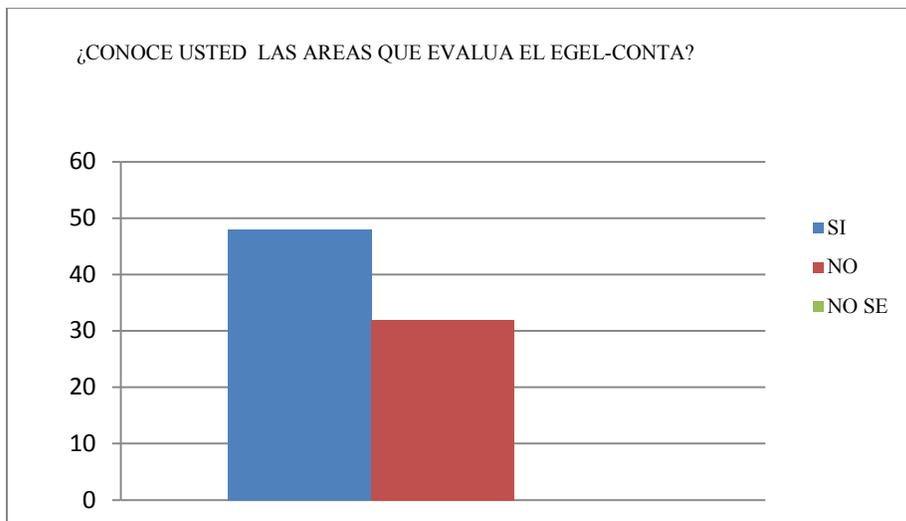
La metodología empleada para el desarrollo de esta investigación se efectuó en dos etapas, en la primera parte se llevó a cabo la revisión y análisis de bibliografía en libros, revistas, periódicos, bases de datos y documentos electrónicos relacionados con el tema de estudio, en base a esa revisión se elaboró el marco de referencia y el establecimiento de la hipótesis de investigación. En la segunda parte se realizó un estudio de campo, mediante la aplicación de un cuestionario a las personas a cargo de la administración y funcionamiento de las empresas, el cual se elaboró tomando como referencia la información obtenida en la revisión documental. En esta fase una vez elaborado el instrumento se llevó a cabo su pilotaje para determinar si la estructura, validez y confiabilidad eran adecuadas. Después de esta prueba se hicieron correcciones al instrumento principalmente de forma, el cual una vez modificado, se aplicó a los empresarios que cumplieran con las características del objeto de estudio. Una vez aplicadas las encuestas a los participantes de la investigación, los datos fueron capturados y analizados a través de pruebas estadísticas con el sistema estadístico SPSS.

El instrumento de medición que se elaboró para medir las variables fue un cuestionario, constituido en su mayoría por preguntas cerradas con respuestas de opción múltiple. El instrumento del cuestionario se aplicó a empresas que actualmente se encuentran en el sector servicios bajo el rubro de despacho contable, siendo los participantes los propietarios, socios, administradores, contadores o encargados que operan estas entidades ya que son estos quienes tienen el conocimiento y la experiencia de las operaciones, recursos, información y conocen la forma en que se toman las decisiones sobre su funcionamiento. Los informantes son personas relacionadas con el tema de investigación conocedoras y con amplia experiencia en la actividad que desempeñan, lo que proporcionó validez y confiabilidad a los datos recabados.

## RESULTADOS

A continuación se presenta el análisis de los resultados obtenidos en la aplicación del instrumento:

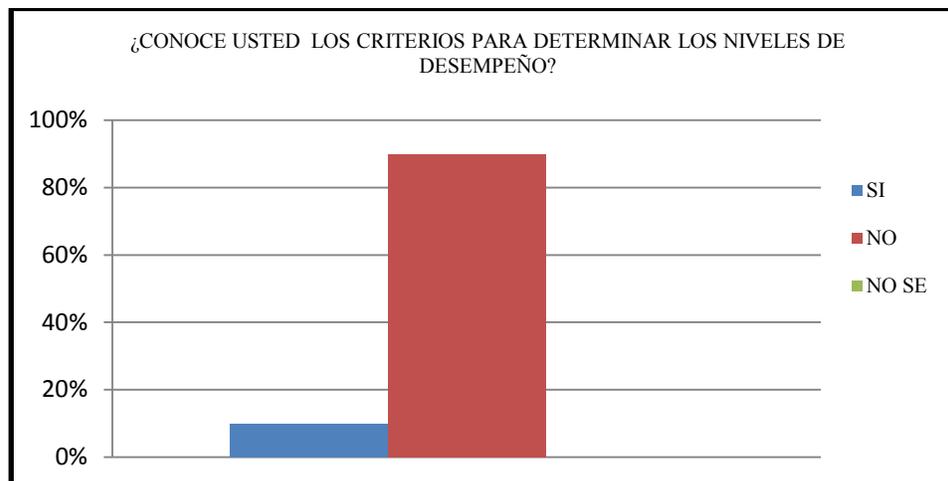
Figura 1: Conocimiento de Áreas EGEL-CONTA



Fuente: Elaboración Propia

En lo que se refiere al grado de conocimiento de las áreas que evalúa el examen EGEL-CONTA los encuestados reflejan que el 60% si tiene un previo conocimiento de ellas, mientras el 40% restante muestra un desconocimiento, considerando que un alto porcentaje de los contadores tienen relación directa con la formación académica de los egresados.

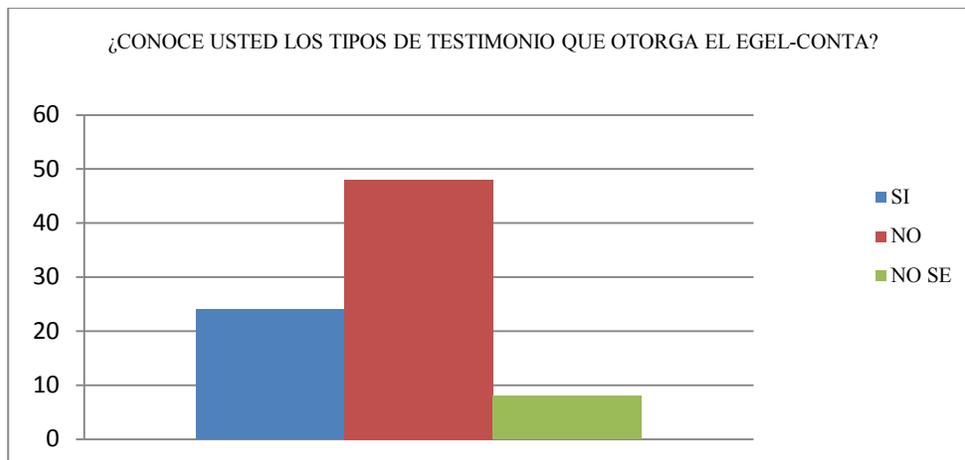
Figura 2: Criterios Para Determinar Niveles de Desempeño EGEL-CONTA



Fuente: Elaboración Propia

En cuanto al conocimiento con el que cuentan los empresarios sobre los criterios que se utilizan para determinar el nivel de desempeño en el EGEL-CONTA, el 90% muestra un desconocimiento mientras solo el 10% tiene una referencia de los mismos.

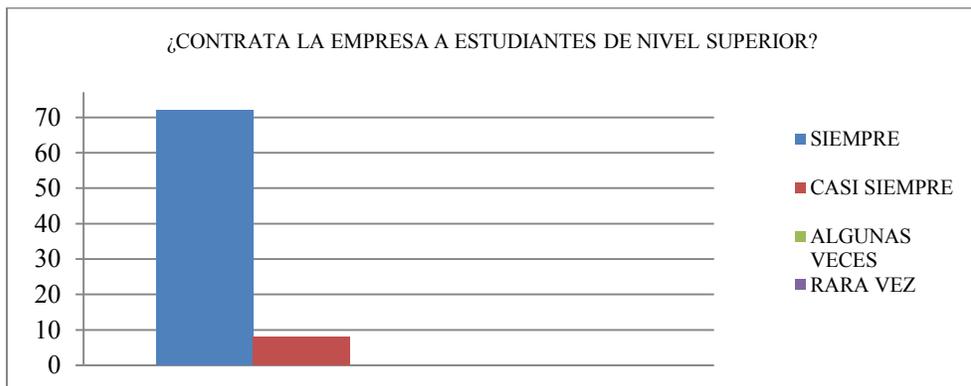
Figura 3: Testimonios EGEL-CONTA



Fuente: Elaboración Propia

El resultado refleja un 60% de desconocimiento por parte de los empresarios en cuanto al tipo de evidencia testimonio que maneja la evaluación presentada, el 30% si cuenta con el conocimiento de los tipos de testimonios que se entregan y el 10% restante manifiestan un desconocimiento de indiferencia ante la situación.

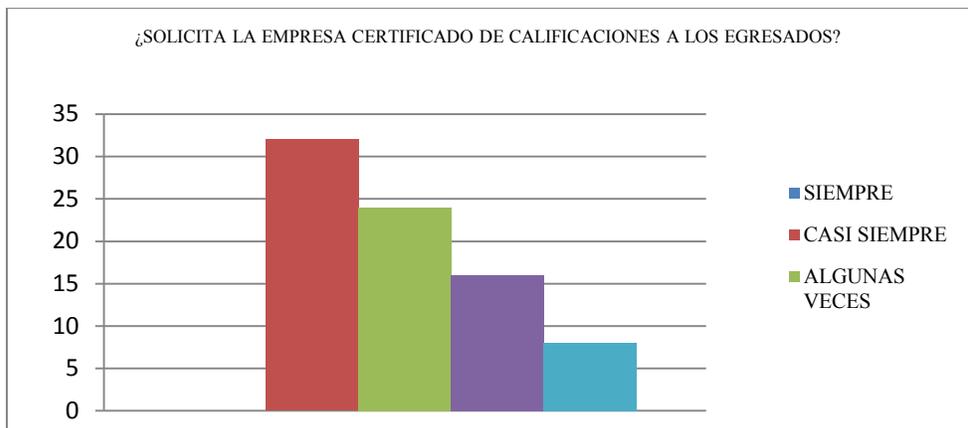
Figura 4: Contratación de Estudiantes de Nivel Superior



Fuente: Elaboración Propia

La tendencia de los empresarios demuestra que en un 90% de los encuestados siempre enfoca su contratación con preferencia a estudiantes de nivel superior y solo un 10% no tiene ese enfoque para tomar la decisión de contratación en las organizaciones que representan.

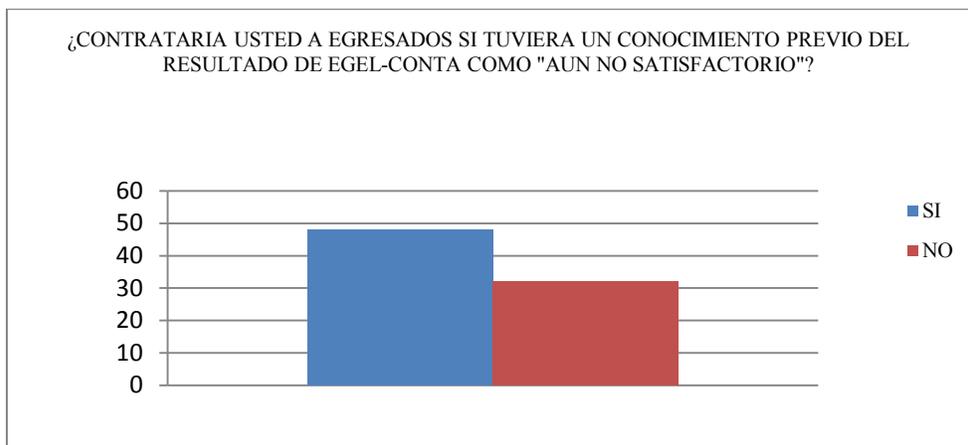
Figura 5: Solicitud de Certificado de Calificaciones



Fuente: *Elaboración Propia*

El resultado que nos arroja este cuestionamiento indica que el 40% de los empresarios siempre busca tener un conocimiento del certificado de estudios como un indicador para la contratación, mientras que algunas veces en un 30% se considera, rara vez representa un 20% de la muestra y solo un 10% nunca lo considera como parte del proceso de contratación.

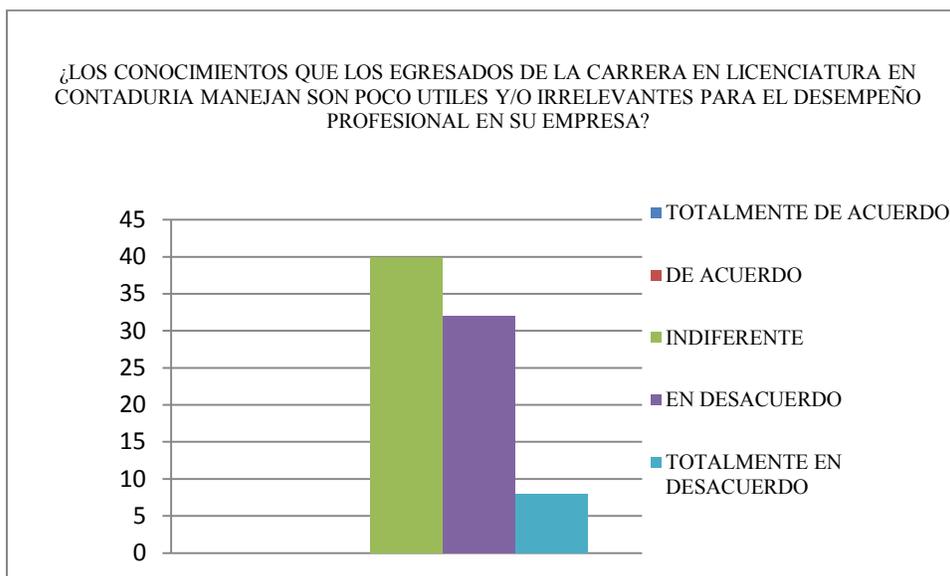
Figura 6: Contratación de Egresados con Conocimiento Previo de EGEL-CONTA



Fuente: *Elaboración Propia*

Se puede observar que un 60% de la muestra indica que a pesar de tener un conocimiento previo del resultado no satisfactorio del examen los empresarios seguirían tomando la consideración de la contratación, mientras que un 40% si lo reconsideraría como un factor decisivo para la toma de decisión de contratación del egresado. El resultado refleja que existe un 50% de los empresarios a los cuales les parece indiferente el hecho que los egresados cuenten con conocimientos previos para poder ejercer su profesión de manera eficiente, mientras el 40% está en desacuerdo con esta aseveración y solo un 10% se muestra totalmente en desacuerdo con esta cuestión por lo que si valoran el conocimiento que posee el egresado.

Figura 7: Los Conocimientos de los Egresados



Fuente: Elaboración Propia

## CONCLUSIONES

En la actualidad es de vital importancia que exista una vinculación entre las entidades de educación superior y las empresas, ya que son estas últimas las que día a día requieren de personal con conocimientos y habilidades bien definidas, es decir, con un amplio bagaje en su haber. Comúnmente los estudiantes consideran al EGEL solo como un requisito que cumplir para poder egresar de una universidad y a su vez, los empleadores no le dan la importancia necesaria a los resultados obtenidos en el examen mencionado. Sin embargo, surge la necesidad imperante de que los jóvenes egresados tomen conciencia de la importancia de los resultados y sobre todo del testimonio que obtienen después de aplicado el EGEL-CONTA, ya que estos dan una idea del aprovechamiento que estas personas tuvieron en su desarrollo académico. La tendencia de los empleadores está encaminada a presentar un mayor interés y aplicación a los testimonios y puntajes obtenidos en el examen, al momento de la selección y contratación de personal para sus empresas. Aun cuando los resultados de la investigación hasta este momento no son satisfactorios en cuanto a la importancia que los encargados de entidades del sector servicios, específicamente despachos contables, le otorgan a la información que les proporciona el EGEL-CONTA, la línea a seguir es que para la contratación de empleados, las entidades solicitarán y darán una consideración importante a los resultados que muestren las constancias del CENEVAL.

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# EL EMPRENDIMIENTO DESDE UNA INSTITUCIÓN DE EDUCACIÓN SUPERIOR EN MÉXICO

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## RESUMEN

*La tendencia de formar emprendedores involucra en México organismos gubernamentales, cámaras empresariales e Instituciones de Educación Superior. Los índices de sobrevivencia de las empresas en México, la contribución de los pequeños negocios al PIB Nacional, son solo algunos factores que favorecen esa corriente. Este trabajo presenta un análisis descriptivo de los proyectos presentados en la Expo Emprendedora en los últimos dos años en la Facultad de Economía, Contaduría y Administración de la Universidad Juárez del Estado de Durango (UJED), para identificar las temáticas de negocios que se generan, impacto económico entre otros elementos, comparándolas con las directrices del Instituto Nacional del Emprendedor y del propio Modelo Educativo de la UJED y determinar así su pertinencia. Los hallazgos deberán ser considerados para reorientar contenidos curriculares, particularmente en términos de competencias empresariales.*

**PALABRAS CLAVE:** Emprendimiento, Competencias, Empresarial

## ENTREPRENEURSHIP FROM AN INSTITUTION OF HIGHER EDUCATION IN MEXICO

### ABSTRACT

*The tendency to form and develop enterprising people in Mexico, involves government organisms, chambers of commerce and Superior Education Institutions. The Mexico's businesses survival index, the small businesses contribution to the National's Gross Domestic Product (PIB) are just some of the few factor that favors that trend. This research presents a descriptive analysis of the projects presented at the Enterprising Expo in the last 2 years at the Facultad de Economía, Contaduría y Administración of the Universidad Juárez del Estado de Durango (UJED), to identify the generated businesses issues and the economic impact among other elements comparing them to the National Enterprising Institute directives and own Educational Model of the UJED in order to determine its relevance. These findings should be considered to redirect curricular contents, particularly in terms of managerial competencies.*

**JEL:** M10, M14, M19

**KEY WORDS:** Enterprising, Competencies, Managerial

### INTRODUCCION

El emprendimiento empresarial, es la respuesta de moda a los problemas del mundo, como consecuencia o causa de la globalización. La pirámide de la riqueza versus el número de personas que la poseen y enfrentado al número de empresas que la generan, plantea la necesidad de iniciar con velocidad y precisión nuevas ideas de negocio exitosas. Esta tarea, pareciera depender del esfuerzo individual, de las características del espíritu emprendedor, por ejemplo ser innovador y tener metas creativas. Sin embargo en México, la estadística no está a favor de estas iniciativas y muestra que es más fácil que las empresas pequeñas y medianas que hoy se están creando, pese a su contribución con la riqueza y la generación de empleos, estén destinadas a perecer en dos años. Por eso más allá del emprendedor, hay que observar el ecosistema que este necesita para sobrevivir. Las Universidades juegan un papel prioritario en este hábitat empresarial pues es ahí donde se pueden desarrollar competencias empresariales y la capacidad emprendedora, es decir destrezas para saber y saber hacer. A nivel nacional, la Secretaría de Economía, a través del Instituto Nacional del Emprendedor (INADEM), reconoce la labor de las incubadoras de negocios, mediante las cuales opera sus directrices de crecimiento regional. El INADEM ha identificado sectores claves y estratégicos para cada estado, así como las áreas de negocio que se podrán desarrollar en el futuro. Las Incubadoras, deben favorecer la gestación de planes de negocios con esas directrices.

La Facultad de Economía, Contaduría y Administración de la Universidad Juárez del Estado de Durango, tiene como objetivo estratégico, desarrollar habilidades empresariales a través de su Centro de Desarrollo Empresarial (CDE). Adicionalmente, desde el 2002, ha venido realizando esfuerzos sistemáticos para fomentar el emprendimiento hasta la realización de una Feria Expo FECA Creatividad Empresarial, a la que los alumnos conocen como EXPO FECA. Desde el 2010, se premia a los proyectos ganadores con una beca para llevar a cabo su proyecto en la Incubadora de Negocios de la propia universidad. Este estudio, es un análisis descriptivo que plantea las siguientes preguntas de investigación: ¿Qué perfil de proyectos se generan en la Expo FECA Creatividad Empresarial? ¿Qué elementos muestran coincidencia con las directrices del INADEM para considerarlos proyectos susceptibles de ser incubados? ¿El perfil de los proyectos, responde a las necesidades detectadas por el INADEM para el Estado de Durango? Se tomaron en cuenta los proyectos presentados por los estudiantes de las licenciaturas de Administración y Contador Público generados durante los años 2012 y 2013. Los resultados de la investigación, son en este momento de suma importancia, ante la tarea de la FECA de replantear su Plan de Estudio de un sistema de enseñanza Tradicional a uno basado en Competencias, como lo sugiere el Modelo de la UJED y que a su vez atiende al llamado internacional, nacional y estatal de formar emprendedores.

## REVISION LITERARIA

Emprender proviene del latín coger o tomar e inicialmente tenía relación con la aventura, hasta evolucionar a lo que hoy se define como emprendedor. Su uso mas común es en el ramo de la economía donde se piensa que un emprendedor debe tener al menos tres características: a) actividad empresarial, b) creación de valor y c) propuestas innovadoras. (Castañeda, 2013). La discusión sobre si hay que formar emprendedores o estos nacen como tales, tiene muchas respuestas. Desde la perspectiva del Dr. Luis Aguirre Torres, quien fue reconocido en 2012 por Barak Obama como Champion of Change: connecting the Americas, cofundador de varias startups e Israel, Singapur, Estados Unidos y México, no es suficiente nacer con liderazgo, capacidad creativa e innovadora. Es necesario soportar a estos personajes con un Ecosistema. Entendiendo este último como una “red de colaboración y confianza entre personas y organismos, tanto públicos como privados... con el fin de favorecer la actividad emprendedora” (Peralta, 2013).

El Ecosistema del Emprendedor incluye: instituciones de apoyo como incubadoras, otras empresas, las universidades, los centros de investigación y desarrollo tecnológicos, al gobierno y a los medios de comunicación. En el caso de las universidades según Jorge Peralta, tienen un doble papel: “formar a los emprendedores y a los tecnólogos y ser el espacio natural para que surjan talentos y se generen conocimientos” (Peralta, 2013). Con todo esto, en México formar emprendedores es una tarea que tiene ecos desde los organismos gubernamentales, medios de comunicación, cámaras empresariales y universidades entre otros. Para 2002, se estimó que existían 130 programas dedicados dar algún tipo de apoyo a las pequeñas y medianas empresas (PyMEs). Apoyos que van desde servicios de consultoría hasta financiamientos (Tan & Lopez, 2005). Para la economía mexicana, las PyMEs representan el 99% de las empresas, aportan el 52% del PIB y generan el 72% de los empleos (OCDE, 2013). Esta política de crear nuevas empresas, ocurre en el mundo como efecto dominó, pues sería imposible dejar de reconocer la contribución que las pequeñas y medianas empresas hacen a las economías mundiales. En abril de este año, en Doha, Qatar, se afirmó que una “economía diversificada, basada en un tejido de muchas PyMEs en varias industrias, es más resistente a los vaivenes de los mercados internacionales erráticos”. (Arzeni, 2013).

Por otro lado hay varias razones para entender que los esfuerzos por generar proyectos empresariales factibles no deben verse solamente desde el individuo. El primero de ellos es que el INEGI reporta que cada año nacen alrededor de 200 mil empresas y según Tan y López solo 35 mil sobreviven sus primeros dos años de vida (Tan & López-Acevedo, 2009). El segundo dato indica que para el tercer trimestre del 2013, la tasa de desempleo para México es de 5.2%. (INEGI, 2013) El desempleo en México, tiene una característica relacionada con el nivel educativo. Según la Encuesta Nacional de Ocupación y Empleo, en 2009, las personas con educación media y superior tienen una tasa de desempleo del 6.19%, por encima del 5.16% promedio. (Heath, 2012) . Por último, según datos citados por Creadores de Exitos, en el 2013, el 40% de los egresados universitarios están desempleados, 5 de cada 10 personas con estudios carecen de empleo y mientras que hace 50 años un egresado tenía 3 ofertas de empleo, desde 1990, solo hay un trabajo disponible por cada 4 egresados. (Creadores de éxitos, 2013).

El Instituto Nacional de Emprendimiento, es la iniciativa del actual gobierno federal para el apoyo de los pequeños negocios y tiene por objeto “instrumentar, ejecutar y coordinar la política nacional de apoyo incluyente a emprendedores” (INADEM, 2013). En esa misma línea, el Fondo de Apoyo para la Micro, Pequeña y Mediana Empresa (FONDO PYME) es un mecanismo para brindar apoyo a las empresas haciendo énfasis en empresas pequeñas y a los emprendedores a través de financiamientos de carácter temporal a “programas y proyectos que fomenten la creación, desarrollo, viabilidad, productividad, competitividad y sustentabilidad de las micro, pequeñas y medianas empresas” (FONDO PYME, 2013). Otras iniciativas como ProMexico y Nacional Financiera también están en esta tarea. El INADEM, a través de un estudio realizado por el Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM) hace un listado de los Sectores estratégicos actuales y futuros para cada estado de la república. En la Tabla 1, se puede ver que para el Estado de Durango, los sectores clave son el Metalmecánico, la Maderera y Agroindustrial, siendo el segundo el que más genera empleos y el primero el que conserva una mejor calidad del empleo. Los sectores futuros, según este análisis, son: a) servicios de investigación, b) turísticos, c) energía renovable, d) tecnologías de la información y e) logística. (INADEM, 2013)

Tabla 1: Durango, Sectores Clave. Inadem

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Sectores Clave

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Cluster	Calidad del Empleo	VACB	Empleo	Productividad	Remuneraciones
Metalmecánica	138	2,615,477	3,354	780	462,396
Productos de madera	43	2,579,802	22,726	114	966,265
Agroindustrial	42	498,920	10,935	456	458,822

*Fuente: INADEM 2013. La calidad del empleo, se refiere a la remuneración promedio que recibe el empleado del sector. VACB es el valor agregado Censal Bruto, significa el valor agregado que se le da a los insumos primarios para convertirlos en productos terminados. El Empleo se refiere a la cantidad de personas de 12 años o más que se encuentran laborando. La Productividad, es el indicador que mide con que efectividad el trabajador obtiene un producto terminado. Remuneraciones son los pagos normales y extraordinarios, tanto en dinero o en especie antes de cualquier deducción.*

Por otro lado, el sector empresarial ha fomentado programas como los Centros México Emprende, dedicados a ser un enlace entre los emprendedores y los organismos gubernamentales, brindando asesoría y espacios virtuales, entre otros servicios, en todo el país. Otras iniciativas tienen que ver con la gestión de modelos de negocios como los Startup Weekend o los Startup Nights. Muchos de estos esfuerzos confluyen en 234 incubadoras y 21 aceleradoras de negocios reconocidas por INADEM (García Fuentes, 2013). La mayoría de estas se encuentran hospedadas en Universidades públicas y privadas. El ITESM, ha sido pionero en la creación de nuevos negocios desde las aulas y ha llevado este tema hasta el emprendimiento social, plasmado en su misión y en su declaración de principios y estrategias. Desde 1978 ha incorporado en sus planes de estudio el Programa Empresario, que más tarde se conoció como Programa Emprendedor (ITESM, 2011). Nuevo León, el segundo estado más competitivo de México, según el Instituto Mexicano para la Competitividad (IMCO, 2012) cuenta con ocho incubadoras y tres aceleradoras. La mitad se encuentran en las IES tanto públicas o privadas. El Estado de México, tiene 22 Incubadoras y 2 Aceleradoras. 12 de estas incubadoras son dirigidas por la Universidad Autónoma del Estado de México (INADEM, 2013). Además todas pertenecen a la Asociación Mexicana de Centros para el Desarrollo de Pequeñas Empresas (AMCDPE) y cuentan con la certificación del modelo SBDC. (Small Business Development Centers), iniciativa del Gobierno de Estados Unidos fomentado por la Universidad de Texas en San Antonio (AMCDPE, 2013). En el Estado de Durango, que ocupa el lugar no. 20 en el Índice de Competitividad Estatal 2012 (IMCO, 2012), se cuentan con cuatro incubadoras de negocios, dos de ellas instaladas en la UJED y las otras dos están albergadas en los Tecnológicos Superiores, también IES. En el caso de la UJED, el Modelo Educativo vigente a la fecha, ha incorporado la visión del Plan de Desarrollo Estatal Durango 2005-2010, en el que se menciona que “sus recursos maderables se considera una reserva forestal nacional y ocupa el segundo lugar, en lo que se refiere a esta industria, después de Chihuahua”. Se hace alusión al potencial agrícola, minero y al sector ganadero. En la generación del PIB del Estado, la industria manufacturera ocupa el primer lugar y el segundo el comercio, restaurantes y hoteles”. (UJED, 2006). Mas adelante el mismo documento, hace referencia a la tasa de desempleo del Estado la cual lo coloca en el tercer lugar nacional. (UJED, 2006).

Esta misma visión para el Estado de Durango, proponía desde entonces algunas directrices para la educación superior, que incluyen “formar ciudadanos con visión humanista, carácter emprendedor y nivel competitivo tanto local como global”. (UJED, 2006). A lo largo del Modelo Educativo, se propone desde diferentes perspectivas, promover un ser humano que se adapte a diferentes circunstancias, que cambie su entorno desde una actitud emprendedora. La UJED cuenta con una dirección de Vinculación y Desarrollo Empresarial, dentro de la cual desde hace 6 años, existe una Incubadora de Negocios, miembro de la AMCDPE y certificada en el modelo SBDC.

La Incubadora de Negocios de la UJED sigue el Modelo de Negocios del ITESM. Dentro del Plan de Negocios se cubren aspectos básicos como mercadotecnia, técnicos y financieros. Además de la Naturaleza del negocio, recursos humanos y requerimientos legales del proyecto.

Los emprendedores en la incubadora pasan por un proceso de asesoría, donde construyen sus planes de negocio y una vez aprobado se hace el trámite para concursar el proyecto y ser susceptible de que se asignen recursos por parte de Secretaría de Economía. El Fondo más recurrente es el de Capital Semilla. Una vez que el emprendedor recibe el recurso se incuba el negocio por hasta un año.

En la Facultad de Economía, Contaduría y Administración (FECA) de la UJED, se reconoce como un objetivo estratégico de Extensión, Difusión y Vinculación “ofrecer programas de Desarrollo Empresarial donde los alumnos, los docentes e investigadores colaboren activamente”. Actualmente esta facultad esta rediseñando su Plan de Estudios para trasladarse a uno Basado en Competencias. La FECA cuenta con un Centro de Desarrollo Empresarial CDE que tiene dentro de sus tareas formar habilidades empresariales y entre sus programas se brinda consultoría a nuevos empresarios y se imparten talleres como el YO EMPRENDO, programa auspiciado por la Secretaría de Economía, en el que se atienden a estudiantes universitarios y al público en general. Los proyectos de negocios nuevos generados en el CDE, se transfieren a la Incubadora de Negocios.

La FECA pertenece a la Asociación Nacional de Facultades y Escuelas de Contaduría y Administración (ANFECA) la cual lleva a cabo una Feria Anual de Emprendimiento. En la Tabla 2 se puede ver cuáles son las categorías y conceptos que esta Feria considera como pertinentes. Cabe la anotación de que las primeras tres categorías son las que utiliza el INADEM para clasificar a las Incubadoras de Negocios según el tipo de proyectos que atiende.

Tabla 2: Categorías ANFECA Para Clasificar Planes de Negocios

Categorías	Descripción	Ejemplo de Empresas
Tradicional	Apoya la creación de empresas innovadoras de sectores tradicionales cuyos requerimientos de infraestructura física y tecnológica no tienen un proceso productivo.	Compra venta alimentos, ropa, calzo y servicios en general, entre otros.
Tecnología Intermedia	Apoya la creación de empresas innovadoras con mecanismos semi-especializados	Dulces artesanales, procesamiento de alimentos, desarrollo software, animación, multimedia
Alta Tecnología	Apoya la creación de empresas en sectores especializados, tales como Tecnologías de Información y comunicación, microelectrónica, sistemas micro-electromecánicos y farmacéuticos.	Nueva patentes 3D, ciencia médica aplicada, desarrollo de software de alta especialización
Proyectos sociales sustentables	Apoya la creación de empresas innovadoras enfocadas a la contribución social, a la sustentabilidad, cuidado el medio ambiente, desarrollo comunitario con o sin fines de lucro.	Material de construcción, tratamiento de aguas, comercialización de productos biodegradables, apoyo y crecimiento de grupos vulnerables.

*Las cuatro categorías que se muestran en la tabla, representan la clasificación que la ANFECA hace de los Planes de Negocios que se reciben en la Feria Anual de Emprendimiento. La categoría Tradicional, alberga proyectos de compra venta y servicios generales, los de Tecnología Intermedia son proyectos productivos con un nivel de especialización. Los de Alta Tecnología, tienen que ver software, patentes y medicina. Los proyectos sociales sustentables, son la categoría que alberga proyectos de cualquier naturaleza, siempre que estén incrustados en el enfoque de ayuda a grupos vulnerables como indígenas, madres solteras, niños en situación de calle.*

Por su parte la FECA, realiza dos veces al año, al final de cada semestre la Feria Expo FECA Creatividad Empresarial mejor conocida entre los estudiantes como Expo Emprendedora. En ella participan los estudiantes de noveno semestre de las licenciaturas de Administración (LA) y de Contador Público (CP). Los proyectos que se evalúan provienen de la asignatura “Formulación y Evaluación de Proyectos de Inversión”, dentro de la Academia de Finanzas. Esta materia, tiene duración de un semestre, tiempo en el cual el alumno debe formular un estudio de mercado, un estudio técnico y otro financiero, para evaluar la viabilidad y factibilidad de una idea de negocio.

Además de esta asignatura, los alumnos han cursado antes cinco clases de finanzas y al menos 2 de mercadotecnia, dependiendo de la licenciatura. Como materia optativa, es decir no obligatoria, se ofrece un curso de “Programa Emprendedor” (Facultad de Economía, Contaduría y Administración, 2008)

## METODOLOGÍA

El estudio hace una descripción del tipo de proyectos que se construyen desde las aulas de la FECA en la asignatura de Evaluación de Proyectos de Inversión y que se presentan en la “Expo FECA Creatividad Empresarial” para relacionar estas propuestas con las directrices que marca el INADEM y el propio Modelo Educativo de la UJED. También hace un análisis de lo que por su parte ha realizado el CDE y lo que genera la Incubadora de Negocios de la UJED, como los organismos que atienden emprendedores en procesos de Consultoría y Asesoría. Los Proyectos deben cumplir los requisitos de ser susceptibles de incubación, es decir, ser viables y factibles. Viables desde el punto de vista de mercado y técnico y factible desde la perspectiva financiera. Toda la información se procesó en SPSS 19.0. Los proyectos que se tomaron en cuenta para esta investigación, se realizaron en 2012 y en 2013. Antes de esta fecha, no se tienen bases de datos que registren nombres de los proyectos, el giro o algún dato adicional. Por otro lado, el proyecto se presenta en la Feria solo con un resumen ejecutivo. Se da por hecho que el Proyecto de Inversión o Plan de Negocios se entrega solo al profesor que imparte la cátedra.

Tabla 3: Historia y Evolución de la Expo FECA Creatividad Empresarial

Fecha	Evento
Antecedentes	En materias como Mercadotecnia, Evaluación Financiera, se presentan proyectos ya sea de negocios o de inversión, sin exposición formal o prototipos.
2002	Se inicia el proceso de acreditación de la FECA ante CACECA y se cumple con una de las sugerencias, de realizar eventos donde se evidencie la formación empresarial. Se realiza la primer Expo FECA Creatividad Empresarial
2002-2011	Se realiza la Expo FECA Creatividad Empresarial, con un promedio de 25 proyectos al semestre, es decir 50 al año. Los jueces son profesores de la FECA
2007	Se realiza la primera EXPO NACIONAL EMPRENDEDORA, ANFECA. Con etapas regionales por zona.
2009	La primera generación de economistas realiza proyectos de inversión. Son alumnos de 5o. Semestre, por eso quedan excluidos de la Feria.
2010	Se invita por primera vez a jueces externos. Empresarios locales y tutores de la Incubadora de Negocios de la UJED
2012	Se inicia la base de datos de proyectos de la Feria Expo Emprendedora. Se estandarizan los criterios del Resumen Ejecutivo y de la Presentación ante jueces. A partir de ese año, se ofrece una Beca de Incubación para los nueve proyectos ganadores por parte de la Incubadora de Negocios.

*Fuente: Datos recabados entrevistas a tres ex directivos de la FECA. Esta tabla contiene un resumen de los principales hechos relacionados con la Feria Expo FECA Creatividad Empresarial, mejor conocida como EXPO Emprendedora. Esta se realiza dos veces al año, al final de cada semestre. Antes de ello, proyectos de inversión o ideas de negocio eran presentados en forma aislada en el salón de clase. Hoy en día los estudiantes presentan su proyecto ante un jurado, integrado por empresarios reconocidos y tutores de la incubadora de negocios.*

Los proyectos que se evaluaron, son 38. Se descartaron resúmenes ejecutivos que no contenían al menos el 50% de la información solicitada en el Reglamento de Operación de la EXPO FECA

Creatividad Empresarial. Los equipos deben participar según lo describe la Tabla 4, con un Resumen Ejecutivo, una Presentación Ejecutiva, Diseño y presentación de Stand. La etapa de premiación se menciona en el Reglamento de Operación del evento, mencionando las categorías sin descripción adicional o definición. De 65 resúmenes ejecutivos, solo se conservaron el 58.46%

Tabla 4: Etapas de la Expo FECA Creatividad Empresarial

Etapa	Descripción
Resumen Ejecutivo	3 días antes de la presentación ejecutiva, los equipos entregan a la Coordinación de Logística Académica, un Resumen Ejecutivo que contiene debe contener los siguientes datos: Factibilidad, viabilidad y vulnerabilidad del proyecto. Valor agregado del proyecto. Información relevante de cada etapa del proyecto: Finanzas, Técnico, Económico y Mercadológico. El documento debe ser presentado en no más de 7 cuartillas en una redacción clara y concisa.
Presentación Ejecutiva	Los equipos preparan una Presentación de no más de 10 diapositivas y que no exceda de 7 minutos ante un jurado.
Presentación Stand	Los equipos diseñan y montan un "Stand", donde atenderán al público en general sobre el producto o servicio que ofrecen.
Resultados y Premiación	Las categorías que se premian son: Mejor proyecto Proyecto más factible Proyecto con mayor impacto Proyecto más innovador Proyecto más creativo Mejor stand Mejor presentación Mejor producto Mejor servicio

*Fuente: (FECA, 2012). Según el Reglamento de Operación de la Expo FECA Creatividad Empresarial, los estudiantes inscriben proyectos que antes deben haberse gestado en un curso, dentro de la currícula oficial. Los Elementos del Resumen Ejecutivo, son los principales aspectos que cubre un Plan de Negocios. Las Categorías que se premian son nueve y tal como los elementos del resumen ejecutivo, se enlistaron tal y como aparecen en el citado reglamento.*

Los proyectos se clasificaron de acuerdo a su giro, de acuerdo al tipo de incubación que solicitarían (Clasificación de Incubadoras de INADEM o de Negocios de ANFECA). Se relacionó el giro con el sexo de los integrantes del proyecto. Se identificó el perfil de los indicadores financieros como la TIR, el Periodo de Recuperación, la Inversión Inicial. Datos de Mercadotecnia fueron descartados al no incluir la mayoría información consistente como el tipo de mercado al que van dirigidos. (Clase social). Aspectos técnicos fueron descartados al no encontrarse información homogénea como número de empleados, localización de la planta, entre otros que pudieran compararse. Para entender estas diferencias, se elaboró la Tabla 5, donde se identifican los elementos de la Formulación y Evaluación de un Proyecto de Inversión, los requisitos de la convocatoria de ANFECA y los de la Secretaría de Economía, a través de las Incubadoras de Negocios y que responden a las directrices del INADEM. Importante destacar que la calificación que obtiene el alumno no está relacionada o no toma en cuenta el resultado de la Expo FECA Creatividad Empresarial.

Tabla 5: Aspectos de Diferenciación Entre un Plan de Negocios, un Proyecto de Inversión y la Convocatoria de ANFECA Para el Emprendimiento

Formulación y Evaluación de Proyectos de Inversión	ANFECA	INCUBADORA-SECRETARIA DE ECONOMIA-INADEM
Estudio de Mercado	Resumen Ejecutivo	Resumen Ejecutivo
Estudio Técnico	Naturaleza del Proyecto	Definición y Justificación del Negocio
	Mercado	Mercadotecnia e Imagen
	Producción	Producción Operación
		Administración de Recursos Humanos

Estudio Financiero	Finanzas	Contabilidad y Finanzas
	Aspectos Legales	Aspectos legales
	Impacto social y/o ambiental	
	Anexo	Anexos
	Fuentes	Plan de Trabajo grafica GANTT Canvas Business Model

*En esta Tabla, se muestran las diferencias de contenido general, entre la Formulación y Evaluación de un Proyecto de Inversión que por lo general solo contiene esos tres aspectos, la Convocatoria ANFECA para la Feria Nacional de Emprendimiento, y el guión para elaborar el plan de negocios de la Secretaría de Economía y que se opera en las Incubadoras de Negocios reconocidas por INADEM, donde además se incluye por ejemplo el lienzo estratégico o CANVAS Business Model. Y la Grafica de Gantt para visualizar el Plan Maestro del proyecto.*

En la tabla 5, se manifiestan requisitos entre un tipo de proyecto y otro. No significa que existan más elementos. El estudio técnico por ejemplo, puede incluir la parte de Recursos Humanos.

## RESULTADOS

Retomando las preguntas de investigación. ¿Qué perfil de proyectos se generan en la Expo FECA Creatividad Empresarial? ¿Qué elementos muestran coincidencia con las directrices del INADEM para considerarlos proyectos susceptibles de ser incubados? ¿El perfil de los proyectos, responde a las necesidades detectadas por el INADEM para el Estado de Durango?

### Perfil de los Proyectos

Los proyectos están integrados por estudiantes de noveno semestre, cursando la materia de Formulación y Evaluación de Proyectos de Inversión. Se forman grupos de 4 a 6 estudiantes y algunas veces hasta 8. Los estudiantes tienen la facilidad de formar equipos con estudiantes que cursan la materia, aunque sea con otro profesor o pertenezcan a otra carrera. En la Tabla 6, se puede observar de acuerdo al giro del negocio, el tipo de proyectos que se generan. No hay una tendencia contundente. Los proyectos de Alimentos y Servicios se consideran de Incubación Tradicional, mientras que los de manufactura de Tecnología Intermedia. Como se puede observar no hay proyectos de giro agrícola.

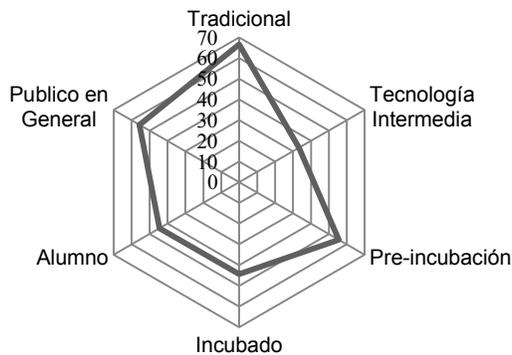
Tabla 6: Giro de los Proyectos

Giro	Año			Total	
	2012	2013			
Alimentos	3	8	11	29%	
Manufactura	6	7	13	34%	
Servicios	5	9	14	37%	
	14	24	38		

*En esta figura se observa que no hay una tendencia marcada de acuerdo al giro de los proyectos. Se mantiene el mismo comportamiento. Todos estos proyectos entrarían en un Modelo de Incubación Tradicional a excepción de los de Manufactura que solo representa un 34 % y que entrarían en Tecnología intermedia.*

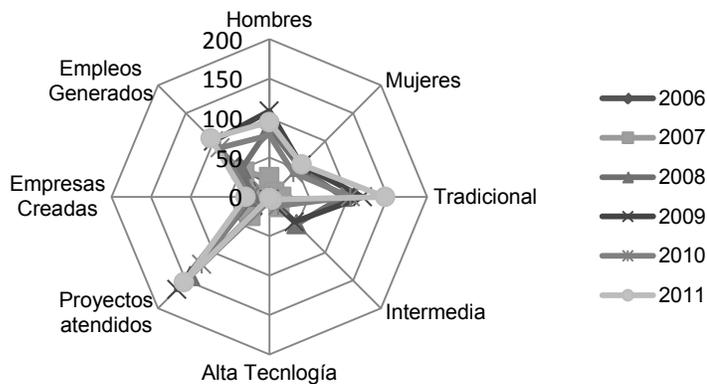
Las Figuras 1 y 2, por su parte muestran el comportamiento de los proyectos atendidos por el Centro de Desarrollo Empresarial y por la Incubadora de Negocios de la UJED respectivamente. Igual que en la Expo FECA Creatividad Empresarial, los proyectos que se generan son de tipo Tradicional. Datos proporcionados por la Incubadora de Negocios, confirman que desde que esta inició solamente 15 proyectos han sido “atendidos” en la Incubadora, provenientes de la FECA. Ninguno de estos proyectos ha surgido de la EXPO FECA.

Figura 1: Tipos de Proyectos Atendidos en el CDE 2012-2013



Esta figura muestra la tendencia del tipo de proyectos que se generan en el CDE. Las dos categorías son tradicional y de tecnología intermedia, siendo 66.6% para la primera. Es decir la mayoría son comercios y servicios que no requieren especialización. En cuanto a la relación, este factor nos indica que la tendencia es atender poco mas de 50% al público en general y el resto a alumnos de la FECA. El otro factor comparable es el status. El 55.5% de los proyectos estan en etapa de pre-incubación, es decir estan recibiendo algún tipo de asesoría para terminar de construir el plan de negocios y acceder a un crédito. El resto ya estan en etapa de incubación, es decir en marcha.

Figura 2: Tipos de Proyectos Atendidos en la Incubadora de Negocios 2006 A 2011



*Fuente: (UJED VyDE , 2013) La figura nos muestra el comportamiento de la generación de negocios de la Incubadora de Negocios desde 2006 hasta 2011. Datos de 2012 a la fecha aún no han sido publicados. La tendencia es atender a mas hombres que mujeres y a generar mas negocios de tipo tradicional. La tecnología intermedia queda en segundo lugar y los proyectos de Alta Tecnología, no son representativos. Aunque ha habido años en que se atienden casi 180 ideas de negocios, el promedio es de 21 empresas creadas para esos años. Los empleos generados en cambio si ienen una evolución, siendo el 2009, el año en que mas impacto se tuvo en este ramo.*

La siguiente asociación tiene que ver con el sexo de los generadores de proyectos. En la Incubadora de Negocios, son los hombres los que generan más proyectos de incubación que las mujeres. En la FECA, hay solamente 2 proyectos para los periodos analizados, donde la participación de las mujeres es menor al 33%. La tabla 7 muestra esa asociación. La tendencia tampoco muestra un comportamiento específico, solo en el caso de que el equipo está conformado por solamente mujeres, estas tienden a elaborar más proyectos de Alimentos, que entrarían en la clase de Tradicional.

Tabla 7: Participación de Mujeres Vs. Giro de Negocios

% de mujeres	Giro		
	Alimentos	Manufactura	Servicios
0%	0	1	0
25%	0	0	1
33%	1	2	0
50%	1	1	3
57%	0	0	1
60%	0	1	1
67%	1	1	2
71%	0	0	1
75%	0	1	0
80%	1	1	0
.83%	0	1	3
100%	5	2	2
Sin Inform	2	2	0
	11	13	14

*La tabla muestra que tampoco hay una tendencia contundente que refleje el tipo de proyectos que se generan respecto al número de participantes mujeres. El genero no es determinante. Cuando las mujeres son la mayoría se generan proyectos de Alimentos y cuando no existe participación femenina, o esta es menor al 33%, se generan proyectos de Manufactura o Servicios sin que esta asociación sea definitiva.*

### Análisis E los Elementos Evaluables en los Proyectos

La tabla 8 muestra un análisis que pretende identificar asociaciones y tendencias en cuanto al tipo de proyecto y el análisis que financiero que de él se hace. La mayoría de los proyectos concentran una inversión inicial menor a un millón de pesos o en la categoría de más de 1 millón y menos de 10 millones. Si bien cada proyecto debe manejar su propia Tasa de Rendimiento (TIR), algunos de los proyectos presentan niveles poco probables.

### Relación Entre los Negocios Propuestos y las Necesidades del Estado

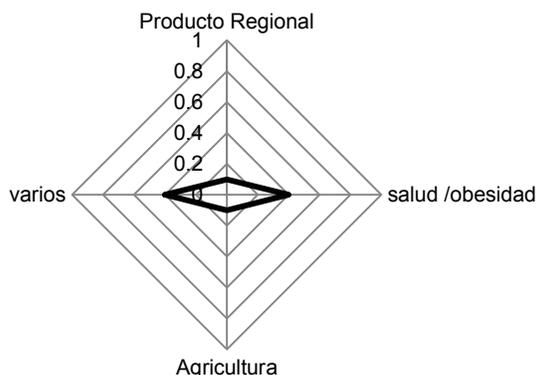
El siguiente análisis, se enfoca a identificar, independientemente de la factibilidad, las ideas de negocios formuladas y evaluadas en el proyecto de inversión y su relación con los Clúster identificados por INADEM y el Modelo Educativo de la UJED.

Tabla 8: Comparativo del Análisis Financiero de los Proyectos

GIRO	Per.R ecup	Inversión inicial																	más de 100'	
		Sin dato	1 a 10'				10' a 100'		a 1'								TIR			
		TIR	TIR				TIR		TIR											
		Sin dato	Sin dato	10 a 20%	20 a 30%	50 a 100 %	Sin dato	10 a 20%	Sin dato	10 a 20%	20 a 30%	30 a 40%	40 a 50%	50 a 100 %	55%	a 10	mas de 100	más de 100		0.1 millo nes
Alimentos		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	3 a 5	0	0	1	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	5
	a 3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	4
	mas de 5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Manufactura		1	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	5
	3 a 5	0	0	0	2	1	0	0	0	0	0	0	0	1	0	0	0	0	0	4
	a 3	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	3
	más de 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Servicios		0	0	0	1	1	0	1	3	1	0	0	0	1	0	0	0	0	1	9
	3 a 5	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	3
	a 3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	más de 5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
		1	1	4	4	5	1	1	5	1	1	1	1	3	1	1	1	5	1	38

Esta compilación de datos, arroja frecuencias y asociaciones entre el Giro del Proyecto, la TIR (rendimiento del proyecto) y periodo de recuperación y el monto de la inversión. Hay frecuencias muy altas relacionadas con una ausencia de datos. No hay una tendencia en montos de inversión y hay periodos de recuperación que se analizan en más de cinco años. Los Negocios de Manufactura, tienen inversiones menores a 10 millones.

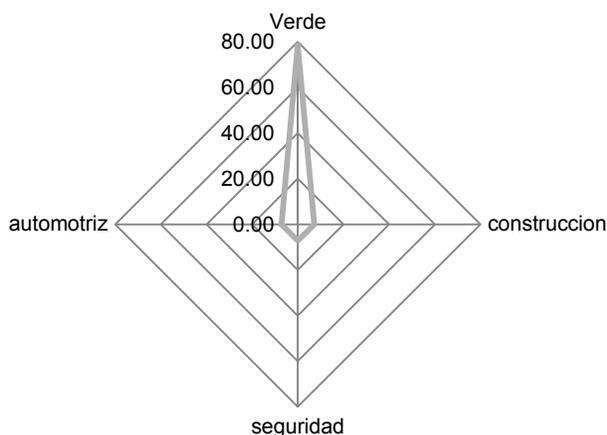
Figura 3: Temas de los Proyectos de Alimentos. (Tradicionales)



La figura muestra la tendencia de los temas de los proyectos de Alimentos. El 40% de ellos tiene que ver con negocios para combatir la obesidad y o bien temas relacionados con la salud. Alimentos que ofrecen productos del campo solamente aparece uno en todos los proyectos revisados. Los Productos regionales, se consideraron alimentos como dulces tradicionales. En el de varios, se encuentran diversas temáticas sin relación con los anteriores y sin tendencia marcada entre ellos.

En la figura 3, se toman en cuenta solo proyectos de la rama de Alimentos. Solo un proyecto tiene temática de producto Agroindustrial. Se ofrece un alimento con un recurso natural típico de la región. Sin embargo el tema recurrente es la salud. Alimentos dietéticos, altos en fibra, directamente relacionados con el combate a la obesidad, se encuentran aquí. En Varios no hay homogeneidad ni tendencia temática.

Figura 4: Temas de Proyectos de Manufactura. (Tecnología Intermedia)



En esta gráfica, se puede apreciar que la mayor tendencia en los proyectos e Tecnología Intermedia, en este caso de manufactura, son con tendencia ecológica. Las otras clasificaciones, como la automotriz, la construcción y la seguridad contribuyen con menos de un 10%. Los proyectos ecológicos tienen que ver con lámparas solares, cargadores solares, productos con materia prima que proviene del reciclaje de cartón, llantas y PET

La figura 4, tiene como propósito mostrar el tema de los proyectos de Tecnología Intermedia. La tendencia clara es participar con proyectos ecológicos con temáticas que van desde los cargadores solares hasta el reciclaje del PET. El INADEM identifica por su parte como un sector clave en el futuro las energías renovables. Esta es por lo tanto una tendencia que se manifiesta en los proyectos estudiantiles. En cuanto a los negocios de servicios, estos presentan una temática heterogénea que incluye restaurantes, entretenimiento, deportes, zoológicos y un metro como

medio de transporte por ejemplo. No se identificó una tendencia que pudiera relacionarse con las directrices que se analizan.

## CONCLUSIONES

El Perfil de Proyectos de Inversión, presentados en la Feria EXPO Creatividad Empresarial, para los años revisados, no arroja una tendencia clara como preferente, a excepción de los proyectos de Manufactura, donde más de un 78% tiene una temática ecológica. Sin embargo no hay respuestas metalmecánicas, madereras, o agroindustriales. Tampoco turísticas, de investigación, tecnologías de información o logística. Por lo que no hay relación con los Sectores Estratégicos marcados con INADEM ni tampoco con la vocación económica del Estado de Durango, plasmada en el Modelo Educativo de la UJED. La característica más rescatable es que la mayoría de los Proyectos, de incubarse requerirían de una Incubación Tradicional. Es decir, se comercializan productos y servicios pero no se genera riqueza en activos.

La integración de los Proyectos de inversión, no es consistente con los elementos que marca INADEM a las Incubadoras de Negocios. Los datos analizados muestran frecuencias altas precisamente en donde no se presentó dato o este no estaba claro. Esto significa que los proyectos que se generan en las aulas no están listos para incubarse. Y esto coincide con los datos de la Incubadora de Negocios en la que se refleja que aún con la Beca de Incubación, ningún proyecto sale de la feria. Sin embargo no se puede afirmar que ningún proyecto se haya llevado a cabo, pues no se tiene un seguimiento sistemático. Si hay negocios en marcha, ninguno ha pasado por la Incubadora.

Algunos factores que pueden determinar la falta de efectividad de los proyectos, tiene que ver con el trabajo organizado en el aula. La UJED como parte de ese ecosistema emprendedor, debe guiar proyectos que aborden la temática del INADEM. La razón es simple, la misión de una IE es egresar personas que cambien el entorno. Si el alumno no es guiado, se puede generar una idea de negocio pero no llegar a serlo. También se debe tomar en cuenta los reglamentos de las Ferias de Emprendimiento. No están alienadas ni siquiera con lo que ANFECA solicita, en las Ferias Nacionales y Regionales de Emprendimiento. Se puede seguir reconociendo la innovación o la creatividad, siempre que estén enmarcadas o en las categorías de los Clúster del INADEM o bien dentro del tipo de Incubación que se requiere, como lo hace ANFECA. Finalmente el hecho de que durante muchos años los proyectos fueran evaluados por profesores de la institución, pudo limitar la evolución o exigencia de los mismos al no recibir retroalimentación que proviniera de la vinculación con el sector empresarial. Como un punto a considerar en el rediseño del Plan de Estudios de Tradicional a uno Basado en Competencias, este tipo de clases, debe encontrarse al menos dos semestres más abajo. La Facultad tendría cautivo al alumno un año más, para trabajar su plan de negocios desde el CDE y pasar a la Incubadora o a su puesta en marcha incluso antes de egresar. Tal como está ahora en noveno semestre, parece según los datos, un poco tarde para formar emprendedores.

Hay una diferencia académica entre Formular y Evaluar Proyectos de Inversión y Diseño de un Plan de Negocios. La diferencia está en el valor agregado, en las competencias blandas. Más allá de los elementos que integran uno y otro documento, en el primero se pretende desarrollar competencias técnicas y en el segundo competencias de ejecución. Luego entonces la Feria Expo FECA Creatividad empresarial, no necesariamente debe seguir ligada a la materia de Formulación y Evaluación de Proyectos de Inversión. Se puede concluir también que la preocupación de los estudiantes además de los proyectos ecológicos, está en los proyectos orientados a combatir problemas de salud como la obesidad. Aunque el primero puede

relacionarse con el tema de energía renovable, sector clave en el futuro para Durango, no necesariamente llegan a ser el tipo de proyectos del nivel deseable. Por otro lado el tema de la obesidad, es una preocupación nacional, así que este tipo de proyectos debe seguir fomentándose.

El emprendimiento empresarial, está siendo atendido desde la Incubadora de Negocios en la UJED y desde el CDE en la FECA, que a su vez transfiere los proyectos a la Incubadora. Es decir funciona como una ventanilla o extensión al menos en ese aspecto. El número de proyectos de la FECA no rebasa 15. Comparado con el número de proyectos generados al año, por la feria, que pueden ser por lo menos 40 al año, si el 10% de estos se incubara, desde el 2006, que comenzó a operar la incubadora, habría 28 proyectos en marcha. También es importante señalar que si durante 10 años, el evento Expo FECA solo ha servido como un escaparate pero no como una plataforma de creación de negocios, es momento de pensar en otra estrategia distinta para promover el emprendimiento. Metodologías innovadoras como los fines de semana Startup, o las sesiones de estrategia empresarial con empresarios de la región como mentores y profesores como asesores, pueden resultar mucho más efectivas. El nuevo plan de estudios debe fortalecer la relación del estudiante con los servicios extracurriculares de la FECA, para que independientemente de la clase, el alumno pueda ir identificando su hábitat para emprender.

Finalmente, documentar las experiencias de emprendimiento, integrar las temáticas regionales a los planes de estudio, alinear la exigencia de mecanismos como la Feria Expo Emprendedor y el CDE para lograr generar proyectos de emprendimiento real y proponer nuevas estrategias innovadoras para la creación de negocios, dentro o fuera de la currícula, son solo alguna de las tareas para responder a las demandas económicas de sociedad de la región.

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# EXPORTACIÓN DEL MEZCAL DE DURANGO A TOKIO JAPÓN

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## RESUMEN

*Este trabajo tiene como objetivo comprobar si la comercialización del mezcal duranguense para su exportación a Tokio, Japón, representa una ventaja comparativa en el Comercio Internacional del Estado de Durango. México es un país rico en recursos naturales los cuales han sido desaprovechados para producir bienes de calidad que permitan fomentar su participación en el comercio internacional y utilizar la herramienta de comercialización como un factor para el desarrollo económico de la sociedad. Miles de familias campesinas habitan en ecosistemas donde no llueve la mayor parte del año y por ello no hay bosques maderables ni posibilidad de agricultura rentable. Uno de los productos endémicos de esta región que deja mayor beneficio económico es el Maguey (Agave-Mezcalero), fuente de materia prima para productos con alto valor agregado como los mezcales. Este trabajo está dirigido a evaluar la viabilidad de la comercialización del mezcal duranguense para su exportación a Tokio, Japón, para comprobar si representa una ventaja comparativa en el Comercio Internacional del Estado de Durango. La metodología utilizada en este análisis, fue estudio de caso, a través de una investigación documental y de campo con instrumentos de recopilación de datos como información documental, entrevistas y observación directa. Los resultados de este trabajo confirman que derivado de una ventaja competitiva de la región, garantizan una adecuada inserción en los mercados internacionales.*

**PALABRAS CLAVES:** Comercialización Internacional, Mezcal, Ventaja Competitiva

## DURANGO'S MEZCAL EXPORTATION TO TOKYO, JAPAN

### ABSTRACT

*This research's objective is to check to prove if the commercialization of Durango's Mezcal for its exportation to Tokyo, Japan, poses a comparative advantage to Durango's State International Commerce. Mexico is a country rich in national resources which have been wasted or misused to produce quality goods that allow to promote its participation in the international commerce and utilize the commercialization tools as a factor in its society's economic development. Thousands of farmer's families live in ecosystems with little to no rain throughout the year, that's why its forest's wood cannot be commercialized and there is no possibility for profitable agriculture. One of the endemic products for this region is the Maguey (Agave Mezcalero), a source of raw material for products with added value like the mezcales. This research aims to evaluate the viability of the commercialization of Durango's Mezcal for its exportation to Tokyo, Japan, to see if it has a comparable advantage to Durango's State International Commerce. The methodology utilized in this analysis was a case study through a field and documentary investigation using data recompilation such as documental information, interviews and direct observation. The*

*results of this research indicate that because a competitive advantage in the region guarantees an adequate insertion into international markets.*

**JEL:** F44, F63 y F23

**KEYWORDS:** Competitiveness, International Business, Competitive Advantage, International Competitiveness, Mezcal

## INTRODUCCION

México es un país rico en recursos naturales los cuales no han sido bien utilizados para producir bienes con valor agregado, que permitan fomentar su participación en el comercio internacional y así aprovechar la comercialización como un fuente de divisas e impacto económico para la sociedad. Hoy en día nuestro país cuenta con la mayor cantidad de tratados de libre comercio pactados en diferentes partes el mundo, con un total de 43 países y tres continentes, representando ésta, una oportunidad única en el comercio exterior ya que abre la puerta a mercados de millones de consumidores. Nuestro país, paga un costo de oportunidad muy alto al no hacer uso de las ventajas que estos nos brindan.

México se encuentra dividido por dos zonas importantes, la Neartica y la Neotropical, lo que permite tener una variada gama de vegetación, tanto de zonas templadas como de zonas áridas y semiáridas. Miles de familias campesinas habitan en ecosistemas donde no llueve la mayor parte del año dando como resultado que en estas zonas no hay bosques maderables ni posibilidad de agricultura rentable. Por esta razón, se han buscado diversas estrategias de aprovechamiento de los recursos forestales no maderables, los cuales involucran varias especies, entre ellas el orégano, la lechuguilla, la candelilla entre otras. Pero sin duda, el que deja mayor beneficio económico es el Maguey (*Agave-mezcalero*), existen más de 120 especies de Agave, fuente de materia prima para productos con valor agregado como los mezcales. Hoy en día, se ha convertido en tema de interés de académicos, empresarios y políticos la agroindustria derivada de los agaves donde se visualizan excepcionales planes de desarrollo.

Durango debe aprovechar esta tendencia donde el gobierno estatal, ha colocado a la cadena maguey-mezcal, en la lista de prioridades de Desarrollo Estatal. La Cadena Agave-mezcal, es de Importancia Socioeconómica y de competitividad para el Estado de Durango, esta cadena se ubica en el cuadrante de Impulso para el Estado de Durango, al representar una alternativa de reconversión productiva para zona agrícola de bajo potencial. (SAGARPA, Desarrollo de Capacidades Innovación Tecnológica y Extensionismo Rural, 2011) Las agaváceas se hallan desde el nivel del mar, donde crecen sobre dunas costeras, hasta bosque mesofilo de montaña a los 3300 metros; sin embargo, su abundancia es mayor entre los 800 y los 2500 metros sobre el nivel del mar. La familia agavácea, solo se desarrolla en forma natural sobre América (García Mendoza, 2002). En México se localizan principalmente sobre regiones de clima árido y semiárido entre los 1,700 y los 2,600 msnm. En suelos generalmente erosionados, formando matorral rosetofilo y se asocia con material microfilo y crasicaule en zonas de baja precipitación pluvial. Se localiza principalmente en los Estados del centro del país como lo son: México, Tlaxcala, Hidalgo, Puebla y Querétaro; en el sur de Oaxaca y Yucatán; en el Bajío en Guanajuato, San Luis Potosí, Jalisco, Colima y Aguascalientes, en el norte lo encontramos en Zacatecas, Coahuila y Durango, (SAGARPA, PLAN RECTOR DEL SISTEMA PRODUCTO DIAGNÓSTICO DEL AGAVE., 2004). La superficie plantada de Agave se ha incrementado significativamente en los últimos años. En 2005 alcanzo una superficie de 173,841 hectáreas, distribuidas 156,801 de agave Tequilero y 17,040 de Agave Mezcalero. Una proporción

importante de esta superficie ya alcanza los años necesarios para su cosecha (SAGARPA, Programa Sectorial de Desarrollo Agropecuario y Pesquero 2007-2012, 2007).

Para definir que es el mezcal debemos tomar la definición etimológica que viene del náhuatl Melt e Ixcalli que significa “agave cocido al horno”, aunque en otros diccionarios la palabra Mezcal proviene del náhuatl mexcalmetl, que significa “agave”, por otro lado tenemos la definición científica que se encuentra expresada en la Norma Oficial Mexicana del Mezcal, “bebida alcohólica que se obtiene por la destilación y rectificación de los mostos (jugos) preparados directamente con los azúcares extraídos de las cabezas maduras de los agaves, mismas que son previamente cocidas y sometidas a fermentación alcohólica”. El Mezcal, al igual que el Coñac, el Champagne y el Oporto solo es posible obtenerlo en una región, la cual fue registrada el 9 de Marzo de 1995 por la Organización Mundial de la Propiedad Industrial (OMPI) con sede en Ginebra Suiza. En la declaración de protección, Denominación de Origen Mezcal, se establece como región geográfica las comprendidas por los Estados de: Oaxaca, Guerrero, San Luis Potosí, Zacatecas y Durango.

La bebida a pesar de ser regional, se ha introducido al sur de los Estados Unidos y se ha reconocido como un excelente y principal sustituto del Tequila con características organolépticas distintivas de sabor, olor, cuerpo y color, además lo mencionado anteriormente con respecto a su denominación de origen representa una ventaja legal ya que su denominación reconocida internacionalmente significa que a nivel mundial se debe tener la seguridad de que el mezcal es un producto original, producido y envasado en México. Así mismo, al interior del país, el mezcal se rige bajo la Norma Oficial Mexicana (SECOFI, 1994), que dicta la regularización de la producción de esta bebida exige su envasado de origen lo que garantiza la calidad y originalidad ya que solo existirá el mezcal producido y envasado en México.

Posterior a la resolución de la Denominación de Origen en 1994, la elaboración de Mezcal retoma importancia en el estado de Durango, principalmente en los municipios de Durango, Nombre de Dios y el Mezquital. Cada región productora de mezcal impregna su propia cultura, conocimientos y gusto en la realización de su mezcal. Dicha bebida puede considerarse en los mercados internacionales como un producto diferenciado/distintivo así como una bebida exótica, con un sabor único y condiciones especiales, lo cual no tienen otras bebidas, brindando una ventaja comparativa y competitiva a este producto sobre las demás bebidas.

El gusto y la preferencia de los destilado de agave se ha multiplicado en los últimos 15 años, derivado del éxito internacional de la introducción del Tequila en los mercados internacionales, donde el consumo de ésta bebida marcó un hito de crecimiento preferencia y consumo a nivel internacional. El dinamismo mostrado por la demanda de Tequila a nivel mundial impulsó un crecimiento extraordinario de empresas y marcas en la industria. Sin embargo, pese a la mayor presencia del Tequila en el mercado de las bebidas, esta agroindustria no se ha logrado consolidar, por lo que no ha respondido de manera eficiente a la creciente demanda nacional e internacional. Es decir, la planeación entre la producción de agave y la industrialización de tequila ha sido su talón de Aquiles, teniendo constantes periodos de sobreoferta seguidos por otros de escasez de materia prima. Dicha falta de coordinación ha tenido consecuencias lamentables como enfrentamiento y pérdida de oportunidades para los actores. Tal es el caso de lo que sucede actualmente, cuando la escasez en la oferta de agave ha ocasionado que se desaproveche una demanda creciente al no tener la capacidad de satisfacerla. (Macias Macias, 2001)

Con base a lo descrito anteriormente y considerando que el Mezcal al igual que el Tequila son destilados de agave sustitutos perfectos con un perfil del consumidor muy similar se busca impulsar y posicionar internacionalmente al tequila, considerando la experiencia y problemática del Tequila en los mercados internacionales, estableciendo la siguiente hipótesis: “La comercialización del Mezcal duranguense para su exportación a Tokio, Japón, representa una ventaja comparativa en el Comercio Internacional del Estado de Durango.” Con las siguientes preguntas de investigación: ¿Qué factores de la producción intervienen en la exportación del Mezcal Duranguense a Japón?, ¿Cómo es el comportamiento de la demanda en Japón? ¿Cómo es el comportamiento de los costos de comercialización y exportación?, ¿Qué efecto tiene la exportación del Mezcal Duranguense a Japón en el desarrollo económico y en su participación en el comercio exterior? La metodología utilizada en este trabajo, fue estudio de caso, a través de una investigación de tipo documental e investigación de campo con instrumentos de recopilación de datos como información documental, entrevistas y observación directa.

## REVISIÓN LITERARIA

### Mezcal

El Mezcal objeto de este estudio de exportación es una bebida alcohólica regional y con denominación de origen elaborada a partir de la destilación y rectificación de mostos preparados con los azúcares extraídos de las cabezas maduras de los agaves, el mezcal es un destilado de agave característico de México y particularmente de regiones semiáridas o de bajo desarrollo económico, el cual surgió a partir de la fusión de la tradición prehispánica en cuanto al uso del maguey y la técnica de destilación traída por los españoles. El mezcal es un líquido transparente con cualidades organolépticas particulares de olor y sabor característico de acuerdo al tipo de agave utilizado y el proceso con el que es elaborado, es incolora o ligeramente amarilla si esta añejado, reposado o abocado.

La materia prima utilizada en la elaboración de mezcal es el agave que recibe el nombre común de maguey y que pertenece a la familia Agaváceas el cual es quizá el término más conocido debido a las importantes relaciones etnobotánicas que se han originado entre sus elementos y las diversas culturas del continente americano. Su uso milenario se conoce a través de los códices y escritos antiguos que narran la riqueza cultural encontrada por los españoles en México. Dentro de esta familia se encuentra el Agave Duranguensis una de las principales especies en el estado de Durango debido a su importancia económica en la sustentación de una industria regional en la elaboración del mezcal, esta especie pertenece a la sección Ditepalae la cual se caracteriza por incluir plantas de pequeñas a grandes, con rosetas glaucas brillantes, productoras de semillas, con hojas firmes a rígidas, con panículas generalmente abiertas, yemas florales generalmente rojizas, flores maduras amarillas, tépalos dimórficos, los externos más grandes y sobre poniendo los internos, generalmente rojos en la punta.

En el estado de Durango es el Agave Duranguensis o Cenizo. Esta especie pertenece a la sección Ditepalae, la cual se caracteriza por incluir de acuerdo con (Gentry, 1982) plantas, de pequeñas a grandes, con rosetas glaucas brillantes, productoras de semillas (existen especies de Agave que no producen semillas y su reproducción es básicamente vegetativa), con hojas firmes y rígidas, con panículas generalmente abiertas, yemas florales generalmente rojizas, flores maduras amarillas,

tépalos dimórficos, los externos más grandes y sobreponiendo los internos, generalmente rojos en la punta.

### Internacionalización

La internacionalización de la empresa es un fenómeno económico de sumo interés para la investigación. Donde se explica el fenómeno de la internacionalización de las empresas, como el conjunto de operaciones que facilitan el establecimiento de vínculos más o menos estables entre la empresa y los mercados internacionales, a lo largo de un proceso de creciente implicación y proyección internacional. Otra perspectiva que ha estado revolucionando el estudio de las empresas internacionales es la investigación en el ámbito de la de la exportación y productividad a nivel micro, es decir específicamente en datos de la empresa. Uno de los principales resultados de este tipo de investigaciones ha sido que, las empresas exportadoras, muestran mejores niveles de desempeño, en términos de productividad, tamaño, supervivencia, salarios pagados, intensidad de capital y sofisticación tecnológica que las empresas no-exportadoras (Gopinath, Sheldon, & Echeverria, 2007) (Aw & Hwang, 1995) (Bernard & Jensen, 1997).

Por una parte, se argumenta que las empresas exportadoras logran mejoras en sus resultados como consecuencia del proceso de aprendizaje que se genera en los mercados internacionales (hipótesis de aprendizaje por la exportación). Y por otra parte, se sostiene que es el éxito competitivo en el mercado doméstico el que provoca que una empresa sea capaz de exportar. (Delgado, Fariñas, & Ruano, 2002).

Analizando los posibles factores de éxito de empresas exportadoras éstas deben poseer algún tipo de ventaja competitiva exclusiva. Dicha ventaja competitiva puede tener su origen en la producción, en la tecnología, en la organización, el estilo de dirección o la comercialización, ventaja de ser un producto con denominación de origen, entre otras. Lo que implica que estas empresas pueden competir con empresas extranjeras en sus propios mercados. En su tesis (Hymer, 1976) examina qué tipo de ventajas pueden poseer o adquirir las empresas de exportación, así como el tipo de sectores industriales y las estructuras de mercado en las que es más probable que se concentre la, ya que la existencia de tales ventajas competitivas. Una empresa puede tener una ventaja competitiva tal que le permita superar los inconvenientes de ser foránea y, por lo tanto, resultarle lucrativo explotarla en otros países.

### Ventaja Competitiva

Para dejar claro que es una ventaja competitiva, es importante que se comience por contestar a la siguiente respuesta, ¿Qué quiere decir ser competitivo? de acuerdo al Dr. Santiago Garcia Echevarria de la Universidad Alcala de Henares establece que una empresa debe contar con 3 aspectos básicos para ser competitivos, los cuales son: racionalidad económica, productividad, capacidad de coordinación y adecuación con el entorno y calidad de dirección y organización, finalmente concluye que ser competitivo implica crear, permanente barreras rente a los competidores. Así podemos decir que *“una ventaja competitiva constituye una destreza o habilidad especial que logra desarrollar una empresa y que la coloca en una posición de preferencia a los ojos del mercado.”* (Bravo, 1997). Para entender mejor el concepto de ventaja competitiva, podemos decir que una empresa vende sus productos o servicios no porque tenga una infraestructura física, disponga de personal, de productos en existencia, sucursales, proveedores, maquinaria o profesionistas para dirigirla, sino porque existe un grupo de consumidores o usuarios que por alguna razón prefieren sus productos o servicios que los de otra marca o empresa. Finalmente cabe destacar, que en base a la internacionalización de la empresa,

se considera que la exportación de Mezcal a Tokio Japón, representa una ventaja competitiva tanto en base a la especialización del producto como de su denominación de origen.

## **METODOLOGÍA**

Una vez que se ha establecido el fundamento teórico, se describe el procedimiento que se seguirá en este estudio para dar solución al problema y comprobar la hipótesis. El objetivo de este estudio es comprobar la hipótesis y preguntas de investigación que se proponen: Hipótesis: “La comercialización del Mezcal duranguense para su exportación a Tokio, Japón, representa una ventaja comparativa en el Comercio Internacional del Estado de Durango.” Preguntas de investigación: ¿Qué factores de la producción intervienen en la exportación del Mezcal Duranguense a Japón?, ¿Cómo es el comportamiento de la demanda en Japón?, ¿Cómo es el comportamiento de los costos de comercialización y exportación?, ¿Qué efecto tiene la exportación del Mezcal Duranguense a Japón en el desarrollo económico y en su participación en el comercio exterior?

Estudio de caso: Para este estudio se contempló la investigación documental e investigación de campo así como la observación practicada al personal de la Planta productora de Nombre de Dios, Durango. Ingenieros, químicos, equipo de apoyo, personal de la empresa, proveedores de insumos que intervienen en la producción del mezcal, consumidores de destilados de agave, productores de mezcal artesanal, vinatas y dependencias de gobierno. Instrumentos de recopilación de datos: Información documental, entrevistas y observación directa. Se practicaron encuestas que permitieron conocer la apertura del mercado meta hacia los destilados de agave, para conocer con este estudio el comportamiento del mercado respecto al sustituto perfecto del Mezcal que es el Tequila. Para este estudio se realizó una muestra por conveniencia, debido al difícil acceso a un mayor número de tokiotas, complicaciones con el idioma y la diferencia de horarios complican un estudio con el muestreo más amplio. Se utilizó la escala de Likert. Finalmente el método de observación directa se aplicó en las vinatas artesanales y en la planta productora del Mezcal de Nombre de Dios, para conocer el proceso productivo y sus implicaciones.

## **RESULTADOS**

Se determinó la existencia de una ventaja competitiva de la exportación de Mezcal, destilado de agave, a Tokio, Japón, considerando los resultados obtenidos en el estudio. A nivel macro los inventarios de agave en México, según datos de la Servicio de Información Agroalimentaria y Pesquera SAGARPA (SIAP) 2010, muestran que el agave se cultivó en una superficie total de 162,388.89 ha., sin embargo solo se cosecharon 15,880.20, estas en Jalisco; el volumen es pequeño comparado con el resto de la superficie sembrada, la explicación de dicha situación radica en que el agave -como materia prima para la producción de mezcal- tiene un proceso de recolección a partir de plantas silvestres, particularmente en Estados como Oaxaca, Guerrero, San Luis Potosí y Zacatecas, y por lo tanto, no requieren de cosechar el producto. En este rubro, productores de Guerrero, Oaxaca y Zacatecas y Durango. Indica la importancia del agave para la economía de los productores, industrializadores y comercializadores que integran la cadena agroalimentaria Agave - Mezcal.

La evolución de la superficie sembrada con agave a nivel nacional desde el año 2000 al 2010, muestra que el año 2000 marcó un crecimiento de la superficie sembrada con agave, particularmente de la variedad Tequilana Weber (destinado a la producción de Tequila) ya que existía un desabasto de materia prima para atender las necesidades de la industria. Será necesario

mantener el crecimiento en cultivo y reforestación, ya que es indispensable la protección de la denominación de origen de los productos elaborados a partir del agave: Sotol, Tequila, Mezcal y Bacanora en el marco de los acuerdos comerciales que tiene México con regiones económicas importantes en el mundo, tal es el caso del Acuerdo Asia Pacífico. El Estado de Durango sensible a ésta necesidad proyecta la reforestación en base a un programa de comercialización internacional del Mezcal previo.

En el Estado de Durango, México, donde por años se ha aprovechado el agave sin límite, se requiere de la atención en el cultivo y reforestación de las áreas naturales de producción del agave cenizo, principal materia prima del Mezcal. Ya que actualmente estas sólo reproducen los hijuelos que en la mejor de las circunstancias se desarrollarán y en su momento también serán explotadas. De lo que se desprende que la población endémica silvestre de agave tipo cenizo, básicamente, de no establecerse un plan serio de reforestación combinado con el programa de plantaciones tecnificadas, a largo plazo, el agave silvestre irá declinando y desapareciendo de las superficies que hoy lo cobijan. El sobre pastoreo de ganado acaba también con los hijuelos de agave. Es por ello que SEMARNAT a partir del año 2000 se ha interiorizado del asunto para gradualmente ir estableciendo parámetros de manejo sustentable para la especie de interés. Otra de las ventajas competitivas que tiene el Mezcal, es que es una bebida con Denominación de Origen, actualmente una figura jurídica reconocida internacionalmente para garantizar a los consumidores la autenticidad del producto y para salvaguardar los derechos de los productores contra la competencia desleal. La denominación de origen es aquella que utiliza el nombre de una región o lugar geográfico de un país para designar un producto originario, cuya calidad o características se deben exclusivamente a ese medio geográfico, resultado de factores naturales y humanos.

En México es el gobierno el titular de estas y quien autoriza su uso a productores que cumplan con las disposiciones establecidas, pero ambas partes obtienen reconocimiento a nivel nacional e internacional. En México hay catorce productos que poseen denominación de origen, entre los que se encuentran cinco bebidas destiladas que son el mezcal, el tequila, bacanora, sotol y charanda. Los tres primeros son mezcales y se encuentran protegidos y registrados en la Organización Mundial de la Protección Intelectual y en el caso específico del Mezcal bajo el número 731 del 9 de marzo de 1995. Las denominaciones de origen se encuentran reguladas por las normas oficiales mexicanas, para la operación de estas existen organismos de certificación acreditados que verifican y vigilan que el producto efectivamente mantenga los estándares de calidad requeridos en lo cual también colabora la PROFECO, así en 2003 se creó el Consejo Mexicano regulador de la Calidad del Mezcal A.C.

La tendencia internacional de consumir bebidas alcohólicas orgánicas y con características organolépticas especiales trae consigo otra ventaja de éxito para el Mezcal. En los últimos años, el Mezcal ha cobrado importancia en los mercados nacional y extranjero. En México y en otros países hay un creciente interés por esta bebida. De acuerdo con datos del Consejo Mexicano Regulador de la Calidad del Mezcal, en 2010 se produjeron más de un millón 530 mil litros de mezcal y se exportó casi la tercera parte. En 2010, se exportaron más de 422 mil litros de mezcal, 96% más que en 2005 y 54% más que en 2009. De acuerdo al Consejo Mexicano Regulador de la Calidad del Mezcal (COMERCAM), los centros de consumo que expenden Mezcal en la capital mexicana aumentaron en 660 % en el último año (2013). La tendencia en exportaciones es a la alza, el auge del mezcal se manifiesta de forma más evidente en las exportaciones, que según el organismo experimentan un crecimiento de entre el 35% y el 40 % anual. "En la actualidad, del 60% al 65 % de la producción anual, de poco menos de un millón de litros, se va

al extranjero, principalmente a Estados Unidos y otros países como: Canadá, Guatemala, Reino Unido, España, Italia, Turquía, Japón y Taiwán.

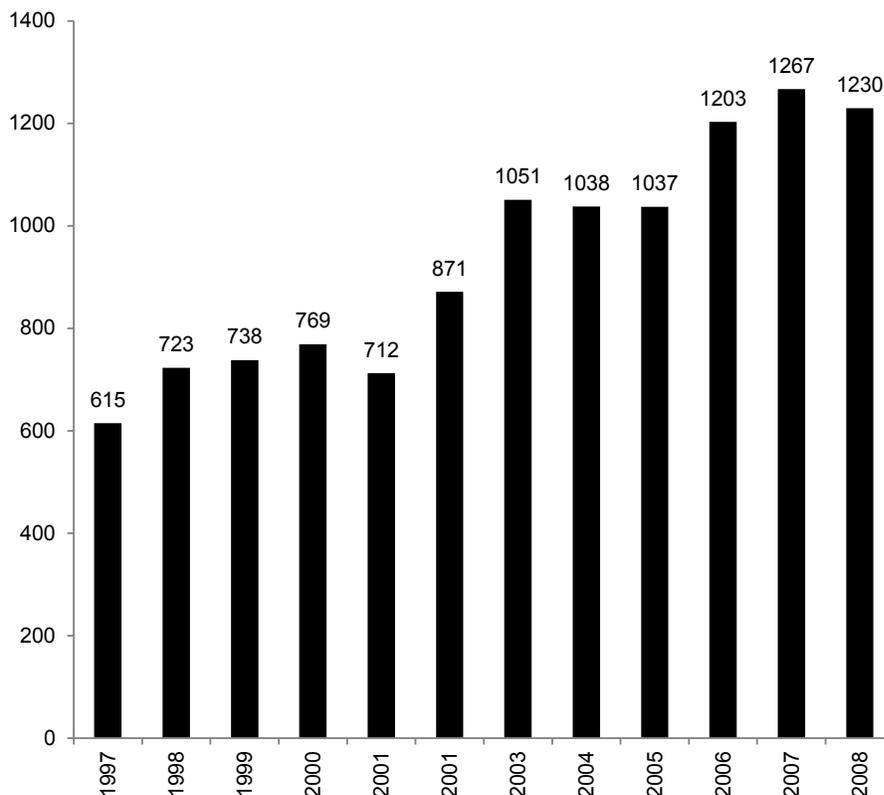
Una vez analizado el contexto de nuestro producto así como su participación en el mercado local e internacional, fue necesario encontrar el destino que reuniera con las características necesarias para posicionar el mezcal Duranguense, atendiendo a la satisfacción de los consumidores potenciales en el país elegido. De acuerdo a la exploración de oportunidades de mercadeo que brinden un escenario favorable para llegar a un determinado grupo de consumidores y generar ventas plenamente identificables.

Considerando los factores de la producción que intervienen en la exportación del Mezcal Duranguense a Japón, se identificaron las siguientes: Las características que distinguen el género Agave son el arreglo radial de las hojas, la presencia de dientes a lo largo de las mismas, una espina terminal en las hojas, cutícula cerosa, inflorescencias grandes que pueden ser racimosas o paniculadas, frutos dehiscentes en formas de capsulas y numerosas semillas negras. De la gran cantidad de especies de agave existentes, la especie utilizada para la elaboración de mezcal

En el estudio, se incluyó un análisis realizado para determinar el envase, embalaje y empaque de nuestro producto, tomando en cuenta las características particulares que debe reunir de acuerdo a la imagen que se pretende proyectar al exigente consumidor final al que está destinado, el envase y embalaje debe ser de alta calidad y diseñado tomando en cuenta el largo trayecto que deberá recorrer el producto antes de llegar a su punto de venta. Se realizó un análisis logístico de desplazamiento desde la Planta Productora de Mezcal, Nombre de Dios, Tradición Mezcalera S.A de C.V. en el Estado de Durango hacia el puerto de Los Ángeles y posteriormente su embarque con destino a Tokio Japón. En todo este apartado se consideraron las Normas Oficiales Mexicanas para el envasado y etiquetado de nuestro producto, en conjunto con las Normas Oficiales del país destino.

En relación a la segunda pregunta de investigación ¿Cómo es el comportamiento de la demanda en Tokio Japón? Para dar respuesta a esta interrogante se inició con una descripción del ciudadano japonés conociendo tanto sus compartimientos como gustos y preferencias para definir cómo se comporta el mercado de bebidas alcohólicas en el país de destino y así desarrollar una estrategia de posicionamiento en el mercado internacional. Se determinó la viabilidad de exportación del mezcal ya que esta bebida espirituosa se ha ido abriendo paso en el mercado internacional a través del tiempo. A veces lo confunden con una de sus variedades como lo es el Tequila; sin embargo el Mezcal, ha tenido su nicho de mercado entre los paladares más exigentes del mundo. La búsqueda de mercados ha llevado a productos como el mezcal a la internacionalización. Este proceso ha tenido que recurrir a las características intrínsecas que lo determinan y que marcan su diferencia con otros productos.

Figura 1: Importación de Destilados de Agave a Japón



*Fuente: ProMéxico Japón con datos del Ministerio de Finanzas de Japón. En la gráfica nos muestra el comportamiento de las importaciones de Destilados de Agave a Japón, mostrándose una tendencia a la alza de su consumo y una mayor aceptación. Estos datos aunados a la aceptación del consumo personal fortalecen la hipótesis de posicionamiento en el mercado con ventaja competitiva para México.*

Para la determinación del mercado meta se utilizó la metodología propuesta por BANCOMEXT y utilizado por Alejandro Lerma Kichner, (Lerma & Marquez Castro, 2010) ambas complementarias y útiles para determinar nuestro mercado meta. Se tomaron en cuenta en primer término los países con los que México sostiene acuerdos comerciales con preferencias arancelarias, obteniendo información de los países más accesibles e interesantes. Posterior a esta primera revisión, se resaltaron elementos específicos como: aspectos culturales, costumbres y sobre todo hábitos de consumo de bebidas alcohólicas. En esta primera revisión, se identificaron tres posibles mercados. Como primer paso para preseleccionar los posibles mercados, definimos que los consumidores que lo conformen deben reunir algunas características como a continuación se menciona: 1.- Las personas deben tener la necesidad de un determinado producto 2.- Las personas deben tener la capacidad de adquirir el producto y 3.- Los posibles consumidores deben estar dispuestos a usar su poder adquisitivo. Se realizó una selección con los requerimientos de mercado eligiendo tres países, España, Japón y China. (ver tabla 1).

Los factores decisivos para definir estas tres entidades, fueron los siguientes: ubicación, magnitud del mercado, productos o servicios que consume, ingreso per cápita, política proteccionistas, perfil de consumidores, riesgo país, entre otros. Una vez revisados estos elementos, el factor preponderante de decisión fue la tendencia de crecimiento de la economía japonesa gracias a su estabilidad en las variables micro y macroeconómicas, así como la tendencia que muestra hacia la

importación de bebidas y alimentos. Sin perder de vista que es un mercado que tiene un alto índice de consumo de bebidas alcohólicas así como gusto por las bebidas exóticas importadas. A partir de esa elección preliminar, se realizó una evaluación, tomando en cuenta; hábitos de consumo, perfil de consumidores, población económicamente activa, ingreso per cápita, redes de distribución, moneda, infraestructura, etc. Como resultado de esta última evaluación se definió a Tokio, Japón, como mercado meta, se tuvieron diferentes consideraciones, predominando el ingreso per cápita y sobre todo el hecho de que se considera a Tokio como una ciudad cosmopolita con actividades primordialmente financieras, comerciales, turísticas y de ocio, con gustos y preferencias dirigidas al trabajo y al esparcimiento con actividades lúdicas, favoreciendo este último al consumo de bebidas alcohólicas.

Tabla 1: Matriz Para la Selección del Mercado Objeto

Parámetros	España	Japón	China
Población	47,021,031	126,874,000	1,339,724,852
PIB (MD)	1,438,356	5,390,897	5,878,000
PIB Percapita	29,925	33,668	4,382
Valor en volumen de importación de México – } País (DlIs)	97,702	1,034	210
Tendencias del mercado	Productos Orgánicos	Productos orgánicos y consumo de bebidas alcohólicas	Incremento de consumo de bebidas alcohólicas
Barreras arancelarias	Libre de aranceles	Libre de aranceles	
Tratados de libre comercio	TLCUE	AAE	No Existe
Intensidad de la competencia	Alta	Media	Media
Estabilidad social y política	Media	Alta	Alta
Afinidad Cultural (idioma, religión costumbres)	Mismo idioma y culturas similares	Baja afinidad, idioma y cultura diferentes	Baja afinidad, idioma y cultura diferentes
Canales distribución del producto	Mediana – baja, hay intermediarios para entrar al mercado	Múltiples etapas de mayoristas y distribuidores	Ventas a través de HORECA (intermediarios) que incrementan el precio del producto
Ferias del sector	Alimentaria Barcelona 2012	FOODEX Japan 2012	FHC China 2012
Familiaridad del consumidor con el producto	Mediana – Alta a través del Tequila y Mediana baja por el mismo consumo de Mezcal	Mediana – Alta a través del Tequila y Mediana baja por el mismo consumo de Mezcal	Mediana – baja a través del tequila y baja por el mismo consumo de Mezcal

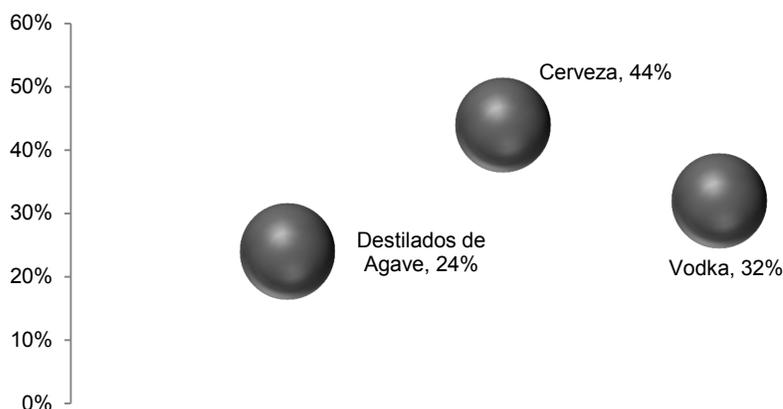
*La Matriz elaborada en base a la Metodología de Alejandro Lerma Kichner, muestra los elementos de mercado más importantes en cada uno de los mercados preseleccionados. A partir de esa elección preliminar, se realizó una evaluación, tomando en cuenta; hábitos de consumo, perfil de consumidores, población económicamente activa, ingreso per cápita, redes de distribución, moneda, infraestructura, etc. Como resultado de esta última evaluación se definió a Tokio, Japón, como mercado meta.*

Una vez determinado el mercado meta, se realizó una segmentación en la que se especificó el perfil del mercado al que va dirigido nuestro producto, concluimos que las personas idóneas deben ser adultos mayores a los 20 años ya que es la edad mínima de consumo de bebidas alcohólicas en Japón va dirigido tanto a hombres como mujeres y otro aspecto interesante por el cual fue decisivo al elegir el mercado es que el mercado asiático sus habitantes no tienen una religión o creencias muy estrictas que les prohíban o limiten el consumo de alcohol, nos enfocamos en personas económicamente activas, de clase media o alta, con un estilo de vida actual y moderno con un amplio gusto por las bebidas alcohólicas y con una actitud con tendencia a probar nuevos productos y vivir nuevas experiencias.

El resultado de la encuesta para el estudio por conveniencia realizado, se basó en la aplicación de 25 encuestas, tomando en cuenta el perfil definido para nuestro mercado meta. Hombres y

mujeres tokiesas entre 25 y 65 años de edad. La encuesta se diseñó con la finalidad de conocer los gustos y preferencias del mercado meta respecto al consumo de bebidas alcohólicas, buscando conocer la aceptación y preferencias que se tienen hacia el tequila, tomando éste como base para nuestro estudio debido al posicionamiento con el que cuenta en este mercado. Respecto a la preferencia de bebidas alcohólicas listadas en la encuesta se obtuvo los destilados de agave, se encontraron en tercer lugar de preferencia por los tokiesas, con un 24% respecto a otras bebidas que predominaron como la cerveza y el vodka, como se muestra en la gráfica.

Figura 2: Preferencia de Consumo de Bebidas Alcohólicas en Tokio



*Elaboración propia. Encuesta realizada sobre la preferencia de bebidas alcohólicas donde los destilados de Agave se encuentran entre una de las bebidas preferentes en un 24%. Resultados que apoyan a sustentar la hipótesis. Estas bebidas se encuentran en el gusto y preferencia del mercado meta, situación que es considerada como una gran ventaja para el Mezcal.*

En la tercera pregunta ¿Cómo es el comportamiento de los costos de comercialización y exportación? Para dar una respuesta se realizaron análisis financieros, presupuestos de ventas para el primer, segundo y tercer semestre, así como un presupuesto de producción. En el cálculo de ventas, se determinó la determinación del precio de exportación, ya que dentro de este estudio se determinó los inventarios promedios mensuales, tanto de materia prima como de insumos principales y accesorios. Como segundo paso, se analizaron los presupuestos de producción y operación así como el de materia prima y mano de obra, tomando en cuenta en este último, actividades previas como lo son, la selección de la materia prima, el proceso de preparación para su introducción a la planta productora, el traslado, el proceso productivo en cada una de sus etapas, envasado, embalaje, carga y descarga y almacenamiento de producto terminado. Posterior a esto, se elaboraron los presupuestos de gastos de venta, gastos de administración y gastos financieros, finalmente se realizó el cálculo de contribuciones al comercio exterior, fletes seguros, gastos conexos para concluir con la determinación del precio de exportación. Este precio nos muestra un margen de utilidad del 30%, dato que identifica y promueve que si tenemos ventajas competitivas para

De acuerdo a los resultados anteriores nos revela que la hipótesis: “La comercialización del mezcal duranguense para su exportación a Tokio, Japón, representa una ventaja comparativa y competitiva en el comercio internacional del Estado de Durango”. La hipótesis se ve fortalecida en el análisis de resultados y tiene aún mayor reafirmación con la evaluación económica y financiera que se realizó. Es decir, en primer término la aportación de pruebas realizadas en el desarrollo de los capítulos respalda y apoya el contenido de la hipótesis, de acuerdo a que la exportación del mezcal representa una ventaja comparativa. Lo anterior se demuestra a través del

análisis financiero derivado de los resultados de la evaluación económica del negocio de exportación se consolida la aceptación de la hipótesis. En seguida se determinó el punto de equilibrio, se calculó el Valor Presente Neto (VPN) y la Tasa de Rendimiento (TIR) para reconocer si los flujos esperados realmente satisfacían las necesidades financieras de inversión y de utilidades, situación que resulto favorable para la empresa.

## CONCLUSIONES

Como resultado del estudio realizado se concluye que la exportación del Mezcal de Durango a la ciudad de Tokio, Japón, representa una ventaja comparativa en el Comercio Internacional del Estado de Durango. Se analizó el proceso de producción del Mezcal para tomar en cuenta todos los elementos que lo componen desde la primera etapa de recolección de la materia prima hasta la preparación para su comercialización, activos fijos, mano de obra, etc. Al analizar la situación actual de la industria del Mezcal para identificar su posicionamiento nacional e internacional y evaluar su comportamiento permitió conocer la oportunidad de mercado que representa para éste destilado la demanda internacional.

Como primera etapa de éste proceso se seleccionaron tres posibles destinos los cuales fueron enfrentados con sus características generales para determinar cuál reunía las características más atractivas, teniendo como resultado que Tokio es el lugar indicado para iniciar la exportación y así introducirse al mercado asiático quien muestra un gusto especial por los destilados de agave. Se determinó que Tokio como ciudad cosmopolita por excelencia con una economía estable, siendo uno de los centros urbanos más importantes del planeta cuenta un poder adquisitivo que permite que nuestro mercado meta designe una parte de su ingreso al consumo de bebidas exóticas como lo que representa el Mezcal para el mercado Nipón. Estimándose una demanda basándose en el consumo aparente de las bebidas alcohólicas por parte de los tokiotas y el incremento poblacional en el rango de edades de nuestro mercado meta, sin dejar de lado el incremento en las tasas de turismo en la metrópoli de Tokio, quienes sin duda alguna serán parte de ese mercado que queremos penetrar. Finalmente se concluye que éste proyecto es realizable, fundamentándonos en las principales teorías de ventajas comparativas, además de un estudio de aceptación del mercado, considerándose que es viable y factible como unidad de negocio además de generar beneficios adicionales como impacto en la región productora, bienestar social y económico en las comunidades productoras agregando un valor agregado importante, creando una nueva industria para la región y un impacto favorable en los indicadores macro del Estado de Durango.

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# EL TRABAJO COLABORATIVO EN LA EDUCACIÓN SUPERIOR MEDIADA POR LAS TECNOLOGÍAS DE INFORMACION Y COMUNICACION

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## RESUMEN

*En el presente artículo se abordarán algunos conceptos relacionados con el trabajo cooperativo/colaborativo, como apoyo para la mediación de las TIC en los procesos de enseñanza y aprendizaje en la educación superior. Dichos conceptos se relacionan con algunos hallazgos, identificados en la investigación “Caracterización de experiencias significativas mediadas por las TIC en educación superior virtual, investigación realizada por Piedad María Metaute, Paul Andrés Rugeles y Beatriz Mora González, para optar el título de Magister en Educación y Desarrollo Humano. Durante el desarrollo del artículo se hará referencia a aspectos como: el papel de la sociedad del conocimiento, la ética en el trabajo cooperativo y la brecha digital en el aprendizaje cooperativo, adicionalmente, se pretende elaborar una reflexión en torno al trabajo cooperativo y su importancia en la formación del ser, en su desarrollo emocional, entendido como el conjunto de habilidades que contienen la capacidad de motivación, de resistirse ante las frustraciones, de controlar los impulsos y la demostración de empatía hacia el otro.*

**PALABRAS CLAVE:** Trabajo cooperativo, TIC, Sociedad del conocimiento, nativo digital, brecha digital

## COLLABORATIVE WORK IN HIGHER EDUCATION MEDIATED TECHNOLOGIES INFORMATION AND COMMUNICATION

### ABSTRACT

*This article will address some concepts related to cooperative or collaborative work, as support for the mediation of information and communication technologies in the teaching and learning in higher education. These concepts will be related to partial findings identified in the research: “Characterization of meaningful experiences mediated by information and communication technologies in higher education”<sup>2</sup> during the development of the article will refer to aspects such as the role of the knowledge society, the cooperative work ethic and the digital divide in cooperative learning, in addition, is to develop a reflection on cooperative work and its importance in the formation of self, emotional development, understood as the skill sets that contain the ability to motivate, to resist to the frustrations, to control impulses and demonstrating empathy for the other.*

**KEYWORDS:** Cooperative Work, Information Technology and Communication, significant experience, knowledge society, digital divide.

## INTRODUCCIÓN

Para ubicar el tema del trabajo colaborativo, es importante situar las condiciones sociales e históricas en las que nos encontramos. Castell (2002) afirma que cuando se habla sobre el futuro de la sociedad del conocimiento se refiere a un código para hablar de una transformación sociotecnológica, debido a que todas las sociedades son del conocimiento y que en todas las sociedades conocidas históricamente, la información y el conocimiento han permitido la toma de decisiones en relación al poder, la riqueza y las organizaciones sociales. Lo anterior permite hacer la precisión de que se trata de una sociedad en la que la generación de conocimiento y procesamiento de la información han sido alterados por una revolución tecnológica que tiene su centro en el procesamiento de información y las tecnologías, lo que lleva a pensar que la tecnología se desarrolla en relación a los contextos sociales, económicos, culturales e Institucionales, lo que es corroborado en los hallazgos de la investigación en la que los diferentes actores ven la posibilidad real de articular los procesos académicos con otros sectores, entre ellos el productivo donde se da solución a problemas reales, además de la posibilidad que tiene la institución de servir a la sociedad propiciando una educación virtual que apoya el desarrollo de las competencias de los estudiantes, llegando a personas que quizás el único medio que tengan para acceder a esta información es a través de las tecnologías de información y comunicación, sea por su ubicación o porque puedan estar impedidos físicamente de llegar hasta una Institución de educación.

En los últimos quince años, lo que hace diferente este acontecer en las tecnologías de la información y la comunicación es un cambio de paradigma similar al que ocurrió con la sociedad industrial, pero con la diferencia de que este paradigma acontece con la participación de todos los procesos de la sociedad, la política, la economía y son afectados por la capacidad de procesamiento de información en todas las actividades humanas.

Krüger (2006) define el término sociedad del conocimiento como un factor del cambio social. La expansión de la educación, por ejemplo, se constituirá en la base de los procesos sociales en diversos ámbitos funcionales de las sociedades. En lo referente al término conocimiento, no se puede hablar de la sociedad del conocimiento en relación únicamente al hecho de producir cada vez más conocimiento en términos de número de personas con estudios de doctorado, sino como sistema de producción de conocimiento en donde se ponen en interrogante las suposiciones, percepciones y expectativas, en donde se incrementan las interacciones que propician el crecimiento del ser social. Es en este punto donde el trabajo cooperativo cobra gran importancia, una vez que, de acuerdo con Mercer (1997), se considera que el trabajo de forma cooperativa debe ser generador de nuevas ideas en el que la comunicación sea frecuente, permanente y rápida, exista un contacto continuo entre los miembros, exposición de ideas claras y fácilmente compartidas para lograr evaluaciones oportunas y conjuntas, con elaboración de argumentaciones que apoyen la construcción de conocimiento a través de críticas constructivistas con el aporte de cada uno de los miembros del equipo, se justifiquen de forma abierta los razonamientos que van realizando los diferentes actores y el establecimiento de roles claros desde el inicio del trabajo, en especial, los facilitadores reconocen y resaltan la importancia que tiene generar conocimiento

compartido aprendiendo de otros en las participaciones son virtuales y presenciales en eventos y ferias regionales, nacionales e internacionales.

El fenómeno tecnológico actual obliga a que el trabajo cooperativo desarrolle un tratamiento especial a la gran cantidad de información que proporciona internet, su evolución genera oportunidades para trabajar con muchas personas en espacios diversos tanto de ubicación geográfica como de ubicación temporal; se habla entonces de un panorama sociocultural que lleva a la realización de replanteamientos de las estrategias pedagógicas y formas de comunicación e interacción que obligan a la adquisición de nuevas competencias o a desarrollar otras, tales como la iniciativa, la autonomía, el emprendimiento, la innovación, la autogestión y el auto direccionamiento de procesos de aprendizaje personales en los que se deben tomar decisiones de forma ágil.

### El Trabajo Colaborativo y El Proceso De Enseñanza y Aprendizaje

Para el desarrollo del tema, se retoman las ideas de autores que han venido profundizando en el trabajo colaborativo y su relación con otros aspectos en los procesos de enseñanza y aprendizaje, tal es el caso de la relación que hace Calzadilla (2002) entre el trabajo cooperativo y el constructivismo, quien referencia a Piaget (1992). Calzadilla arguye que existen cuatro factores que atraviesan las estructuras cognitivas, estos son: la maduración, la experiencia, el equilibrio y la transmisión social, cada uno de los cuales se puede potenciar por medio del trabajo colaborativo.

De otro lado, en la teoría constructivista de Vigotsky, (1974), se afirma que el aprendiz requiere la acción de un agente mediador para acceder a la zona de desarrollo próximo. Éste será responsable de tener un andamiaje que proporcione seguridad y permita que aquél se apropie del conocimiento y lo transfiera a su propio entorno.

Por su parte, Coll y Solé (1990) definen la enseñanza como «un proceso continuo de negociación de significados, de establecimiento de contextos mentales compartidos, fruto y plataforma, a su vez, del proceso de negociación», (p.332), lo anterior a su vez permite la mediación de procesos de aprendizaje para validar las interconexiones donde se evidencian que los individuos que intervienen en el proceso se impactan y afectan mutuamente a través del intercambio de ideas, proyectos, vivencias y expectativas que aportarán a su crecimiento.

De acuerdo a Guitert & Jiménez (2006), existe un trabajo cooperativo cuando se presenta una reciprocidad entre un número de individuos que tienen la capacidad de diferenciar y contrastar sus diferentes puntos de vista hasta lograr generar un proceso de construcción de conocimiento, este es un proceso en el que cada persona aprende más de lo que podría aprender de forma individual, con el acompañamiento del facilitador que permanentemente como mediador posibilita un diálogo constructivo y la solución de conflictos entre los integrantes de los grupos.

Específicamente, el trabajo colaborativo propone que el trabajo en equipo es el logro de un objetivo común a través del intercambio que incluye el trabajo individual y el trabajo compartido, lo que requiere poner en escena tres aspectos fundamentales: actitudes, habilidades y conocimientos (Guitert & Jiménez, 2006). Esto, a su vez, demanda que la comunicación tenga una frecuencia adecuada, un contacto continuo entre los miembros del equipo, las afirmaciones y los aportes tienen que ser respetuosos, constructivos y argumentados.

En este punto es importante enunciar algunas herramientas, conceptualizadas en el Foro Educativo: Metas Educativas 2021 (2010), que aportan a la producción de aprendizajes colaborativos, estas son:

Identificar claramente las capacidades de los diferentes integrantes de los equipos, conocer las potencialidades individuales para que cada uno aporte el máximo.

Establecer metas de forma conjunta que a la vez tengan en cuenta las metas individuales.

Diseñar, establecer y elaborar una planeación que permita visualizar que resultados se esperan, definiendo responsabilidades particulares.

Realizar seguimiento permanente a los resultados parciales

Poner especial cuidado a las relaciones socios afectivas que apoyen el sentido de pertenencia que se tenga por el grupo.

En términos de Casanova (2008), el aprendizaje colaborativo es considerado como una metodología de enseñanza o técnica didáctica que se basa en la creencia de que cuando los estudiantes desarrollan destrezas cooperativas para aprender y solucionar problemas y acciones educativas en las que se ven inmersos, se incrementa el aprendizaje cooperativo. Según Cabero (2004), se asume que el aprendizaje y la cognición conforman una actividad social que es el resultado de la interacción entre las personas, los medios y los ambientes. Ahora bien, teniendo claras las metas y objetivos a lograr por los equipos, es importante garantizar que el dominio de los contenidos ha sido adquirido por cada uno de los integrantes (Guitert y Jiménez, 2006).

De igual forma en esta técnica didáctica se debe evidenciar una correspondencia entre los integrantes del equipo al resolver y contrastar diferentes puntos de vista en relación a una temática específica, lo que para Guitert y Jiménez (2006), permite un proceso de generación de conocimiento nuevo o con argumentaciones que generen la potenciación de ideas que ya existen, obteniendo sinergias que solo se pueden dar cuando existe una interacción entre varios individuos, dicho trabajo cooperativo tiene resultados más enriquecedores que si se suman los trabajos individuales de diferentes actores.

De lo expuesto por los autores relacionados, se puede concluir que un trabajo cooperativo no es la suma de trabajos individuales que se unen, sino que obedece a una estructura organizacional que produce un resultado conjunto partiendo de ideas claras y comunes en el que cada individuo aporta al crecimiento del grupo y a su propio crecimiento, existe una interacción permanente entre los miembros, y se involucran unos con otros para lograr un proyecto común.

En el mismo sentido, los resultados exitosos del equipo solo se logran si todos los miembros tienen claros los objetivos y las estrategias planteadas para lograrlos, en el que cada uno da lo mejor de sí, aportando con sus habilidades y conocimientos. Bajo estas premisas, se podrán obtener resultados mucho más favorables no sólo a nivel grupal sino también individual.

No queda duda entonces, que las Instituciones de Educación superior se convierten cada vez más en los “lugares de encuentro” en los que confluyen estudiantes de todas las edades con formaciones y experiencias previas, de diferentes contextos; todo esto bien direccionado puede permitir y generar dinámicas de trabajo y aprendizaje colaborativos cuyo aporte a la solución de problemas de forma interactiva permita el desarrollo de habilidades personales y profesionales.

Finalmente, es importante resaltar que, según Calzadilla (2002), el aprendizaje colaborativo permite la inserción eficiente de los procesos educativos al interior de los propios proyectos de vida de los estudiantes y puede potenciar el desarrollo personal, el desarrollo de comunidad y el desarrollo de país a través de una cohesión y una visión sistémica en donde no solo se ven las partes, sino que se puede tener un acercamiento a un todo entre aspectos como: Formación, familia, sociedad, desempeño y evolución, haciendo un intento por que vayan desapareciendo las formas memorísticas y repetitivas que han estado en nuestros centros de educación por años. Todo lo anterior, implica estimular la transición hacia procesos de socioconstrucción en los que la tolerancia que hace parte de la diversidad sea uno de los elementos a trabajar por los diferentes equipos, al igual que la ayuda y el interés por el otro como ser.

Lo valioso en este tipo de aprendizaje dialógico es que bien direccionado puede ser facilitador del desarrollo de procesos de conocimiento para la construcción social del conocimiento a partir de la construcción individual, soportado en la motivación que sienten los estudiantes por el apoyo Institucional que reciben a nivel personal.

#### El Trabajo Cooperativo y La Mediación De Las Tecnologías De Información y Comunicación

De acuerdo a lo definido por Casanova (2008), el trabajo cooperativo mediado por las tecnologías de información y comunicación es el encuentro de dos tendencias: la primera es la incorporación de las TIC en la sociedad, y la segunda es el enfoque del aprendizaje que suscita las interrelaciones entre pares mediados por la cooperación y la colaboración. Sin embargo, no debemos desconocer que el aprendizaje cooperativo no es un término nuevo, previamente hay una tradición de investigaciones y experiencias, por ejemplo Barbera (2001) hace alusión a dos aspectos de gran importancia en el trabajo colaborativo, en primera instancia el aprendizaje cooperativo es una manera diferente de entender la colaboración, refiriéndose a la propuesta de una actividad puntual de enseñanza en un contexto virtual de aprendizaje y, en segunda instancia, afirma que hay dos funciones que se diferencian claramente en el trabajo colaborativo en ambientes virtuales: la primera función es entender la interacción como sinónimo de interacción social que promueva la construcción cooperativa del conocimiento y, la segunda, es la contraposición que existe entre la cooperación y el trabajo independiente, es decir es la construcción de significados compartidos con otros y que a la vez permiten la interdependencia de los aprendizajes de acuerdo a las individualidades de los actores.

De manera concreta, las herramientas TIC como géneros dialógicos y de generación de experiencias es abordado por Sánchez (2010), para quien pasar de la relación a la interacción es “el aspecto central de toda experiencia educativa, sobre todo cuando se intenta promover el desarrollo del pensamiento crítico y reflexivo mediante diversas estrategias, con el fin de que la comunicación sea sistemática y estructurada”. (p, 85). A continuación se muestran algunos argumentos definidos en relación con las herramientas que propician la mediación entre los diferentes actores del proceso enseñanza aprendizaje:

El chat en el ámbito académico, según Sánchez & Puerta (2010), no es en sí mismo un espacio que pueda reemplazar la clase; es el tipo de comunicación que permite el desarrollo de orientaciones puntuales y complementarias surgidas a partir de lecturas y actividades alrededor de un núcleo. A través de su uso se favorece un contacto sincrónico que permite saber que al otro

lado tenemos un ser humano que nos escucha, que nos habla y al que le podemos hablar, aunque no lo veamos.

En el Foro, según Yus (2001), se evidencian “los valores compartidos por un grupo de personas cohesionadas por un interés común” (p.11). Asimismo, el foro según Contin (2003) es “un espacio de interacción discursiva en el cual sujetos con diferentes niveles de experiencia cultural y lingüística se presentan a sí mismos, negocian su imagen y sus propósitos comunicativos” (p. 269). Esta herramienta de apoyo al trabajo cooperativo tiene un enorme potencial y permite junto a otras herramientas la construcción de conocimiento a través de la negociación.

El correo electrónico en el que “las competencias de redacción se hacen necesarias para lograr establecer una comunicación efectiva y son aún más importantes si dicha comunicación la establece en el contexto de educación virtual”, según Monserrat Casanovas (2003), permite: fortalecer la competencia comunicativa, promueve la producción lingüística y temática y hacer la realimentación individualizada (que luego podrá ser socializada en espacios colectivos como el foro y el chat).

Para la utilización del correo electrónico como herramienta me debo apropiarme no solo de conocimientos técnicos, sino también de competencias en el ser que me permitan tener presente que en la distancia tengo otro ser humano con expectativas, necesidades y creencias, un ser humano que requiere de una formación orientada a su desarrollo integral, al descubrimiento de sus capacidades e intereses que le permitan tomar decisiones, asumir posiciones y gestionar su propio proyecto de vida, siendo éste el centro del proceso activo de aprendizaje.

Otras herramientas útiles en el trabajo cooperativo, según Guitert y Jiménez (2006) son: Documentos compartidos (Google docs) a través de ellos se puede trabajar la información de forma reflexiva y con un alto grado de profundización.

Encuentros virtuales: son encuentros que se pueden establecer de forma periódica y fija con asignación de trabajos entre los integrantes del equipo y hacer un seguimiento constante de su evolución y lograr que todos compartan toda la información y que se tengan en cuenta las sugerencias y recomendaciones de todos apoyando así elementos para la reflexión.

Para mejorar las competencias en la utilización de las tecnologías de información y comunicación antes vistas, estas deberán ser incorporadas y utilizadas en su doble función, tanto de transmitir información como la de generación de información y conocimiento, utilizándolas de forma crítica y analítica a través del trabajo autónomo y del trabajo colaborativo de forma sincrónica y asincrónica estableciendo y participando en redes de relaciones cada vez más amplias.

Es importante destacar que el estudiante ve la educación virtual como un espacio, donde puede optimizar su tiempo, teniendo la oportunidad de plantear de forma libre inquietudes y opiniones, utilizando como mediadores herramientas TIC como foros, correos electrónicos con el fin de abordar temas sugeridos o libres, compartiendo aspectos personales y académicos.

### La Ética En El Trabajo Cooperativo

Es de gran importancia considerar que la relación con el estudiante debe ser una relación ética, donde se asuma un verdadero compromiso con éste y sea de aporte en su formación y crecimiento como ser humano, haciendo todo lo posible por potenciar sus valores, como el respeto por el otro, la posibilidad de exponer sus puntos de vista, el desarrollo de su sentido crítico y analítico, sin que con ello se vea amenazado por ser criticado ni señalado”, Lévinas (1991, se debe intentar llegar a los otros desde sus vivencias, sus modelos, sus paradigmas, y en ocasiones de sus

necesidades, porque siempre deberíamos preocuparnos por el otro y no verlo como alguien enfrentado ya que, al fin y al cabo, hay yo, porque hay responsabilidad, pues el yo es el resultado de que alguien nos haya cuidado, nos ha orientado y gracias a esto podemos sentirnos insustituibles, porque detrás de mí hay otros que no son yo, por ello Lévinas propuso un humanismo del otro, de aquel que se hace responsable y responde totalmente por el otro, desde este punto de vista, el papel del facilitador tiene gran importancia al pensar en ese otro como parte de su responsabilidad como formador y propiciador de espacios de reflexión y verdadero aprendizaje. En este sentido es importante destacar la importancia del acompañamiento de los facilitadores como potenciadores del pensamiento crítico y reflexivo, como mediadores para que haya diálogo, posibilitando de esta forma la solución ante conflictos, indagando por las experiencias previas de los estudiantes, responsabilizándose de alguna forma por hacer sentir al estudiante como un ser valorado; de otro lado este facilitador promueve el trabajo en equipo permitiendo al estudiante que sustente y argumente sus puntos de vista aplicando la metodología de aprendizaje basado en problemas.

Existen otros aspectos éticos que deben tenerse en cuenta en el trabajo cooperativo, los cuales según Guitert y Jiménez (2006) son:

La responsabilidad individual y grupal durante todo el proceso y esto de parte de todos los actores del proceso educativo: estudiantes, facilitadores y personal administrativo

Las autoevaluaciones permanentes de los aportes tanto individuales como grupales, es decir fomentar la autorreflexión y hacer una valoración de la medida de implicación dentro de la dinámica del trabajo cooperativo, fomentando la reflexión del autoproceso y la capacidad para compartirlo con el resto del equipo.

El fomento del apoyo mutuo, de tal forma que permita el desarrollo de una vivencia de grupo.

El impulso por parte de los facilitadores y personal administrativo de habilidades del trabajo en equipo, la negociación, la paciencia, la espera de turnos, instruir a los participantes en pautas para comunicarse de forma oportuna, y la integración de materiales de trabajo que potencien el trabajo en equipo.

La promoción de una interdependencia positiva haciendo que el logro de los objetivos sea visto como un trabajo conseguido por todos.

El establecimiento de reglas claras de trabajo que favorezcan la dinámica del mismo.

El impulso al valor de cada integrante como persona, hacerlo sentir parte esencial del equipo para el logro de los objetivos.

## CONCLUSIONES

Los valores éticos y morales, el estilo de aprendizaje, las estrategias curriculares, el proyecto educativo Institucional y el modelo pedagógico, son factores esenciales en la construcción de experiencias significativas en el trabajo colaborativo.

En el trabajo colaborativo debe existir una reciprocidad al establecer la relación de equipo para potenciar las diferentes capacidades en pro de un objetivo común que es además de la construcción de conocimiento y la construcción de relaciones que pueden aportar al desarrollo individual y grupal. En el trabajo colaborativo, es visible la necesidad de desarrollar competencias actitudinales y comunicacionales, donde se pueda dar cuenta de la participación, la

autonomía, la innovación, la autogestión y el autodireccionamiento para la toma ágil de decisiones.

En tiempos de cambio, suscitados por el uso y apropiación de las TIC, puede observarse que las experiencias educativas mediadas por las TIC en educación superior virtual, el trabajo colaborativo potencia las posibilidades de aprendizaje de los estudiantes al proporcionar oportunidades tangibles que lo estimulan a hacerse responsable de su propia formación, autogestor de sus aprendizajes, crítico, analítico y reflexivo, un ser social que requiere interacción con el otro e intercambio de ideas todo ello encaminado al desarrollo de su personalidad e intereses que le permitirán orientar su propio proyecto de vida y el proyecto de vida de otros.

En el trabajo colaborativo, la interacción con herramientas TIC, facilitan el auto aprendizaje, la autodisciplina, la investigación formativa y la interacción con pares y facilitadores, en razón a que cada estudiante puede utilizar los materiales más acordes con su estilo de aprendizaje y sus circunstancias personales, en las que se establecen relaciones con comunidades e instituciones que propician el compartir experiencias y aprender de otros.

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# NUEVA LEY DEL IMPUESTO SOBRE LA RENTA EN MÉXICO. RÉGIMEN DE INCORPORACIÓN FISCAL PARA PERSONAS FÍSICAS

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## RESUMEN

*El presente artículo está basado en una investigación relacionada con las nuevas disposiciones fiscales del Impuesto sobre la Renta que entrarán en vigor en México a partir del 2014 a través de un nuevo régimen opcional para las Personas Físicas denominado "Régimen de Incorporación Fiscal" y está dirigido a quienes realicen únicamente actividades empresariales, que enajenen bienes o presten servicios por los que no se requiera para su realización título profesional mismas que podrán optar por pagar el impuesto sobre la renta en los términos establecidos en el citado Régimen, siempre que en el ejercicio inmediato anterior, sus ingresos propios no hubieran excedido de la cantidad de dos millones de pesos. El nuevo régimen se establecerá en la Nueva Ley del Impuesto Sobre la Renta (LISR) y sustituirá a los Regímenes Fiscales llamados "Intermedio" y Régimen de Pequeños Contribuyentes REPECOS con ingresos anuales actuales de hasta cuatro y dos millones de pesos respectivamente.*

**PALABRAS CLAVES:** Impuesto Sobre la Renta, Régimen de Incorporación Fiscal, Personas Físicas

## NEW LAW ON THE TAX ON THE INCOME IN MEXICO. REGIME OF INCORPORATION TAX FOR INDIVIDUALS

### ABSTRACT

*This article is based on an investigation related to the new provisions of the income tax that will take effect in Mexico from 2014 through a new system optional for individuals called "Regime of incorporation Fiscal" tax and is directed to Implementers only business activities, which alienated goods or provide services that is not required to carry out same professional title may choose to pay the tax on income in the terms established in the aforementioned scheme, provided that in the period immediately preceding, their income had not exceeded the amount of two million pesos. The new regime established in the new law of the tax on the income and replace regimes tax called 'Intermediate' and small taxpayers REPECOS regime with current annual revenues of up to four and two million pesos respectively.*

**KEYWORDS:** Regime of incorporation Attorney, natural persons, income tax

### INTRODUCCI ÓN

En México, uno de los objetivos prioritarios es incrementar la capacidad de crecimiento a largo plazo a través del ensanchamiento de la base productiva en la que participen todos los sectores de la población, siendo necesario para ello, abatir el fenómeno de la informalidad por medio de un sistema fiscal simplificado que facilite el cumplimiento de las obligaciones tributarias.

## REVISIÓN LITERARIA

La Nueva Ley del Impuesto Sobre la Renta vigente en México a partir de 2014 en su Título IV Capítulo II "De los Ingresos por actividades empresariales y profesionales" se dividirá en dos secciones:

- Sección I. De las Personas Físicas con actividades empresariales y profesionales
- Sección II. Régimen de Incorporación Fiscal

### Régimen De Incorporación Fiscal

El Régimen de Incorporación Fiscal será optativo y podrán pertenecer a él las Personas Físicas que reúnan los siguientes requisitos:

*Que únicamente realicen actividades empresariales, es decir, comerciales, industriales, agrícolas, ganaderas, de pesca o silvícolas. Enajenen bienes o presten servicios por los que no se requiera para su realización título profesional. Hayan obtenido en el ejercicio inmediato anterior ingresos propios de su actividad empresarial que no hubieran excedido de dos millones de pesos.*

En el caso de las Personas Físicas antes mencionadas, que inicien actividades en el 2014 y estimen que sus ingresos no excederán de dos millones, podrán elegir la opción de tributar en éste Régimen. Cuando en el ejercicio citado realicen operaciones por un periodo menor de doce meses, para determinar el monto señalado, dividirán los ingresos manifestados entre el número de días que comprende el periodo y el resultado se multiplicará por 365 días; si la cantidad obtenida excede del importe citado, en el ejercicio siguiente no podrán tributar conforme al Régimen de Incorporación Fiscal. Asimismo, cuando los ingresos propios de la actividad empresarial obtenidos por las Persona Físicas en el periodo transcurrido desde el inicio del ejercicio y hasta el mes de que se trate, excedan la cantidad de dos millones, deberán abandonar el régimen a partir del mes siguiente a aquel en que excedieron el monto señalado y no podrán en ningún caso volver a tributar en este Régimen. Las Personas Físicas que se encuentren en los siguientes supuestos, no podrán pagar el Impuesto sobre la Renta conforme al Régimen de Incorporación Fiscal:

*Los socios, accionistas o integrantes de personas morales o cuando sean partes relacionadas, o exista vinculación con personas que hubieran tributado en el Régimen de Incorporación Fiscal. Aquellos contribuyentes que realicen actividades relacionadas con bienes raíces, capitales inmobiliarios, negocios inmobiliarios o actividades financieras, salvo que únicamente obtengan ingresos por la realización de actos de promoción o demostración personalizada a clientes personas físicas para la compraventa de casas habitación o vivienda, y dichos clientes también sean personas físicas que no realicen actos de construcción, desarrollo, remodelación, mejora o venta de las casas habitación o vivienda. Las personas físicas que obtengan ingresos por concepto de comisión, mediación, agencia, representación, correduría, consignación y distribución, salvo tratándose de aquellas personas que perciban ingresos por concepto de mediación o comisión y estos no*

*excedan de 30% de sus ingresos totales. Las retenciones que las personas morales les realicen por la prestación de este servicio, se considerarán pagos definitivos para esta sección. Las personas físicas que obtengan ingresos por concepto de espectáculos públicos y franquiciatarios. Los contribuyentes que realicen actividades a través de fideicomisos o asociación en participación.*

Los contribuyentes que opten por pertenecer a éste Régimen calcularán y enterarán el Impuesto Sobre la Renta en forma bimestral a más tardar el día 17 de los meses de marzo, mayo, julio, septiembre, noviembre y enero del año siguiente, mediante declaración que presentarán a través de los sistemas que disponga el Servicio de Administración Tributaria (SAT) en su página de internet, el cual tendrá el carácter de definitivo. Para estos efectos, la utilidad fiscal del bimestre de que se trate se determinará restando a la totalidad de los ingresos por las actividades ya comentadas obtenidos en dicho bimestre ya sea en efectivo, en bienes o en servicios, las deducciones autorizadas en la Ley que sean estrictamente indispensables para la obtención de los ingresos a que se refiere este Régimen así como las erogaciones efectivamente realizadas en el mismo periodo para la adquisición de activos, gastos y cargos diferidos y la participación de los trabajadores en las utilidades de las empresas pagada en el ejercicio, en los términos del artículo 123 de la Constitución Política de los Estados Unidos Mexicanos. Asimismo, cuando los ingresos percibidos, sean inferiores a las deducciones del periodo que corresponda, los contribuyentes deberán considerar la diferencia que resulte entre ambos conceptos como deducibles en los periodos siguientes. Se prevé que dicho régimen sea de carácter temporal por un período de diez años. En el primer año, estos contribuyentes no pagarán ISR, en los siguientes nueve años el descuento irá disminuyendo paulatinamente. A partir del onceavo año deberán tributar conforme al régimen de personas físicas con actividades empresariales y profesionales a que se refiere la Sección I del Capítulo II del Título IV de la Nueva Ley del Impuesto sobre la Renta pagando el 100% del impuesto. Lo anterior se detalla en la siguiente Tabla:

Tabla 1: Reducción Del Impuesto Sobre la Renta a Pagar en el Régimen de Incorporación Fiscal

Años	1	2	3	4	5	6	7	8	9	10
Por la presentación de información de ingresos, erogaciones y proveedores:	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%

*Esta tabla presenta el beneficio fiscal de la reducción del Impuesto sobre la Renta del que gozarán los contribuyentes del Régimen de Incorporación Fiscal.*

Para evitar abusos de aquellos contribuyentes que ya estando en la formalidad, con el ánimo de obtener los beneficios de la reducción en el pago, deseen trasladar sus unidades de negocio a este régimen, entre ellos, condiciona los descuentos a la entrega regular al SAT de la información del total de sus ingresos y erogaciones, incluyendo los relacionados a interacciones con contribuyentes que pertenecen al régimen general. El cumplimiento de estas obligaciones se realizará a través de las herramientas electrónicas que, para ese fin, diseñará el SAT. Dichas herramientas además auxiliarán a los pequeños negocios en su contabilidad. Las obligaciones a las que estarán sujetas las Personas Físicas que pertenezcan al Régimen de Incorporación Fiscal serán las siguientes:

Solicitar su inscripción en el Registro Federal de Contribuyentes (RFC) Conservar comprobantes que reúnan requisitos fiscales, únicamente cuando no se haya emitido un comprobante fiscal por la operación. Registrar en los medios o sistemas electrónicos a que se refiere el Artículo 28 del Código Fiscal de la Federación (CFF), los ingresos, egresos, inversiones y deducciones del ejercicio correspondiente. Entregar a sus clientes comprobantes fiscales Efectuar el pago de las erogaciones relativas a sus compras e inversiones cuyo importe sea superior a \$2,000.00, mediante cheque, tarjeta de crédito, débito o de servicios. Presentar a más tardar el día 17 del mes inmediato posterior a aquel al que corresponda el pago, declaraciones bimestrales. Efectuar retenciones por pago de salarios y conceptos que se asimilan a salarios, conforme a las disposiciones previstas en la misma y en su Reglamento, y efectuar bimestralmente, los días 17 del mes inmediato posterior al término del bimestre, el entero por concepto de ISR de sus trabajadores conjuntamente con la declaración bimestral que corresponda. Pagar el Impuesto sobre la Renta en los términos de la Sección II Capítulo II Título IV de la Nueva Ley del Impuesto sobre la Renta, siempre que, además de cumplir con los requisitos establecidos en ésta, presenten en forma bimestral ante el Servicio de Administración Tributaria, en la declaración a que hace referencia el párrafo quinto del artículo 111 de la LISR, los datos de los ingresos obtenidos y las erogaciones realizadas, incluyendo las inversiones, así como la información de las operaciones con sus proveedores en el bimestre inmediato anterior.

## **METODOLOGIA**

Esta investigación se lleva a cabo a través del seguimiento al proceso de aprobación del Paquete Económico 2014 que el 8 de septiembre del actual, el Ejecutivo Federal a través de la Secretaría de Hacienda y Crédito Público (SHCP) entregó al Congreso de la Unión la iniciativa de Ley de Ingresos, el Proyecto de Presupuesto de Egresos y las iniciativas de reformas legales relativas a las fuentes de ingresos para el 2014, lo anterior en cumplimiento de lo dispuesto en el artículo 74, fracción IV de la Constitución Política de los Estados Unidos Mexicanos.

## **RESULTADOS**

El 17 y 31 de Octubre de 2013 las Cámaras de Diputados y de Senadores, respectivamente, aprobaron el Proyecto de iniciativa de la Ley de Ingresos de la Federación 2014 de conformidad con el artículo 42, fracción IV de la Ley Federal de Presupuesto y Responsabilidad Hacendaria LFPRH.

## **CONCLUSIONES**

Con el Régimen propuesto se pretende que la incorporación a la formalidad atraiga esencialmente a quienes hoy ya realizan una actividad empresarial, enajenan mercancía o prestan servicios y no cumplen con sus obligaciones fiscales. El Régimen de Incorporación fiscal es transitorio pero a la vez otorga certeza, al ofrecer un tratamiento especial por diez años a los contribuyentes que opten por éste régimen, condicionando sus beneficios graduales al cumplimiento permanente, de tal manera que una vez que éste alcance la madurez y estabilidad fiscal, transite al régimen general aplicable a todos los contribuyentes.

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# FACTORES DEL COMPORTAMIENTO DEL CONSUMIDOR QUE INFLUYEN EN LA COMPRA POR MEDIO DE INTERNET

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## RESUMEN

*La presente investigación es una investigación no experimental de corte transversal, descriptiva y correlacional, cuyo objetivo busca identificar según el modelo psicológico social de Veblen y el Modelo contemporáneo de O'Shaughnessy, las variables (internas y externas) que inciden en la compra de bienes y servicios por medio de Internet en jóvenes estudiantes de una Universidad pública de la ciudad de Tijuana, Baja California México. Soportado en la investigación documental que se realizó, se describieron las variables con cada uno de sus indicadores "comportamiento del consumidor" y "caracterización producto/servicio del sitio o página web". Aun cuando no se tienen resultados preliminares que permitan hacer una aproximación de comportamiento de la población estudiada, se cree que el consumo va a estar estrechamente ligado a las variables sociodemográficas, pero sobre todo a las de seguridad y confiabilidad del sitio o página web donde se desea adquirir el producto/servicio. En el corto plazo se tendrán los resultados que permitan comprobar tales hipótesis.*

**PALABRAS CLAVE:** Comportamiento del consumidor, intención de compra, consumo por medio de Internet

## CONSUMER BEHAVIOR FACTORS AFFECTING THE PURCHASE THROUGH INTERNET

### ABSTRACT

*This research is an experimental investigation of cross-sectional descriptive correlational aim is to identify as the social psychological model of Veblen and contemporary Model O'Shaughnessy, variables (internal and external) affecting the purchase of goods and services through Internet in young students in a public college in the city of Tijuana, Baja California Mexico. Supported on documentary research was conducted, variables were described with each of its indicators "consumer behavior" and "product characterization/service and the site or web page". Even when there are no preliminary results for making the behavioral approach of the study population, it is believed that consumption will be closely linked to sociodemographic variables, but especially to the safety and reliability of the site or web page where you to purchase the product/service. In the short term will results needed to verify these hypotheses.*

**JEL:** L1

**KEYWORDS.** Consumer behavior, purchase intent, consumption through Internet

## INTRODUCCIÓN

El impacto que ha tenido Internet en los últimos años, ha propiciado que cambie en gran medida el comportamiento del consumidor. Hoy por hoy las empresas le sacan provecho a todas las bondades que generan las operaciones de compra y venta por este medio, y una buena cantidad de consumidores y en función de los nuevos esquemas culturales y sociales surgidos con ocasión de cambio del estilo de vida, encuentran una buena opción para adquirir prácticamente cualquier satisfactor para sus distintas necesidades. El generar este conocimiento es pertinente e importante para las empresas, ya que el tener una sólida comprensión de la conducta del consumidor, ayudaría a identificar los elementos y factores que son importantes para los individuos, y al mismo tiempo permitiría dar respuesta a muchas interrogantes que se hacen los empresarios sobre qué compran los consumidores, por qué compran, cada cuánto compran, y todas las variables que influyen en su decisión de consumo. Adicionalmente podría significar una información de valor, sobre la cual los proveedores de bienes y servicios podrían diseñar una estrategia específica para maximizar las ventas a través de Internet y al mismo tiempo identificar grupos de referencia en los cuales pudiera trabajar independientemente.

En el presente artículo se hace un planteamiento teórico de la investigación, es decir, se abordan los antecedentes existentes en la temática, y las bases teóricas que se utilizan y delimitan el comportamiento de un consumidor hacia las compras de bienes y servicios a través de Internet. Asimismo, se hace un bosquejo de las variables que se utilizarán en el estudio.

## REVISIÓN DE LITERATURA

*Antecedentes:* Al desarrollar la investigación documental, se pudo concluir que este es un tema al cual han dedicado muchos esfuerzos en el continente Asiático, especialmente en China y Malasia. Dan cuenta de ellos las investigaciones realizadas por Yulihisri, Islam y Ku Daud (2011); Jun y Ismawati (2011); Jusoh y Hai Ling (2012); Guo, Choon y Liu (2012) y Gong, Stump y Maddox (2013). También en Estados Unidos, una desarrollada por Brivin Corp (2013) y otra desarrollada en Chile, aunque esta última no generó conclusiones de soporte para esta investigación. A continuación se hace el breve detalle de las mismas. Yulihisri, Islam y Ku Daud (2011) realizaron una investigación cuyo objetivo fue estudiar los factores que influyen en los jóvenes estudiantes de una institución de educación en Malaysia para realizar sus compras por medio de Internet. Sustentaron su estudio en la Teoría de la Acción Razonada (TRA) y llegaron a la conclusión de que la facilidad de uso y la

utilidad son los factores más destacados. Además de éstos últimos, consideran que la compatibilidad y la seguridad son predictores significativos de una actitud positiva hacia las compras en línea. Jun y Ismawati (2011) desarrollaron un estudio sobre la actitud de los consumidores en lo que respecta a las compras en línea en China. Partiendo del enfoque percibido por los compradores, tomaron en consideración las variables: la accesibilidad para el uso del sitio, la seguridad y privacidad del mismo, el servicio post-venta ofrecido, la estrategia de marketing mix aplicada en el negocio y la reputación del proveedor. Los resultados arrojaron que hay relaciones medias entre el uso, la seguridad, la privacidad y el servicio post-venta con la actitud de los consumidores para realizar compras en línea.

Mientras que la estrategia de marketing mix y la reputación del proveedor, afectan significativamente la actitud para fomentar este tipo de compra. Jusoh y Hai Ling (2012) también

desarrollaron una investigación sobre los factores que influyen en la actitud de las personas para hacer compras en línea. Se plantearon como objetivo identificar la actitud de los compradores hacia las compras en línea desde la perspectiva de las variables sociodemográficas, la percepción del producto, el servicio al cliente, el riesgo y la cantidad de horas por semana dedicadas a navegar en la red. Sus resultados demuestran que la edad, la ocupación, la clase/tipo de producto, las horas de uso de Internet, la percepción de los productos, el servicio al cliente y el riesgo no son variables que incidan significativamente en la actitud hacia las compras en Internet; mientras que el nivel de ingresos y las experiencias pasadas en compras por Internet sí influyen significativamente. Guo, Choon y Liu (2012) desarrollaron una investigación para determinar los factores que influyen en la evaluación de la satisfacción del consumidor hacia las compras en línea en China. Al aplicar 350 encuestas a compradores en línea, concluyeron que el diseño de la página web, la seguridad que proyecta y ofrece el sitio, la calidad de la información ofrecida, las formas y opciones de pago, la calidad del servicio online, la calidad del producto, la variedad de productos ofrecidos y la prestación de servicios se relacionan positivamente con la satisfacción del consumidor hacia las compras en línea en este país. Gong, Stump y Maddox (2013) desarrollaron una investigación para identificar los factores que influyen en los consumidores chinos para hacer compras en línea desde la perspectiva de las características demográficas y las características del uso de medios de comunicación. Después de llevar a cabo un estudio exploratorio llegaron a la conclusión de que los ingresos, la educación, el estado civil y la utilidad percibida, son predictores significativos de la intención de compra en línea. Consideran que en posteriores estudios se deberían incorporar otras variables asociadas a las características del producto y las influencias ambientales, entre otras.

Según un estudio realizado por la Brivin Corp en el año 2013, los diez factores que más influyen en la decisión de compra a través de Internet son: la calidad del producto (56%); envíos gratis (49%), devoluciones (35%), valoraciones de otros clientes (33%), búsqueda visual (30%), gran navegación a través del sitio de Internet (26%), el poder hacer pedidos con facilidad (24%), el que tengan opciones múltiples para el cliente (24%), el tamaño especial (12%) y el tener nuevos productos (10%). Consideran que es importante recalcar que para tener éxito en la comercialización en la red se debe tener un buen producto/servicio aunado a un sitio de red que facilite tales operaciones.

### El Comportamiento del Consumidor

Los factores que pueden afectar el qué, cómo y para qué los clientes toman decisiones de compra son extremadamente complejos. El estudio del comportamiento del consumidor está estrechamente relacionado con la psicología y la sociología. De hecho Rivera, Arellano y Molero (2009) mencionan que el comportamiento del consumidor como tal surgió a la sombra de otras disciplinas como la psicología (estudio del individuo), la sociología (estudio de los grupos), la psicología social (la forma en que un individuo se interrelaciona dentro del grupo), la antropología (influencia de la sociedad sobre el individuo), y la economía. Debido a que cada persona es diferente, no es fácil explicar cómo se toman las decisiones de compra. Por esto según Rivera, *et al* (2009, 34) se impulsó dentro de la rama del marketing el estudio del comportamiento del consumidor con el objetivo de proporcionar un instrumento que permitiese prever cómo reaccionarían los consumidores a los mensajes promocionales y comprender los motivos por los que se toman las decisiones de compra. Algunos autores clásicos y contemporáneos, abordan el concepto de comportamiento del consumidor de la siguiente manera:

*W.L Wiilkie (1994) citado por Mollá (2006), menciona que: “el comportamiento del consumidor se puede entender como el conjunto de actividades que realizan las personas cuando seleccionan,*

compran, evalúan y utilizan bienes y servicios, con el objeto de satisfacer sus deseos y necesidades, actividades en la que están implicados procesos mentales y emocionales, así como acciones físicas” (p. 18).

*Mientras que Rivera, et al (2009), lo definen como el: ... “proceso de decisión y la actividad física que los individuos realizan cuando buscan, evalúan, adquieren y usan o consumen bienes, servicios o ideas para satisfacer sus necesidades” y “hace referencia a la dinámica interna y externa del individuo – o grupo de individuos – que se origina cuando éstos buscan satisfacer sus necesidades mediante bienes y servicios” (p. 36). De las definiciones anteriores, se puede rescatar que el estudio del comportamiento del consumidor busca identificar cómo reaccionan los clientes a los esfuerzos de mercadotecnia desarrollados por el proveedor; cuál es el motivo por el que se compra, utiliza y evalúa un bien o servicio; y cuáles son los deseos y necesidades que se requieren satisfacer en el medio ambiente.*

## METODOLOGÍA

La investigación que se presenta es una investigación no experimental de corte transversal, descriptiva y correlacional, cuyo objetivo busca identificar según el modelo psicológico social de Veblen y el Modelo contemporáneo de O’Shaughnessy, las variables (internas y externas) que inciden en la compra de bienes y servicios por medio de Internet en jóvenes estudiantes de una Universidad pública de la ciudad de Tijuana, Baja California, México. Asimismo, se busca obtener información que favorezca el uso de Internet como mecanismo de consumo. Estas variables tienen que ver con la caracterización del sitio o página web, la caracterización del producto/servicio y la percepción que se tiene del proveedor de los mismos. La investigación contempla la aplicación de una encuesta debidamente validada en su constructo, validez y confiabilidad entre el último trimestre del 2013 y el primero del 2014 a una muestra representativa de la población estudiantil de dicha casa de estudios. De las aportaciones realizadas por Kotler, Lane y Keller (2009) y López (2008) se han identificado dos dimensiones y cuatro indicadores para la variable comportamiento de consumidor:

Factores externos		Factores internos	
Factores culturales	Factores sociales	Factores personales	Factores psicológicos
–Cultura –Sub cultura –Clase social	–Grupos de referencia –Familia –Factores demográficos y económicos	–Edad –Ocupación –Estilo de vida: actividades, intereses y opiniones	–Motivación, necesidades y deseos –Percepción –Creencias y actitudes –Aprendizaje –Personalidad

Otra de las variables se ha denominado para efectos de ésta investigación: “caracterización del producto/servicio y del sitio o página web”. Para dicha variable se han diseñado tres indicadores:

Caracterización de producto/servicio ofertado en el sitio o página web	Caracterización del sitio o página web	Percepción del proveedor del producto/servicio
Percepción del producto/servicio Riesgo del producto/servicio Calidad del producto Variedad de productos	Facilidad de uso Utilidad Seguridad – Riesgo de web Privacidad Diseño de la Web Servicio al cliente durante el proceso de compra	Reputación de proveedor Envíos gratis Valoraciones de otros clientes Servicio post-venta

## RESULTADOS Y CONCLUSIONES

El comportamiento del consumidor es un fenómeno factorial que debe ser estudiado de forma continua y detallada. Agregando los factores asociados al uso de Internet, es un universo de información para las empresas que sin duda alguna definirán una nueva directriz respecto a la forma de comercializar los bienes y servicios. Aun cuando no se tienen resultados preliminares que permitan hacer una aproximación de comportamiento de la población estudiada, se cree que el consumo va a estar estrechamente ligado a las variables sociodemográficas, pero sobre todo a las de seguridad y confiabilidad del sitio o página web donde se desea adquirir el producto/servicio. En el corto plazo se tendrán los resultados que permitan comprobar tales hipótesis.

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# COMPETENCIAS DIRECTIVAS PARA PYME: UNA EVALUACIÓN DIAGNÓSTICA EN EL SECTOR SERVICIOS EN SALTILLO COAHUILA

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## RESUMEN

*El modelo de perfil de competencias directivas permite una administración y gestión más efectiva que impacta al talento organizacional y el desempeño empresarial. El objetivo del trabajo es efectuar una evaluación diagnóstica de las competencias directivas en las PYME del sector Servicios, en Saltillo, Coahuila. La metodología de investigación fue de tipo exploratoria, descriptiva y explicativa. La estimación del tamaño de la muestra se obtuvo a partir de un muestreo probabilístico estratificado, con un nivel de confianza del 95%. Se aplicaron 300 encuestas a socios, gerentes y supervisores. Para el análisis se utilizó la clasificación de las competencias directivas del modelo de Psico Consult A.C. "Rueda de competencias" (2001). La confiabilidad y validez del instrumento de investigación se determinó mediante el Alfa de Cronbach con un resultado de 0.80. Como resultado las competencias directivas más desarrolladas son la gerencia de conflictos, desarrollo de la gente y la planeación; mientras que el trabajo en equipo, motivación y el seguimiento las más débiles. La competencia directiva de comunicación es la de menor fortaleza y en específico la competencia de redacción resultó ser la de mayor desarrollo y la más débil la presentación de informes. Los datos aportados servirán para el diseño y aplicación de un modelo de competencias directivas para PYME del sector servicios que influyan en la disminución de la tasa de mortandad y la estabilidad en el desempeño económico y financiero.*

**PALABRAS CLAVE:** Competencias directivas, desempeño empresarial, PYME servicios

## MANAGEMENT COMPETITIONS FOR SMEs: DIAGNOSTIC EVALUATION IN THE SERVICE SECTOR IN SALTILLO COAHUILA

### ABSTRACT

*The profile model management competitions allows more effective administration and management talent that impact the organizational and managerial performance. The objective of this work is to evaluate diagnostic management competitions in SMEs in the Services sector, in Saltillo, Coahuila. The research methodology was exploratory, descriptive and explanatory. Estimating the size of the sample was obtained from a stratified probability sampling, with a confidence level of 95%. 300 surveys were applied to partners, managers and supervisors. For the analysis we used the classification of management competitions Consult Psycho model AC "Wheel of competences" (2001). Cronbach Alpha assessed the reliability and validity of the research instrument with a score of 0.80. As a result the management competitions with more development are The Conflict Management, People Development, and Planning. Meanwhile, Teamwork, Motivation, and Following are the weakest. The administrative managerial*

*competence is the least strong and specifically the redaction competition was the most developed and the weakest was the Data Presentation. This work will be the basis for the design and implementation of a competence model policy for SMEs in the service sector that influences the reduction of the death rate and the stability of the economic and financial performance.*

**KEYWORDS:** Management Competitions, Business Performance, SME Services

## INTRODUCCIÓN

La información y el conocimiento como factores claves en todos los procesos, materiales de producción y distribución, generando innovaciones tecnológicas, organizacionales, de mercadotecnia, financieras, sociales y jurídicas, que impactan a las organizaciones es característico del tránsito hacia la Sociedad del Conocimiento. Por ello, la capacidad para generar riqueza se fundamenta de manera sustancial en la generación de activos intangibles y la clave del desarrollo y de la competitividad está en la capacidad de obtener, procesar y generar información y conocimiento de forma rápida y flexible. El conocimiento y su gestión se configuran como el recurso estratégico principal de la sociedad global. Se trata de crear buenas prácticas profesionales, encontrando eficaces formas de trabajar y aprender en base al desarrollo de la capacidad de dirección. Crear un perfil de competencias gerenciales que responda al constante cambio para la gestión del factor humano, que sea una herramienta que incremente la capacidad de dirección que hoy requieren las organizaciones y que consideran al capital humano como un factor estratégico competitivo, permite incrementar la creación de valor y competitividad en las organizaciones. La propuesta innovadora del trabajo por competencias directivas en las organizaciones requiere por consecuencia un enfoque que sea parte de la estratégica de la organización.

La CEPAL (2010) señala que durante el primer año mueren aproximadamente el 50% de las PYME, durante el segundo año otro 25%, y antes del quinto año se muere otro 15%, sólo sobreviviendo y madurando el 10% de la población inicial. Estas cifras nos confirman que el principal problema existe durante el nacimiento de las PYME hasta su segundo aniversario. FAEDPYME (2011) en su análisis estratégico para el Desarrollo de la MIPYME en Iberoamérica, estudio realizado a partir de una muestra de 3,871 empresas, en nueve estados mexicanos, evaluó de mayor a menor las principales dificultades para el desarrollo de las PYME, entre ellas destaca situación financiera, problemas burocráticos con la Administración, limitada profesionalización de la dirección, insuficiencia de recursos tecnológicos e innovación, debilidades de organización y dirección; insuficiente cualificación de recursos humanos, entre otros. Además en el estudio realizado en el contexto del

Estado de Coahuila, Molina et al (2011) resalta entre las debilidades que más afectan la sobrevivencia de las PYME las cuestiones referidas al mercado, operación, financiero y destaca el lugar de la organización y administración incluyendo la formación y capacitación de los recursos humanos como el factor con mayor valor en todas las etapas del desarrollo de las mismas. Por ello el problema planteado son las ineficiencias en la administración y gestión de las MIPYME en la región, como factor que incluye en el éxito y competitividad, para lo cual el objetivo del presente trabajo de investigación es mostrar los resultados de la evaluación diagnóstica de las competencias directivas en las PYME del sector servicios, en Saltillo, Coahuila como punto de partida para identificar un modelo de gestión para la administración de las PYME. El desarrollo del trabajo se estructura en tres partes: referentes teórico–metodológicos mediante la revisión de la literatura, la metodología utilizada en el estudio empírico, y el análisis de los resultados en

cuanto al nivel de desarrollo de las competencias directivas en las PYME del sector servicios y las conclusiones.

## REVISIÓN DE LITERATURA

Adams (1996) confirma que durante veinte años, más de cien investigadores han producido un total de 286 modelos de competencia genéricos, dos terceras partes son norteamericanos, y el resto se extendió sobre veinte países. Cada modelo tenía entre tres y seis agrupaciones o clusters con dos a cinco competencias por agrupación, con tres a seis indicadores de comportamiento, que demuestran la competencia en el puesto. De este total de modelos se hizo un análisis comparativo y resultaron 21 competencias, con 360 indicadores que fueron plasmados en un diccionario de comportamientos para una gestión efectiva. A partir de este resultado Hay McBer. Spenser y Spenser (1993) lista 21 competencias básicas las cuales integra en 6 grupos: Logro y acción, Apoyo y servicio humano, impacto e influencia, gerencia, cognitivo y efectividad personal. Chinchilla (1999) señala que las empresas que logren desarrollar competencias en sus directores estarán preparadas para enfrentar los retos del entorno, la globalización, la mayor utilización de las tecnologías en los procesos de producción y administración.

Por otra parte Chinchilla afirma que existen dos tipos de competencias directivas: las competencias estratégicas necesarias para el logro de resultados económicos y las competencias intratégicas que se requieren para el logro de la unidad. El tercer grupo de las competencias de eficacia personal, que son aquellos hábitos que facilitan una relación eficaz de la persona con su entorno (Covey, 1993). Estas competencias miden la capacidad de autodirección, capacidad imprescindible para dirigir a otras personas. Rodríguez (1999) comenta: dado que el número de Competencias y sus formas de agrupación son enormes, y depende de cada autor. Por un lado, está la Rueda de las Competencias Gerenciales Psico Consult (2001) que incluye 40 Competencias. Desde el centro hacia la periferia se identifican tres tipos de e Competencias: Personales, Administrativas - Gerenciales y Técnicas - Funcionales, que se asocian a la clasificación más usual de Básicas, Genéricas y Específicas. En el segundo nivel, identificadas con letras, se incluyen nueve competencias, que luego se subdividen en 40.

Chinchilla (2001) explora y describe un análisis sectorial en su estudio sobre competencias directivas y comenta que algunas de las diferencias que aparecen respecto a la valoración de las diferentes competencias se deben a las características propias de cada sector. Así, el hecho, por ejemplo, de que la orientación al cliente -muy valorada en todos los sectores- aparezca en el puesto número 10 en el caso del sector de alimentación y tabaco, puede deberse a que estas empresas no tratan directamente con el cliente final, por lo que la vocación de servicio no está tan clara. Del mismo modo, la visión de negocio - entendida como conocimiento y aprovechamiento de las oportunidades y los peligros que repercuten en la competitividad y la efectividad del negocio - aparece en puestos más bajos en la consultoría, donde esta competencia no es realmente clave. El análisis intersectorial de las competencias permite, además, observar algunos hechos curiosos, que en el análisis general quedaban encubiertos. Por ejemplo, La orientación interfuncional aparece en un puesto relativamente alto de la clasificación general (el doce) y, sin embargo, en el análisis intersectorial observamos que sólo aparece en el sector químico, y con una valoración de 6. Esto significa que se trata de una competencia que, si bien se tiene en cuenta, su valoración es bastante baja, lo que explica que aparezca en el ranking general.

En otras palabras, ha sido valorada por muchas empresas, pero como poco relevante. Por otra parte, aparecen competencias cuya valoración es muy similar en todos los sectores: liderazgo, trabajo en equipo, iniciativa, creatividad, honestidad y credibilidad. Chinchilla considero los

cinco sectores de mayor importancia para establecer un perfil del directivo. En un estudio complementario al ranking anterior llamado las competencias directivas más valoradas concluye que los tres tipos de competencias directivas: estratégicas, intratécnicas y de eficacia personal son tan valoradas que no hay diferencias significativas en cuanto a su valoración. Sin embargo permite ratificar la idea que surgía de la observación a los resultados donde las intratécnicas tienen un peso importante en esta clasificación. Esto significa que las empresas buscan directivos capaces de crear equipo, desarrollar a sus colaboradores, con cualidades para el liderazgo y la motivación. (Chinchilla, 2001).

Alles (2004) reflexiona en su artículo “Perfil del puesto por Competencias” ¿Cómo aplicar la metodología de competencias en el proceso de selección?, propone la identificación de las competencias dominantes y señala que en las organizaciones la evaluación de destrezas y conocimientos es más sencilla, que lo complejo es evaluar los comportamientos. La empresa debe definir su modelo de competencias sin importar el tamaño o sector al que corresponda. Alles sugiere la definición de un perfil del puesto por competencias y define dicho perfil como un modelo conciso, fiable y efectivo para predecir el éxito de una persona en su puesto. Si la empresa ha implementado un esquema de gestión por competencias, se partirá del descriptivo de puestos donde junto a otro tipo de información estarán consignadas las diferentes competencias y los niveles o grados requeridos para cada una. En México su metodología es reconocida y aplicada en los procesos de factor humano basados en competencias como herramienta estratégica de dirección por tratarse de una de las escritoras más importantes del habla hispana sobre recursos humanos Martínez R, Abando C. y Mata A. (2010) en su investigación un modelo causal de competitividad empresarial planteado desde la teoría de los recursos: capacidades directivas, de innovación, marketing y calidad que las capacidades directivas conforman los activos intangibles de la empresa, asociado al capital humano que integran las personas que ocupan cargos gerenciales a nivel estratégico y táctico de la organización, desplegadas a través de sus conocimientos, habilidades, capacidades, actitudes y comportamientos. Su sustento teórico está en las investigaciones (Pfeffer, 1994; Becker y Gerhart, 1996; Aragón et al., 2003; Landeta et al., 2007, entre otras) desde un enfoque basado en los recursos y capacidades en la creación y mejora de ventajas competitivas y sostenibles.

Sin las competencias directivas no es probable lograr ventajas competitivas sostenibles (Barney, 1991). Los directivos juegan el papel primordial de elegir el camino que sigue una empresa (firm's path), la combinación de recursos que ésta desplegará y fomentará, y los mercados en los cuales participará (Castanias y Helfat, 1991; Mahoney y Pandian, 1992; Kor y Mahoney, 2000; citado por Martínez Santa María et al, 2010). Según Barney (1991), el conjunto de conocimientos y habilidades del directivo se pueden clasificar en tres grupos: (1) la formación y desarrollo formal del directivo; (2) aspectos innatos o cognitivos; y (3) la experiencia acumulada que disponga el directivo en su haber. Por su parte, Kor (2003) propone un modelo de competencias directivas formado por tres niveles: (1) experiencia directiva específica a la empresa; (2) experiencia compartida específica del equipo directivo; (3) experiencia directiva específica de la industria. Citado por Martínez Santa María et al, 2010). Las capacidades directivas superiores constituyen el factor determinante, catalizador para el desarrollo de capacidades de innovación, de marketing y de calidad superiores, y no la posesión de las mismas.

Rubio y Aragón (2002) en la explicación de los factores para el éxito competitivo de las MIYME dentro de la revisión bibliográfica idéntica las capacidades directivas en la gestión, junto con 10 factores más, a partir de los siguientes autores: Huck y McEwen, 1991; Viedma, 1992; Acar, 1993; Yusuf, 1995; Luk, 1996; Puig, 1996; Camisón, 1997; Lin, 1998; European Foundation for Quality Management, 2000; Monfort, 2000; Donrosoro et al., 2001, resaltando la capacidad del

directivo para influir en el comportamiento de los demás con el fin de conseguir los objetivos organizacionales, individuales o personales . Psico Consult C.A. ha desarrollado un marco conceptual y metodológico que adapta la teoría a las necesidades particulares de la cultura de cada organización, logrando modelos únicos que se diseñan tomando en cuenta la dinámica, los procesos, los productos y las perspectivas de cada cliente, asegurando la practicidad y utilidad del sistema.

Psico Consult C.A. es una empresa venezolana con 25 años de trayectoria que desarrolla a mediados de los noventa el software PsicoMet 1.0 sistema innovador en la aplicación de baterías y emite informes asociados de evaluación de candidato lo cual le permite ser innovadora y vanguardista, actualmente se encuentra en México, Costa Rica, Panamá y Colombia. Es una empresa que mediante una robusta plataforma en internet administra y aplica diferentes productos y servicios a nivel internacional y tiene el enfoque de consultoría de gestión humana que ofrece soluciones de medición y desarrollo humano para eficientar el desempeño de las personas y organizaciones.

La Rueda de las Competencias Gerenciales Psico Consult (2001) que incluye 40 Competencias. Desde el centro hacia la periferia se identifican tres tipos de Competencias: Competencias Técnicas y funcionales (Conocimientos específicos del cargo y conocimientos genéricos), Competencias personales (cognoscitivas, motivación y compromiso, y personales) y administrativas y gerenciales (comunicación, con la gente, administrativas y liderazgo). En lo que respecta a las administrativas y gerenciales en las cuales se centra nuestro estudio la competencia general de comunicación tiene cuatro específicas: escucha, presentación de informes, redacción de informes y búsqueda de información. La competencia general con la gente tiene integradas tres específicas: gerencia de conflicto, relaciones personales y trabajo en equipo. La competencia general administrativa está integrada por cuatro específicas: seguimiento, efectividad de recursos, organización y planeación. Por último la competencia general de liderazgo tiene integradas: desarrollo de la gente, delegación, control, motivación, estilo e impacto de liderazgo. En el entorno de las MIPYME siempre existe la gran interrogante de si formar o no a sus directivos y administradores, por la alta rotación; sin embargo un directivo o administrador no formado carecerá de los hábitos y comportamientos necesarios para el logro y eficiente desempeño de la PYME y así lograr su estabilidad, crecimiento y competitividad.

Las PYME de éxito suelen estar dirigidas por líderes que se caracterizan por ser grandes profesionales con experiencia y por poseer un gran conocimiento del mercado, del entorno, de los recursos humanos y de sus recursos tecnológicos. El éxito competitivo es un término relativo (AECA, 1988b; Dehesa, 1988; Viedma, 1992; Salas, 1992; Cuervo, 1993; Gómez, 1997; Alonso y Barcenilla, 1999), donde la posición relativa frente a la competencia se constituya como uno de los indicadores determinantes del éxito o fracaso de la empresa. (Limitaciones para acceso a balances y cuentas de pérdidas y ganancias de las empresas). Este indicador global de éxito es una variable de naturaleza cualitativa que integra las variables calidad de los productos o servicios, introducción de innovaciones, productividad de la mano de obra, satisfacción de los empleados, satisfacción de los clientes con los productos de la empresa, rapidez de respuesta a las demandas de los clientes, e incremento de la cuota de mercado. Para confeccionarla se ha recogido información sobre cada uno de los indicadores con respecto a la competencia. Este indicador fue el resultado de sumar el valor medio de las puntuaciones obtenidas por cada una de las siete variables señaladas. Así como la media para el resultado global (Rubio Aragón).

## **METODOLOGÍA**

El diseño de la investigación, de tipo exploratorio y descriptivo, permite “facilitar una mayor penetración y comprensión del problema que enfrenta el investigador” (Malhotra, 1997: 87). En una primera etapa de la investigación se aplicó una prueba piloto de julio a octubre de 2012. Para la validación de las competencias del modelo de la rueda de Psico Consult A.C., en cuanto a la validación del constructo la confiabilidad del instrumento se realizó por medio del coeficiente Alfa de Cronbach obteniendo el valor de 0.836 considerándose como un valor bueno. En una segunda etapa se realizó el trabajo empírico. La población objeto del estudio está constituida por todas las empresas pequeñas y medianas del sector servicios (1,075) del Municipio de Saltillo en el estado de Coahuila (INEGI, 2012) La estimación del tamaño de la muestra se obtuvo a partir de un muestreo probabilístico estratificado, con un nivel de confianza del 95% mediante varianza máxima, con una muestra de 284.

Los sujetos de estudio fueron los dueños, gerentes y supervisores de las PYME sector servicios en Saltillo Coahuila, a quienes se les preguntó su percepción de cada pregunta, con una escala de Likert. Se aplicaron 300 encuestas de manera directa en el período de junio a agosto de 2013. La confiabilidad del instrumento se realizó por medio del coeficiente Alfa de Cronbach obteniendo el valor de 0.80 considerándose como un valor bueno. El instrumento utilizado es resultado del estudio de la bibliografía, siendo en lo fundamental la Rueda de competencias del Modelo de Psico Consult (2001) que fue validado en la prueba piloto, el cual fue complementado con preguntas ya validadas del cuestionario del Desarrollo Estratégico de las MIPYME en cuanto al uso de sistemas de control interno formal y entorno sectorial (FAEDPYME; 2009; Medina 2011; Martínez Serna, et al, 2012 ) y el desempeño empresarial basado en las variables de rendimiento propuestas por Quinn y Rohrbaugh (1983).

Tabla 3: Operacionalización de Variables de Estudio

VARIABLE	INDICADORES	ITEMS	ALFA*
Competencia comunicación	Escucha, informes, redacción y búsqueda de información	10	0.782
Competencia con la gente	Gerencia de conflicto, relaciones personales y trabajo en equipo	8	0.801
Competencia administrativa	Seguimiento, efectividad de recursos, organización y planificación	12	0.836
Competencia liderazgo	Desarrollo de la gente, delegación, control, motivación, estilo e impacto de liderazgo	19	0.912
Entorno competitivo sectorial	Facilidad para entrada de empresas, competencia del sector, poder de negociación de los clientes y proveedores y servicios sustitutos	5	0.714
Desempeño Empresariales	Procesos internos, sistema abierto, sistema racional y recursos humanos	13	0.805
Sistemas de Control interno	Calidad del servicio, flujo de efectivo, presupuestos, análisis económico-financiero y sistema de calidad	6	0.774

\*El Alfa de Cronbach por debajo de 0,5 muestra un nivel de fiabilidad no aceptable; si se situara entre 0,7 y 0,8 se estaría ante un nivel aceptable como muestra la casi totalidad de las variables, excepto la competencia de liderazgo que obtuvo valor de 0,912 que sería excelente.

El instrumento incluyó variables de control de carácter socio demográfico como edad, sexo, escolaridad y puesto del encuestado, así como antigüedad, tamaño, subsector de la empresa. Para el procesamiento de los datos se utilizaron técnicas estadísticas descriptivas la prueba de Chi cuadrada determinar el nivel de significación con un 90, 95% y 99% de confianza en la comprobación de las hipótesis. Para el análisis de la variable rendimiento se usaron las variables propuestas por Quinn y Rohrbaugh (1983), midiéndolas en una escala Likert del 1 (desfavorable) al 5 (favorable).

## RESULTADOS

### Descripción Socio Demográfica

Las características de los dueños, directores - gerentes y supervisores que conforman la muestra es la siguiente: El 74% se desempeña como jefe/supervisor, de ellos un 63% tienen una antigüedad de 1 a 4 años, una formación universitaria con grado profesional el 49% y 17% de posgrado, mayoritariamente de sexo masculino (51%) y con una edad de menos de 40 años (78%) y de 40 a 55 años (20%). Ocupan el cargo de director/gerente de la empresa el 15%, en un 82% de género masculino y con experiencia en cargos de dirección de 1 a 4 años el 29%, de 5 a 9 años el 28% y más de 10 años el 27%.

Las PYME del sector servicios del municipio de Saltillo Coahuila que participaron en el estudio empírico pertenecen al subsector de servicios educativos en un 22%, servicios profesionales 19% y apoyo a negocios 17%. El tamaño de mediana empresa es más representativo con un 52% y en cuanto a su madurez, en etapa consolidada 45% y desarrollo 33%.

#### Nivel de Desarrollo de las Competencias Directivas

Tratándose de la autoevaluación de competencias directivas de los dueños, gerentes y supervisores de las PYME las 3 competencias directivas específicas mejor autoevaluadas de mayor a menor son: motivación, desarrollo de la gente y delegación. La competencia directiva genérica “liderazgo” con la mejor autoevaluación. Con respecto a las competencias directivas con menor ponderación de menor a mayor se infiere que son: seguimiento, efectividad de recursos e impacto de liderazgo. La competencia directiva genérica administrativa resultó ser la de menor autoevaluación. Fuente: elaboración propia. Al analizar los resultados de nuestro estudio con respecto al ranking de las competencias directivas de Chinchilla (2001) encontramos que existen una competencia que ocupó el mismo lugar “efectividad de recursos” (16) y la competencia de comunicación con similar resultado en dos específicas (4 y 6). Las competencias genéricas mejor valoradas son de mayor a menor: liderazgo, comunicación, con la gente y administrativas. Lo anterior nos permite inferir que las PYME del sector servicios prefieren directivos, jefes y supervisores con competencias directivas específicas que desarrollen a sus subordinados, controlen los procesos y gente, deleguen con efectividad, motivando con un estilo de liderazgo que impacte a los objetivos de la organización. Recordando que Chinchilla concluyó que las empresas buscan directivos capaces de crear equipo, desarrollar a sus colaboradores, con cualidades para el liderazgo y la motivación.

Tabla 4: Autoevaluación de Competencias Directivas de Socios / Gerentes y Supervisores de Pyme Sector Servicios

competencia directiva generica	competencia especifica directiva	media	sig.	lugar
c o m u n i c a c i ó n	escucha	3.00	0.007*	12
	informes	2.99	0.175	13
	redacción	3.12	0.001*	4
	búsqueda de información	3.05	0.001*	6
c o n   l a   g e n t e	conflictos	3.05	0.001*	7
	relaciones personales	3.03	0.876	9
	trabajo en equipo	2.98	0.012*	14
	seguimiento	2.80	0.856	17
a d m i n i s t r a t i v a	efectividad de recursos	2.82	0.048*	16
	organización	3.04	0.001*	8
	planeación	3.11	0.008*	5
	desarrollo de la gente	3.19	0.036*	2
l i d e r a z g o	delegación	3.14	0.057	3
	control	3.03	0.001*	10
	motivación	3.22	0.001*	1
	estilo de liderazgo	3.00	0.011*	11
	impacto de liderazgo	2.97	0.085	15

Teniendo en cuenta el valor de la significación con  $\alpha = 5\%$ , en los restantes los valores son  $>0,05$ . Se hallan valores significativos en 12 de las 17 competencias específicas (70.58) y que puede estar relacionada la gerencia de conflictos con la competencia de escucha por la forma de planear y organizar las actividades complementado con el control y motivación de los gerentes y supervisores en las PYME del sector servicios.

Tabla 5: Comparativo Contra Ranking de Chinchilla

competencia directiva generica	competencia especifica directiva	lugar chinchilla	lugar investigacion
c o m u n i c a c i ó n	escucha		12
	informes		13
	redacción	6	4
	búsqueda de información		6
c o n l a g e n t e	conflictos	23	7
	relaciones personales	19	9
	trabajo en equipo	5	14
a d m i n i s t r a t i v a	seguimiento		17
	efectividad de recursos	16	16
	organización		8
	planeación		5
l i d e r a z g o	desarrollo de la gente		2
	delegación	20	3
	control		10
	motivación		1
	estilo de liderazgo		11
	impacto de liderazgo	2	15

La competencia general de liderazgo tiene de las primeras diez competencias específicas mejor valoradas cuatro: motivación, desarrollo con la gente, delegación, y control. Con respecto a las menos valoradas se encuentran en la competencia general administrativa; seguimiento y efectividad de recursos. Se infiere que los encuestados no perciben como competencias específicas importantes el seguimiento, efectividad de recursos, impacto de liderazgo y trabajo en equipo; y esto puede estar relacionado con los numerosos problemas administrativos que originan una pobre cultura de trabajo en equipo y dificultades de comunicación en las PYME del sector servicios.

En el trabajo de Gálvez (2012), sobre el impacto de la innovación sobre el rendimiento de la MIPYME, obtuvo los resultados de que a medida que se mejoran los procesos productivos o se adquieren nuevos equipos, en las MIPYMEs de mediana y alta tecnología de Cali se mejora significativamente su desempeño en cuanto a: 1) la satisfacción de los clientes, la rapidez de adaptación a las necesidades del mercado, y en imagen de la empresa y sus productos o servicios; 2) en cuanto a su cuota de mercado, rentabilidad y productividad; y 3) en cuanto a su rendimiento global.

Tabla 7: Percepción de Resultados Empresariales de las PYME Sector Servicios

eje	resultados	media	desv. típ.	varianza
procesos internos	calidad del servicio	2.95	1.523	2.319
	proceso operativo interno	3.05	1.324	1.753
	organización de las tareas del personal	2.99	1.149	1.321
sistema abierto	satisfacción de los clientes	3.08	1.382	1.909
	rapidez de adaptación de las necesidades del mercado	2.86	1.253	1.570
sistema racional	imagen de la empresa y de sus servicios	3.15	1.390	1.932
	participación en el mercado	2.95	1.342	1.800
	rentabilidad	2.92	1.328	1.763
recursos humanos	productividad	2.75	1.248	1.558
	motivación de los trabajadores	3.03	1.185	1.404
	satisfacción de los trabajadores	3.04	1.151	1.326
	permanencia del personal	2.71	1.191	1.417
	asistencia y puntualidad del personal	2.98	1.260	1.588

*La percepción sobre su desempeño empresarial en comparación con los competidores oscila entre malo (2) y regular (3). Es la imagen de la empresa y sus servicios, satisfacción de los clientes y proceso operativo interno las consideradas con valores más altos y las de menor ponderación: permanencia del personal, productividad y rapidez de adaptación de las necesidades del mercado. Lo cual significa que un problema en los resultados del sector es la estabilidad del personal y el desempeño en los procesos productivos. Modelo de resultados de Quinn y Rohrbaugh (1983). Fuente: elaboración propia.*

## CONCLUSIONES

En este trabajo de investigación se efectuó una evaluación diagnóstica de las competencias directivas en las PYME del sector Servicios, en Saltillo, Coahuila. La metodología de investigación fue de tipo exploratoria, descriptiva y explicativa. La estimación del tamaño de la muestra se obtuvo a partir de un muestreo probabilístico estratificado, con un nivel de confianza del 95%. Se aplicaron 300 encuestas a socios, gerentes y supervisores en 67 PYME. En la autoevaluación de competencias directivas de los dueños, gerentes y supervisores de las PYME las 3 competencias directivas específicas mejor autoevaluadas de mayor a menor son: motivación, desarrollo de la gente y delegación. La competencia directiva genérica “liderazgo” con la mejor autoevaluación. Con respecto a las competencias directivas con menor ponderación de menor a mayor resultaron: seguimiento, efectividad de recursos e impacto de liderazgo. La competencia directiva genérica administrativa resultó ser la de menor autoevaluación.

Las competencias directivas más requeridas en la administración y gestión de las PYME y que deben tener sus directivos, jefes y supervisores son que desarrollen a sus subordinados, controlen los procesos y gente, deleguen con efectividad, motivando con un estilo de liderazgo que impacte a los objetivos de la organización. En el entorno competitivo sectorial existe una competencia de nivel medio en donde las empresas consideran que el factor de mayor competitividad de la industria es el relativo a la rivalidad entre competidores existentes, seguido del poder negociador de los clientes. Por otra parte el factor competitivo menos valorado por las empresas se refiere al poder negociador de los proveedores, seguido de la amenaza del factor facilidad de entrada de nuevas empresas y nuevos competidores.

La percepción del entorno competitivo en el sector de servicio de las PYME es valorado como que existe una competencia que oscila en la escala de 3.30 a 3.70. Pudiéramos decir que es un competencia de nivel medio, siendo la más alta la propia rivalidad competitiva entre empresas y la más baja el poder negociación con los proveedores. En la percepción del desempeño empresarial con respecto a sus competidores existe una baja evaluación entre mala y regular siendo la imagen de la empresa y sus servicios, satisfacción de los clientes y proceso operativo interno las consideradas con valores más altos y las de menor ponderación: permanencia del personal, productividad y rapidez de adaptación de las necesidades del mercado. Lo cual significa que un problema en los resultados del sector es la estabilidad del personal y el desempeño en los procesos productivos. Al analizar el nivel de desarrollo de las competencias directivas con relación a las etapas de madurez de las PYME no se encontraron valores significativos aunque las competencias genéricas de gerencia de conflictos, desarrollo de la gente y motivación puede estar relacionada con las debilidades de estructura, problemas de operación y grado de motivación de los sujetos por desarrollar su trabajo dentro de la PYME.

Al analizar los resultados del nivel de desarrollo de las competencias directivas y su relación con el tamaño de las PYME sólo se hallan valores significativos en redacción de informes y control que puede estar relacionada con la interacción cercana por el tamaño del personal de las PYME y la supervisión directa del gerente en el estilo de liderazgo hacia el subordinado para el cumplimiento de las tareas. Se encontró asociación entre el nivel de competencias directivas y los sub sectores de las PYME en el 88% de las variables, de 15 de las 17 competencias directivas.

El estilo de liderazgo tiene la significancia más importante que puede estar relacionada con la organización y el control lo cual es una consecuencia de la toma de decisiones oportunas y la organización de tareas. Las de mayor significancia son: estilo de liderazgo, organización y control; y la competencia genérica de liderazgo permite el mejor desarrollo de la competencia genérica administrativa.

Existe además una fuerte asociación entre el nivel de competencias directivas y los resultados empresariales en los procesos internos calidad en el servicio, eficiencia en el proceso operativo y la organización de tareas en el 100% de las variables; y los resultados empresariales para el sistema abierto que es la satisfacción de clientes, la adaptación a las necesidades del mercado y la imagen de la empresa y servicio en un 94% de las variables; y los resultados empresariales racionales en la participación del mercado, rentabilidad y productividad en el 100% de las variables; y los resultados empresariales para recursos humanos referente a la motivación, satisfacción, permanencia, asistencia y puntualidad del trabajador en un 94% de las variables, por lo que se acepta en general la hipótesis de la asociación en el desarrollo de las competencias directivas y los resultados empresariales.

Las de mayor significancia son: organización y control en los resultados empresariales de sistema abierto y nuevamente control y escucha para los resultados empresariales del sistema abierto control y estilo de liderazgo en los resultados empresariales racionales, repitiendo control y motivación para los resultados empresariales de recursos humanos: por lo que el nivel de desempeño de las competencias directivas impacta a los resultados empresariales. Una de las limitaciones de este estudio es que aborda el sector servicios que es heterogéneo como algo homogéneo. La investigaciones de Chinchilla sobre los perfiles de competencias por sectores sirve como un antecedente que nos ayuda para continuar profundizando en el perfil de competencia para los subsectores más representativos: Servicios educativos, servicios de alojamiento y alimentos, servicios financieros, servicios de salud y asistencia, servicios profesionales y servicios de apoyo a negocio. Será una tarea importante realizar un análisis por los subsector educativo para obtener el perfil de competencias directivas del subsector educativo.

En la revisión de la literatura los estudios realizados se centran en el sector industrial o manufacturero y no se encontraron estudios específicos para el sector de servicios que es el objeto de estudio de esta investigación lo cual es importante por el papel creciente que ha tenido este sector en los últimos veinte años en particular el subsector educativo en que las investigaciones se enfocan al nivel básico y no superior que un sector considerado en nuestra investigación. El gran reto es diseñar un perfil de competencias directivas para Socios, Directivos, gerentes, jefes y supervisores del sector servicios en el Municipio de Coahuila y la metodología de implantación de ese modelo de gestión que impactaría a la estabilidad y sobrevivencia de las PYME.

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# SELECCIÓN BAJO INCERTIDUMBRE DE PORTAFOLIOS DE GENERACIÓN ELÉCTRICA

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## RESUMEN

*El presente trabajo tiene por objeto realizar un análisis de la cartera de centrales de generación en México, utilizando el modelo de portafolio de Markowitz, con objeto de coadyuvar a la planeación de Centrales de Generación Eléctricas en el país. Se presentan los conceptos fundamentales de la Teoría Moderna de Portafolio, así como su aplicación a dos escenarios: un ejemplo acotado a siete tecnologías de generación, sin restricciones de capacidad contrastado con otro escenario con restricciones de capacidad. El resultado es que al aplicar esta herramienta se puede disminuir el riesgo y aumentar los rendimientos, no se pretende que sustituya a ningún método de planeación actual sino de ser una herramienta adicional para la toma de decisiones.*

**PALABRAS CLAVE:** Portafolio, Riesgo, Incertidumbre, Inversión, Planeación

## PORTFOLIO SELECTION UNDER UNCERTAINTY OF POWER GENERATION

### ABSTRACT

*This paper is intended to make an analysis of the power plant generation portfolio by the Markowitz portfolio model, for planning Electric Power Generation in Mexico. It presents the fundamental concepts of modern portfolio theory and the application a seven-dimensional example generation technologies with and without constraints. The result is that by applying this tool can reduce risk and increase returns, are not intended to replace any current planning method without being an additional tool for decision making*

**KEYWORDS:** Portfolio, Risk, Uncertainty, Investment, Planning

**JEL:** C, G, H, M

### INTRODUCCIÓN

La teoría de portafolio fue desarrollada por Harry Markowitz en 1952 en su artículo “Portfolio Selection” y después ha sido enriquecida por otros autores como Sharpe y Tobin, solo por mencionar algunos, siendo el enfoque principal la conformación de portafolios de activos financieros, (acciones, bonos, papel de deuda, etc.). Ésta establece la creación de portafolios de instrumentos financieros con un mínimo riesgo a un nivel de rendimientos esperado. En el presente trabajo se muestra una aplicación para la selección de centrales de generación, utilizando siete tecnologías y un periodo de 20 años de datos estadísticos de cada una, el resultado obtenido es un portafolio de tecnologías de generación que minimiza el riesgo a un rendimiento dado, comparándose con el portafolio planeado por la Comisión Federal de Electricidad (CFE) para el año 2026.

## REVISIÓN LITERARIA

La preocupación por encontrar la forma eficiente de diversificar los activos de generación ha dado lugar a la escritura de numerosos trabajos que abordan el tema bajo diferentes enfoques, en este apartado se describen los trabajos relacionados más importantes. Shimon Awerbuch ha sido uno de los principales impulsores de la aplicación de la teoría de portafolio de media varianza en el proceso de selección de tecnologías de generación. En el año 2000 publicó un artículo donde realiza un ensayo para los Estados Unidos utilizando las dos tecnologías dominantes en ese país gas natural y carbón y utiliza los costos de combustible exclusivamente y toma como activo libre de riesgo a la energía eólica el resultado es que al considerar una energía cara como la eólica el riesgo y el costo de variable de generación disminuyen.

En 2003 Awerbuch y Berger (2003) publicaron un artículo con el objetivo de mejorar políticas de diversificación y seguridad energética en la Unión Europea, utilizando también la teoría de portafolio de Markowitz. La diferencia con el método tradicional de costo mínimo es la necesidad de incluir el riesgo de la generación de energía, medido por la variabilidad en el precio de la generación de energía para obtener la frontera eficiente del portafolio de generación. Como resultado de este estudio es que un portafolio de tecnologías de generación con diferentes características financieras puede ser menos costoso a lo largo del tiempo que un portafolio que solo se base en tecnologías de costo mínimo como las basadas en combustibles fósiles. Stirling (2008) hace un estudio profundo de las características de un sistema de energía diverso e identifica tres propiedades de la diversidad (variedad, balance y disparidad).

Basado en dicha descomposición para el concepto de diversidad, desarrolla un marco para cuantificar la diversidad de un sistema de energía. Bolinger and Wiser (2008) se concentran en la fuente principal de riesgo para los inversionistas en el sector de generación, riesgos del precio de combustible y sus relaciones con los precios de la energía. Estos autores argumentan que la volatilidad del precio de los combustibles fósiles, especialmente el gas, debería ser tomada en cuenta en las decisiones de inversión y selección de la tecnología. Bazilean y Roques (2008) abordan la diversidad en términos de riesgo y detallan los diferentes tipos de riesgo que afectan a las decisiones. Ilustran el potencial de la teoría de portafolio de la media varianza, para balancear los beneficios de la reducción de riesgos de varios portafolios tecnológicos.

Blyth (2008) explora el potencial de las opciones reales para complementar el análisis de la teoría del portafolio. La teoría de las opciones captura el impacto en la oportunidad de inversión y la flexibilidad en la administración de la valuación de las inversiones. Esto da un conjunto diferente de visiones de políticas. El problema aquí no concierne tanto con una definición de arriba hacia abajo de una mezcla óptima sino de un entendimiento de abajo hacia arriba de los incentivos que enfrenta una inversión individual bajo incertidumbre. Jensen y Beurskens (2008) presentan un portafolio de activos de generación para Holanda para el año 2030. Este trabajo se enfoca en la dimensión del costo-riesgo de la cartera holandesa de tecnologías de generación en lugar de rendimiento-riesgo para el despliegue potencial adicional de las tecnologías de generación renovable. El resultado muestra que la energía renovable reduce el riesgo con un pequeño impacto en el costo de la cartera.

Doherty et al. (2008) Realizó un caso de estudio para un sistema de electricidad aislado en Irlanda, tomando en cuenta el porcentaje máximo de participación de tecnologías con

intermitencia de generación para garantizar la seguridad de suministro del sistema. Los portafolios resultantes son examinados con respecto al impacto de los costos del carbón sobre el desarrollo de plantas de generación eólicas. Krey & Zweifel (2008) se concentró en las maneras de mejorar la estabilidad de las correlaciones entre diferentes precios de combustibles y como robustecer la teoría de portafolio. Utiliza un enfoque econométrico, para filtrar los componentes sistemáticos de la matriz de covarianzas. Aplica su enfoque a computar portafolios de generación para Suiza y Estados Unidos.

Van Zon and Fuss (2008) determina un portafolio óptimo para el Reino Unido con volatilidad en los precios del combustible e incertidumbre concerniente al progreso tecnológico en un contexto cambios técnicos e inversiones irreversibles. Combina teoría de portafolio con aspectos de programación dinámica. Este modelo es ilustrado en el contexto de políticas públicas actuales en el Reino Unido y demuestra que la reducción del riesgo incrementa el costo. Delarue, et al, (2008) presentan el modelo de portafolio distinguiendo entre capacidad instalada, energía y la energía instantánea real entregada. De esta manera, la variabilidad de las energía del viento y los límites de rampa de las plantas convencionales son correctamente incluidos en la optimización de la inversión. Los resultados muestran que la introducción de las centrales eólicas pueden bajar el riesgo del costo de generación.

Florian Kienzle et al, (2007) Analizan la eficiencia del portafolio de generación de la empresa de electricidad BKW, una de las mayores empresas de Suiza. Aplican la teoría de portafolio media - varianza a las mezclas actual y futura y se derivan las respectivas fronteras eficientes. El análisis se basa en cambios relativos en los costos de generación complementado por un análisis de costos reales. Gustavo A. Marreiro et al: (2011) Presentan un trabajo para evaluar la política de energía de Brasil. El análisis utiliza la teoría de portafolio media – varianza para evaluar la eficiencia de la mezcla de generación de energía, en términos de costos y riesgos. El portafolio de generación de Brasil está cercano a la frontera eficiente debido a la hidroelectricidad aporta el 79% de la generación, en Brasil la tendencia de la diversificación es aumentar la participación de plantas de combustible fósil, pero si se introduce un precio al CO<sub>2</sub> puede ser una opción para promover fuentes renovables de generación y reducir el nivel de activismo discrecional del gobierno.

## METODOLOGÍA

En la investigación se aplica el método científico, con un diseño de investigación no experimental, de corte transversal y de tipo correlacional causal debido a que los datos que se utilizan ya ocurrieron y por lo tanto no son manipulados, son éstos a una fecha determinada y describen las relación entre las variables: rendimiento, riesgo, generación eléctrica, costo nivelado y precio de venta. El método que se utiliza se desprende de la Teoría de Portafolio, desarrollada por H. Markowitz, planteada como un modelo de optimización restringida, cuya función objetivo consiste en la maximización de los rendimientos, sujeta a un riesgo determinado por el planeador.

El problema consiste en determinar la mezcla óptima de tecnologías de generación que maximice el rendimiento sujeto a un riesgo dado medido por la desviación estándar de los rendimientos o que minimice el riesgo dado un rendimiento requerido, a que la suma de las participaciones de las tecnologías sea igual a 1 y a las restricciones de generación de las tecnologías. Los datos de entrada del modelo son los costos nivelados de generación de cada una de las tecnologías para producir la energía eléctrica, así como el precio medio de venta del MWh de energía eléctrica de cada uno de los años del análisis, el horizonte de tiempo analizado comprende 20 años de 1992 al

año 2011. Los rendimientos se obtienen restando del precio medio de venta el costo de generación para cada tecnología utilizando la siguiente fórmula:

$$r_{ij} = \frac{PV_j - C_{ij}}{C_{ij}}$$

Donde:

$r_{ij}$  = Rendimiento de la tecnología  $i$  en el periodo  $j$

$PV_j$  = Precio medio de venta en el periodo  $j$

$C_{ij}$  = Costo de la tecnología  $i$  en el periodo  $j$

Planteamiento Matemático

Las variables de decisión son:

$w_i$  = participación de la tecnología  $i$  en el portafolio de generación (dada en fracción del portafolio total).

$$\sum_{i=1}^N w_i = 1$$

$$w_i \geq 0$$

$i$  = TC, CC, CAR, NUC, GEO, HIDRO, EOL

TC = Térmica Convencional (Combustóleo)

CC = Ciclo Combinado (Gas natural)

CAR = Carbón

NUC = Nuclear

GEO = Geotérmica

HIDRO = Hidráulica

EOL = Eólica

Función Objetivo

La varianza de los rendimientos del portafolio mide el riesgo total del portafolio

$$\text{Min } \sigma_p^2 = \sum_{i=1}^n \sum_{j=1}^n w_i w_j \sigma_{ij} = \mathbf{w}^T \mathbf{V} \mathbf{w}$$

Esta función desarrollada queda de la siguiente manera:

$$\begin{aligned} \text{minimizar } z = & w_{TC}^2 \sigma_{TC}^2 + w_{CC}^2 \sigma_{CC}^2 + w_{CAR}^2 \sigma_{CAR}^2 + w_{NUC}^2 \sigma_{NUC}^2 + w_{GEO}^2 \sigma_{GEO}^2 + w_{HID}^2 \sigma_{HID}^2 \\ & + w_{EOL}^2 \sigma_{EOL}^2 + 2w_{TC}w_{CC}\sigma_{TC-CC} + 2w_{TC}w_{CAR}\sigma_{TC-CAR} + 2w_{TC}w_{NUC}\sigma_{TC-NUC} \\ & + 2w_{TC}w_{GEO}\sigma_{TC-GEO} + 2w_{TC}w_{HID}\sigma_{TC-HID} + 2w_{TC}w_{EOL}\sigma_{TC-EOL} \\ & + 2w_{CC}w_{CAR}\sigma_{CC-CAR} + 2w_{CC}w_{NUC}\sigma_{CC-NUC} + 2w_{CC}w_{GEO}\sigma_{CC-GEO} \\ & + 2w_{CC}w_{HID}\sigma_{CC-HID} + 2w_{CC}w_{EOL}\sigma_{CC-EOL} + 2w_{CAR}w_{NUC}\sigma_{CC-NUC} \\ & + 2w_{CAR}w_{GEO}\sigma_{CAR-GEO} + 2w_{CAR}w_{HID}\sigma_{CAR-HID} + 2w_{CAR}w_{EOL}\sigma_{CAR-EOL} \\ & + 2w_{NUC}w_{GEO}\sigma_{NUC-GEO} + 2w_{NUC}w_{HID}\sigma_{NUC-HID} + 2w_{NUC}w_{EOL}\sigma_{NUC-EOL} \\ & + 2w_{GEO}w_{HID}\sigma_{GEO-HID} + 2w_{GEO}w_{EOL}\sigma_{GEO-EOL} + 2w_{GEO}w_{EOL}\sigma_{GEO-EOL} \\ & + 2w_{HID}w_{EOL}\sigma_{HID-EOL} \end{aligned}$$

El rendimiento del portafolio queda determinado por el rendimiento esperado de cada tecnología

$$\mu_p = E[r_p] = \sum_{i=1}^n w_i E[r_i] = \sum_{i=1}^n w_i \mu_i$$

En forma matricial se tiene:

$$\mu_p = \mathbf{w}^T \mathbf{e} \quad \text{Donde} \quad \mathbf{e} = \mathbf{E}[\mathbf{r}] = \begin{bmatrix} \mu_1 \\ \mu_2 \\ \cdot \\ \cdot \\ \mu_n \end{bmatrix}$$

El rendimiento del portafolio es establecido de antemano de acuerdo al rendimiento deseado por la Subdirección de Programación. Este rendimiento es una de las restricciones del modelo. El modelo puede plantearse como la maximización de los rendimientos esperados, como función objetivo sujeta a una varianza del portafolio determinada por el planeador, además de todas las demás restricciones mencionadas para el anterior modelo.

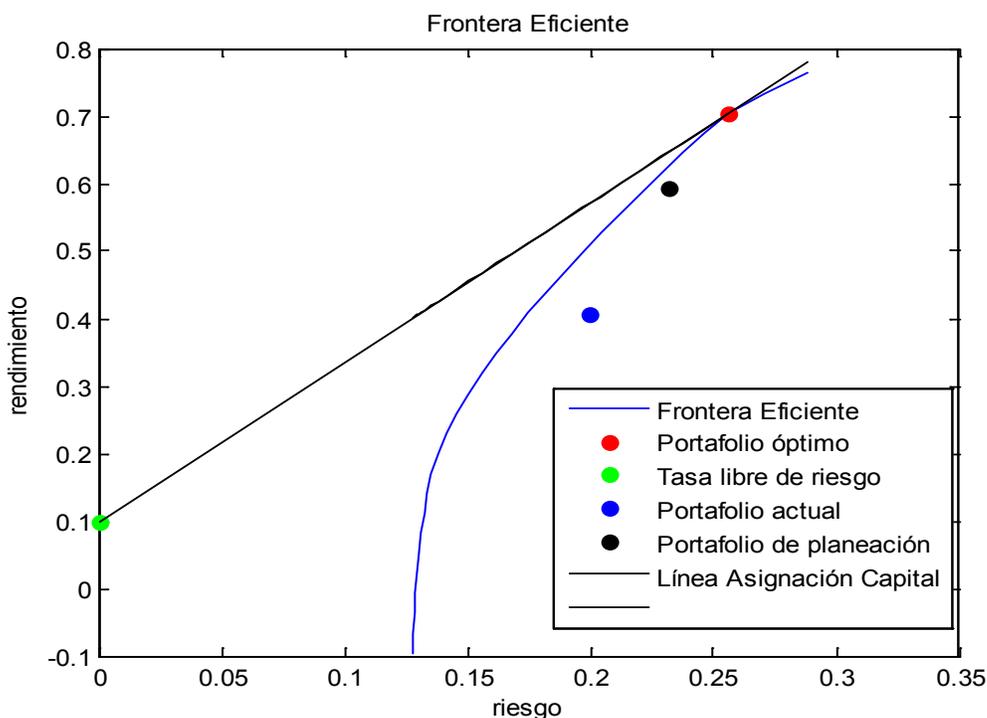
## RESULTADOS

Se realizó una primera corrida en MATLAB solo con la restricción de que la suma de los porcentajes para cada tecnología debe ser uno, el resultado que se obtuvo se muestra tanto en la tabla 1 como en la figura 1. Podemos observar que solo con dos tecnologías se llega al portafolio óptimo, pero existen restricciones impuestas por el entorno tales como la disponibilidad de combustibles, metas de generación con energía limpia, reducción de consumo de algún combustible, entre otras, que deben ser consideradas.

Tabla 1: Frontera eficiente sin restricciones

Indice Sharpe	Riesgo	Rendimiento	TC	CCC	CARB	NUC	GEO	HIDRO	EOLO
2.3586	.2562	.7042	0	.756	.244	0	0	0	0

Figura 1 Frontera eficiente sin restricciones.



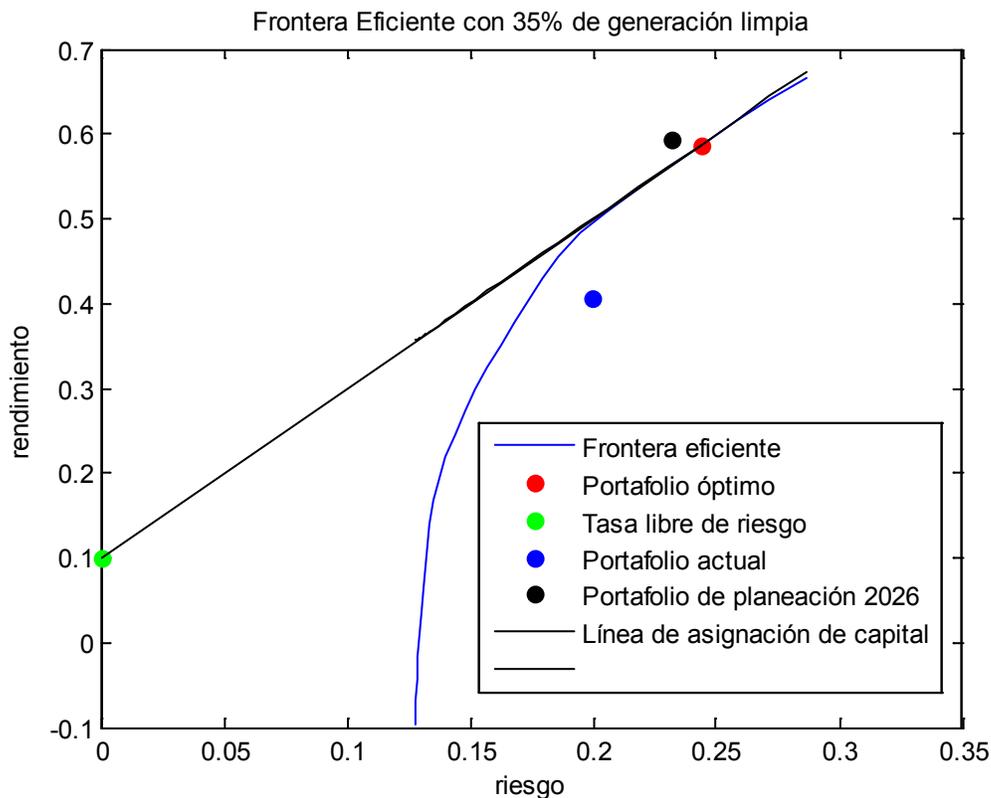
En la figura 1 se observa el portafolio óptimo en la intersección de la frontera eficiente y la línea de asignación de capital, así mismo podemos ver que tanto el portafolio actual como el portafolio de planeación para el 2026 no están en la frontera eficiente.

Tabla 1 Frontera eficiente 35% energías limpias

Indice Sharpe	Riesgo	Rendimiento	TC	CCC	CARB	NUC	GEO	HIDRO	EOLO
2	0.244	0.587	0	0.65	0	0	0.186	0.164	0

La tabla 1 nos muestra los resultados de generar con energías limpias cuando menos el 35% para el año 2026, obsérvese que en este caso el portafolio se distribuye sólo en tres tecnologías, 65% centrales de ciclo combinado, 18.6% en geotermia y 16.4% en centrales hidroeléctricas. Este portafolio resulta no factible debido a que no se cuentan con las reservas de vapor geotérmico necesarias para generar tal resultado ni tampoco la capacidad hidroeléctrica. En la Figura 2 se observa que el portafolio de planeación para 2026 se encuentra por arriba de la frontera eficiente, esto debido principalmente a que dicho portafolio no cumple con la restricción del 35% de energía limpia.

Figura 2: Frontera Eficiente con 35% de Generación Limpia



## CONCLUSIONES

Las conclusiones que pueden sacarse de los resultados obtenidos son:

- El portafolio actual no se encuentra en la frontera eficiente en ninguno de los casos.
- El aplicar el modelo de Markowitz a portafolios de activos de generación nos indica donde se encuentra la mezcla de activos seleccionada respecto a la frontera eficiente.
- Que es posible aplicar el modelo de Markowitz como una herramienta de planeación.

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## MERCADOS INFORMALES: ALBERGUE DE MICROEMPRESAS?

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### RESUMEN

*El presente estudio realiza un análisis de las condiciones en que laboran los micro empresarios que se encuentran dentro de los mercados informales del sur oriente de Ciudad Juárez; así mismo, aborda la problemática que enfrentan ante la falta de atención de las autoridades gubernamentales a este tipo de trabajadores. En la primera parte de la investigación, es presentado un panorama general del fenómeno de los trabajadores informales y los objetivos de la misma. En la segunda parte, se presentan las aportaciones de los principales teóricos de la informalidad, así como las opiniones de los expertos en el estudio de la micro empresa. En la tercera parte de la investigación, se presentan las estrategias y la metodología utilizada para recabar la información necesaria para el estudio, así como el contexto en que se desarrollan las labores del equipo de trabajo. En la última parte, se presentan los alcances de los objetivos, la respuesta a las preguntas de la investigación, dando a conocer el número, características y clasificación del micro empresarios de los mercados informales. Las gráficas indican los resultados duros de las variables del estudio. Las conclusiones y recomendaciones del estudio, se presentan al final del reporte.*

**PALABRAS CLAVE:** micro empresa, informalidad, capacitación, comunicación, desarrollo.

## INFORMAL MARKETS: LODGING OF MICROCOMPANIES?

### ABSTRACT

*The present study accomplishes an analysis of the conditions in which they labor them microcomputer businessmen that find within the informal markets of the south Orient of Ciudad Juárez; that's right, go aboard the problems that they confront before the lack of attention of the governmental authorities this type of workers. In the first part of investigation, a panorama of the phenomenon of the unreliable workers and the objectives of the same is presented same. In the second part, show up the contributions of the main theoreticians of informality, as well as the opinions of the experts in the study of the microcomputer company. In one third of the investigation, strategies and the methodology used to procure the necessary information for the study, as well as the context in which the works of the task force develop show up. In the last part, the reaches of the objectives, the answer to the questions of investigation show up, disclosing the number, characteristics and classification of the bus businessmen of the informal markets. Graphics indicate the hard results of the case-study variables. Findings and case-study recommendations show up at the end of the report.*

**KEYWORDS:** Micro Companies, Informality, Training, Communication, Development

### INTRODUCCIÓN

El trabajo en la economía informal se distingue por sus reducidos y mal definidos lugares de actividad, condiciones inseguras y poco saludables, bajos niveles de competencias, productividad e ingresos, extensas jornadas laborales y restricciones al acceso al crédito. Asimismo, los trabajadores de la economía informal no son reconocidos, no se encuentran inscritos y sus actividades productivas no están reglamentadas ni protegidas por la legislación laboral y de la seguridad social (Apella, I., 2009). En el 2000, el INEGI señaló que el subsector informal no incluye la denominada economía subterránea, ni actividades ilegales tales como la evasión fiscal, la piratería, la producción y tráfico de drogas, la usura, la reventa de taquilla, el comercio, el transporte de mercancías de contrabando o las intervenciones quirúrgicas desautorizadas, entre otras. En el mismo año, el organismo sostiene que en México las actividades informales se concentran en el sector institucional de hogares, y por sector económico en cinco grandes grupos de actividades: industria manufacturera, construcción, comercio y restaurantes, transporte y servicios personales. Cuando se analiza el subsector informal con relación a la producción nacional por sector de actividad económica, se observa que éste representa en promedio el 30.8 por ciento del comercio y restaurantes, el 11.5 por ciento de los servicios personales, 6.1 por ciento de la industria manufacturera, y en menor medida en el transporte y la construcción con un 4.6 y 3.3 por ciento respectivamente (INEGI, 2000). Desde el punto de vista económico, el sector informal se puede caracterizar como el sector no moderno o no capitalista de la economía, donde la utilización del capital es relativamente baja, predominan actividades económicas de pequeña escala (Kugler, B. 1986). Desde el punto de vista legal, el sector informal se distingue del formal y su diferencia radica especialmente en la naturaleza jurídica, es decir, en ella se encuentran los individuos y negocios que no cumplen con las normas establecidas por el Estado (Díaz, M., Ramales, M. 2005).

En la economía informal podemos encontrar actividades con una composición y condiciones económicas múltiples, esto es, podemos encontrar actividades con fines económicos distintos. Tal es el caso de Ciudad Juárez, en cuanto fenómeno socioeconómico de reordenación formal-informal de las relaciones de producción capitalista, la economía informal se ubica dentro de los marcos de la economía política en lo básico, como un problema de distribución (Pelayo y Parra, 1994). Las descripciones referidas a lo informal suelen ser de orden sociológico o económico, mientras que son de carácter jurídico las que se refieren a la ilegalidad, ocultación o falta de declaración (Daza, J., 2005). El Sistema de Cuentas Nacionales en México, en su informe 1998-2003, postula que las unidades de producción del subsector informal presentan los rasgos característicos de las empresas de los hogares. Los activos fijos y los activos de otra clase utilizados no pertenecen a las unidades de producción sino a sus propietarios. En México, el subsector informal incluye a empresas informales por cuenta propia donde el propietario puede trabajar individualmente o asociado con miembros del hogar o de otros hogares, y generalmente no está inscrito en los registros oficiales, fiscales o de seguridad social (SCNM, 1998-2003). Sin presuponer que la actividad económica informal tenga una relación directa con las actividades ilícitas, llamados giros negros o economía subterránea, actividades como el narcotráfico, la producción clandestina, la importación hormiga, se plantean como antecedentes de la economía informal.

Como imperativo económico, de su condición fronteriza, la fayuca y el contrabando subsisten, no obstante los programas fronterizos que a partir de 1963 se implementan con especial costo e impacto en esta ciudad fronteriza. Dos circunstancias son centrales en la expansión de la informalidad entonces y ahora: la primera, demográfica, el flujo intermitente de aspirantes a “mojados”, y la segunda es económica, la insuficiencia productiva y de empleo local, agravan la problemática económica económico-social; además, durante los años ochenta, promueven la

“formalización” y desarrollo acelerado del sector informal (Pelayo y Parra, 1994). De acuerdo a los indicadores de la ENAMIN se puede caracterizar al Subsector Informal: como ejemplo, a través de esta se sabe que del total de la población ocupada en negocios informales el 36% son mujeres y el 63.1 % son hombres, y que los motivos para iniciarse en alguna actividad informal son: 35.9% lo hacen para complementar el ingreso familiar, el 33.1% señaló que ganan más que como asalariados, el 13.6% porque no encontró empleo como asalariado, el 5.5% por tradición familiar, y el 11.9% del total de negocios informales por razones diversas, tales como horario flexible y pérdida de empleo, entre otras.(INEGI,2000). Aunque algunos autores coinciden en que la economía informal aparece como una válvula de escape para la clase obrera; donde su pequeño negocio, las ventas en las calles, cruceros o mercados ambulantes, representa un respiro en su economía y una forma de completar los gastos del hogar, o simplemente, subsistir. Por otro lado, Pelayo (1994) sostiene que la economía informal o subterránea hasta ahora indefinida en cuanto a su contenido y significado ha despertado una razonable inquietud entre teóricos y académicos. La situación de la indefinición de la economía informal, se debe a la inoperancia de los instrumentos y mecanismos teóricos que la explican. Las aproximaciones hipotéticas redundan en la forma de operación de sus diferentes manifestaciones: contrabando de mercancías, producción clandestina, servicios personales no registrados, evasión de impuestos.

## REVISION LITERARIA

Una característica común de todas las actividades informales es la baja productividad, por el uso de tecnologías obsoletas y trabajo no calificado (Castells, Portes y Benton, 1989; Rosenbluth, 1994; Tokman, 2001; Maloney, 2004). Los gobiernos deben promover el trabajo decente, esto requiere el desarrollo de métodos innovadores y nuevas herramientas que puedan ser utilizados por los ministerios del trabajo para promover el trabajo decente a través de asistencia técnica a las micro y pequeñas empresas, así como a los trabajadores independientes o por cuenta propia (Daza, 2005). Debe darse un compromiso real de los gobiernos, crear las herramientas, metodología y proyectos que como ejes articuladores de las economías, den sustento al desarrollo económico, social y humano de nuestros trabajadores. El clasificar a las empresas a través de lo mensurable casi siempre ha implicado una taxonomía basada en el tamaño de la empresa sustentado en el número de trabajadores contratados en esta. Por otro lado, se reconoce que las nuevas clasificaciones que se hace de las empresas comienzan a tener componentes vinculados con lo cualitativo. El agrupamiento de las empresas a través de lo cualitativo implica el desarrollo de conceptos intelecciones y comprensiones que parten de las pautas de los datos, generando así una clasificación holística sustentada en los efectos que produce las empresas en términos de sus características de composición y sus marcos de referencia.

En algunos países las medianas empresas son lo mismo que las pequeñas, con lo cual, las primeras son inexistentes, en función de que la clasificación agrupa a las pequeñas y medianas e un conjunto denominado PYMES que reconoce atributos idénticos en ambos casos. (Tunal, 2003). En el caso de las microempresas, el obstáculo - en su clasificación- radica en que la mayoría de estas están integradas al llamado sector informal, al menos en el llamado tercer mundo, lo cual provoca que la cuantificación sea solo una aproximación, y la clasificación se haga en términos cualitativos. Lo anterior resulta sumamente complicado precisamente porque la dinámica de las microempresas es demasiado heterogénea. Al implementar programas de financiamiento, optar por un tipo de gestión o decidir las estrategias de las empresas, se tiene que considerar: los datos y las pautas de estos, o bien, la distribución de tamaños, medios empresariales en cada país o región, los distintos regímenes jurídicos por los que se rige el mundo empresarial y las empresas en particular, el sector de actividad donde se ubica la empresa, el sistema de propiedad, el volumen de negocio o facturación desarrollado(García, 1997,p.29).

Esto nos indica que aun cuando las empresas se dediquen al mismo giro y sean del mismo tamaño se diferencian por el entorno en que se mueven, por lo que cada una debe ser evaluada de forma diferente de acuerdo con su potencial de desarrollo (Pomar y Rivera, 1998: p. 38). Neck 1997, p.10) indica que la mayoría de las clasificaciones de micro, pequeña y mediana empresa varían según los intereses y objetivos de quienes las elaboran y según la fase de desarrollo del medio particular en que se debe aplicar a la clasificación. Pomar y Rivera (1998, p.38) define a la microempresa como una organización en donde predomina un individuo y un grupo de ayudantes, se trata del modelo de hombre orquesta, sería la forma más simple de estructura organizacional, la cual permite cambiar su estrategia rápidamente si el cambio está dentro de la capacidad y los intereses de la persona. Sin embargo esta característica también aplica para las pequeña y medianas empresas. Rivero, Ávila y Quintana (2000) aseveran que el término de microempresa debe hacer referencia a una pequeña unidad socioeconómica de producción, comercio o prestación de servicios que para su creación no requiere de grandes inversiones de capital, con mucha adaptación al cambio y que pueden orientarse hacia el mercado con mayor rapidez y facilidad que otras empresas. Estos autores reconocen que el tamaño de las microempresas:

- 1.- incide en la productividad y eficiencia
  - 2.- le permite desarrollar capacidades innovadoras.
  - 3.- identificar nichos de mercado con mayor facilidad
  - 4.- facilita la adopción y la adaptación de nuevas tecnologías
  - 5.- al tener una buena gerencia tiene mayores posibilidades de crear ventajas competitivas
  - 6.- pueden competir en sectores de demanda insatisfecha con grandes ventajas
  - 7.- generalmente presta mejores servicios
  - 8.- potencializa el talento empresarial
  - 9.- Absorbe la fuerza de trabajo que no tuvo cabida en las empresas del sector formal.
- El error de esta definición, es tomar el tamaño de la empresa como condicionante de los nueve puntos mencionados por los autores, cuando estos dependen principalmente del tipo de administración.

Carpintero (1998) las define como pequeñas unidades de producción comercio o prestación de servicios, en las que se pueden distinguir elementos de capital, trabajo y tecnología, aunque todo ello este marcado por un carácter precario. La deficiencia en esta definición radica en la no inclusión de las llamadas estrategias de sobrevivencia, olvidando que la mayoría de las micro en el mundo, surgen en el ámbito de la informalidad, consecuentemente, como una estrategia de subsistencia. Si realizamos una actividad económica individual incidentalmente y no contamos con un mínimo de capital, trabajo, y tecnología que pueda distinguirse, no podemos decir que conformamos una Micro empresa, ya que los elementos esenciales para que exista una empresa, son precisamente el capital, el trabajo y la tecnología. Max-Neff (1993) usa el término micro organización para referirse a la microempresa y entiende a estas como entidades que se encuentran subordinadas al núcleo capitalista moderno y que las estructuras con que operan estas, generan diferencias de productividad y de ingresos que tornan poco atractivos los trabajos ejercidos en esos segmentos no institucionalizados, salvo para grupos de baja calificación y para personas con mayor dificultad para acceder al mercado formal. Lo anterior nos lleva a pensar que no existen dos empresas exactamente iguales, precisamente por la heterogeneidad que subyace en este tipo de empresas.

De acuerdo al Banco interamericano de Desarrollo (BID) las microempresas son negocios de pequeña escala en los cuales se destacan los siguientes aspectos y que los distinguen del resto de la economía:

- 1.- tienen menos de diez empleados
- 2.- no existe en muchos casos separación entre el presupuesto familiar y el de la microempresa.
- 3.- cuenta principalmente con empleados no asalariados y relacionados con la familia
- 4.- alto porcentaje de mujeres propietarias del negocio
- 5.- activos menores de 30,000
- 6.- escaso conocimiento de gestión
- 7.- limitado acceso al sector financiero formal
- 8.- falta de registro legal
- 9.- bajo nivel de tecnología

Asevera que una microempresa cuenta con empleados no asalariados y relacionados con las familias, resulta un error conceptual ya que si alguien efectúa un trabajo y no percibe un salario no puede llamarse empleado; por otro lado, existen empresas pequeñas y medianas que son consideradas familiares, luego entonces esta característica no es exclusiva de las microempresas (Tunal, 2003). La percepción internacional acerca de la pequeña empresa se ha modificado desde los ochenta Como consecuencia de los grandes problemas de inestabilidad económica, recesión y desempleo. En este contexto, la gran empresa experimento problemas para mantener sus economías de escala, canalizando procesos a pequeñas empresas bajo esquemas de subcontratación (Mungaray, 1997) con el objetivo de aprovechar su eficiencia colectiva, su potencial de innovación, su flexibilidad productiva y la capacidad de explotar redes o encadenamientos (Pratten, 1991).

Los cambios tecnológicos a favor de la pequeña escala se han hecho evidentes al observar tendencias recientes de la estructura empresarial y del empleo en países como Estado Unidos que muestran incremento de la participación de las empresas pequeñas (Acs y Audretsch, 1989). Otro hecho importante ha sido el desplazamiento de personal altamente calificado de empresas grandes que han emprendido negocios tecnológicos de escala reducida y se constituyen como agentes de cambio en la economía debido a sus actividades e innovación (Acs; 1992; Carree Y Thurik, 1998). En México, el sector empresarial se divide en cuatro grandes grupos con base en el número de empleados y sector de actividad económica donde operan según la clasificación oficial. Estos grupos se conforman en micros, pequeñas, medianas y grandes empresas. (Mungaray, 2007). Aun cuando su contribución productiva en términos de valor agregado es limitada. Las cifras de su participación en establecimientos, empleo y autoempleo en América Latina y en los países en desarrollo, ubican a este segmento empresarial como verdaderas opciones de desarrollo basadas en el mercado, para millones de familias que se encuentran en la línea de la pobreza. Carlson (1999), Bianchi (1999), Acs (1992), Harper (1984) y Yamamoto (1959) destacan que la emergencia competitiva de estas empresas puede mitigar los efectos de los ciclos económicos, favorecer una mejor distribución del ingreso y generar mejores condiciones de crecimiento y desarrollo. Estas posibilidades han llevado a organismos internacionales de desarrollo a incluir el fomento y apoyo a las microempresas como parte de un planteamiento estratégico sobre el papel que las fuerzas empresariales pueden tener en la búsqueda del crecimiento con equidad, si se convierten en entidades innovadoras vinculadas a la economía moderna (CEPAL, 1992).

## **METODOLOGIA**

Se propuso una investigación cuantitativa, con un diseño no experimental de tipo descriptiva; La recolección y análisis de información, se realizó a través de la aplicación del cuestionario dirigido a los potenciales micro empresarios; revisión de la literatura, datos y estadísticas proporcionados por las dependencias de gobierno, otros investigadores y organismos que estudien

el tema. Al inicio de la investigación se propuso una investigación cuantitativa, con un diseño no experimental de tipo descriptiva; se utilizó un instrumento de medición de la Encuesta Nacional de Micro negocios ENAMIN 2010, al cual se le sumaron algunas preguntas en el área de la comunicación. La recolección y análisis de información, se realizaron a través de la aplicación del cuestionario dirigido a los potenciales micro empresarios; revisión de la literatura, datos y estadísticas proporcionados por las dependencias de gobierno, otros investigadores y organismos que estudian el fenómeno.

Así mismo se planearon entrevistas con organismos de la Iniciativa Privada y con un grupo de potenciales microempresarios de los mercados informales del estudio. La presente investigación se desarrolló en Ciudad Juárez Chihuahua, México; como estrategia del estudio, se utilizó la zona suroriente de la Ciudad, que es la zona que alberga el mayor número de mercados informales, al mismo tiempo se definieron como puntos específicos los cinco mercados de mayor afluencia de vendedores y compradores. Se realizaron reuniones con los colaboradores del proyectos, becarios y encuestadores con la finalidad de elaborar una estrategia de rastreo de vendedores con características de microempresarios; características que fueron explicadas al equipo de rastreo para que tuvieran una definición exacta del objetivo a buscar. Una vez localizados se procedió a la capacitación del equipo de encuestadores, con los cuales se elaboró un cronograma de actividades de trabajo para las seis semanas de aplicación del instrumento de medición. El instrumento de medición tomó como muestra la encuesta aplicada por el ENAMIN 2010. De las variables encontradas en dicha encuesta se tomaron las de mayor importancia para el estudio; así mismo, se le incluyeron algunas preguntas sobre comunicación, con el afán de conocer que formas de comunicación utilizan para informarse, que medios de comunicación masiva son los más utilizados y a través de cuál de ellos prefieren que el gobierno les informe sobre las políticas públicas de atención a su problemática. Además se incluyeron variables para conocer los tipos de negocios, edades, género, antigüedad, capacitación, atención, entre otras. El estudio arrojó información que permite realizar análisis con mayor profundidad sobre el fenómeno de estudio; con la información recabada se podrán hacer cruces de variables que podrán enriquecer posteriores estudios en el área de micro negocios, sobre todo en el área de capacitación, comunicación y atención al sub sector.

Por otro lado se organizaron entrevistas con las organizaciones de la Iniciativa Privada, como la Cámara Nacional de Comercio (CANACO), la Cámara Nacional de la Industria de la Transformación (CANACINTRA). De las cuales, la única que aportó información, fue la CANACINTRA, a través de su Directora la Licenciada, Viridiana Vázquez. El estudio se limitó a la aplicación del instrumento de medición a los vendedores con potencial de desarrollo, en el área de alimentos y artesanías, encontrados en los cinco mercados utilizados como para el estudio, sin embargo existen más de setenta mercados localizados dentro de los límites de la ciudad. Por otra parte, la información proporcionada por los entrevistados fue muy limitada, no aceptaron hablar de ganancias en su negocio y algunos no contestaron sobre el origen de sus proveedores. Otra de las limitantes importantes, es lo difícil de la localización de los líderes de los mercados, debido a la situación de inseguridad, se esconden dentro de los mercados y por lo regular atienden diferentes personas, pocas veces fueron atendidos los encuestadores por los líderes. El cobro de cuotas que aún persiste en este tipo de mercados por parte de grupos delincuenciales, la presión ejercida por la autoridad federal que en ocasiones realizan operativos en contra de vendedores de mercancía de piratería e ilícita, inhibe la participación de los vendedores

## RESULTADOS

En primer lugar, la falta de personal designado a las labores de inspección y localización de vendedores informales señalan los responsables de la Dirección de Comercio que es la principal causa o motivo por el cual esta dependencia carece de alguna información relacionada con el subsector. Por otra parte, el número de informales se multiplica cada día, la falta de oportunidades en el sector formal de la economía se ha convertido en factor multiplicador de la informalidad; aunque las estadísticas del INEGI señalan que se han recuperado empleos en el Estado, la realidad nos indica que de más de sesenta mil empleos perdidos del 2007 al 2010 solo se han recuperado alrededor del cincuenta por ciento. Comercio Municipal indica que existen 8,632 vendedores ambulantes en la ciudad, de los cuales, 6,936 vendedores se encuentran en los 85 mercados informales localizados en la ciudad. En este caso, se otorgaron 1,672 nuevos permisos (Diario de Juárez, 2013). De acuerdo a los resultados arrojados por el instrumento de medición, los comercios informales no tienen un porcentaje real de desarrollo; los datos indican que aunque en algunos mercados informales se lograron localizar microempresarios con algún potencial de desarrollo, en general, los mercados informales no poseen actividades con posibilidades de crecimiento o desarrollo; la mayoría de los vendedores, únicamente ofrecen objetos de mediano uso: ropa, calzado, herramienta, utensilios para el hogar, bisutería, la mayoría de ellos procedente de la fayuca.

La Dirección de Comercio Municipal en Ciudad Juárez, caracteriza a los comerciantes informales, como personas que buscan el sustento diario ofreciendo un producto o servicios personales tratando de hacerlo de una forma legal; como lo señala Ramos (2006), quien caracteriza a la economía informal como: los individuos que buscan obtener un ingreso por vías legales y distintas al desempeño de una actividad económica y que caben en lo que se conoce como estrategias de supervivencia. Todos los establecimientos que no cumplen con permisos para laborar, los establecimientos que ofrecen alimentos elaborados en el hogar, o en el mismo lugar donde son ofrecidos al público, todo el establecimiento que no cuente con el título de propiedad que comprenda el área de venta, así mismo, todos los vendedores ambulantes a pie y de casa en casa. Los comerciantes que ofrezcan sus productos o servicios en su propio vehículo, y que el mismo no sea el apropiado para tal efecto. Aunque algunas de las características son propias de las características propuestas por los organismos internacionales, la Dirección de Comercio no cuenta con una estructura o un diagrama fundamentado en las características utilizadas por organismos nacionales o internacionales. De acuerdo a los resultados obtenidos en la investigación, se determina:

El comercio informal en Ciudad Juárez Chihuahua se encuentra en los parámetros de una clasificación con un enfoque Institucional-legal, debido a que los comerciantes informales son personas que consideran, que la formalidad como la informalidad traen consigo una excesiva carga normativa y que los costos de permanencia en la formalidad son demasiado altos en tiempo y costos; así también, poseen características del comercio informal de subsistencia, porque son sujetos con bajos recursos, sin acceso al crédito, que encuentran en la economía informal, por el momento, su única alternativa de empleo. Por otro lado, aunque el comercio informal presenta características similares a las propuestas por organismos internacionales, es importante remarcar que los comerciantes informales se encuentran en un nivel educativo de secundaria, y un considerable porcentaje de estos, tiene estudios de nivel preparatoria; debido a lo anterior, el autor del estudio disiente de Freije (2000) quien señala “los trabajadores que tienen mayores probabilidades de ingresar al sector informal son aquellos con menos experiencia y educación. El comercio informal, es un trabajo precario; son trabajadores independientes que comercian con productos básicos como los alimentos o prestan algún servicio personal en el hogar.

Tienen a familiares trabajando en el establecimiento, sin un salario o compensación, además de carecer de servicio médico. Los resultados del instrumento aplicado en los cinco mercados considerados de mayor afluencia de vendedores y público, arrojaron un número mínimo de posibles vendedores con potencial real de desarrollo. Entre estos, la mayoría vende alimentos que de acuerdo a los datos proporcionados por los mismos vendedores, su producción se ve limitada por la falta de créditos, equipo, publicidad y capacitación en el área de producción y administración. De entre los cinco mercados más populares, se encontraron solo cincuenta y cuatro posibles microempresarios.

El Gobierno Municipal, por un lado, señala que apoya a los comerciantes informales otorgando los permisos de venta a precios que están al alcance de los vendedores, así mismo los permisos para las personas de la tercera edad, se les otorga gratis el primer año. Por otro lado, El Municipio de Juárez, cuenta con los Centros Comunitarios, donde se le brinda capacitación en el área de la salud y elaboración para los comerciantes que trabajan con alimentos. El Gobierno del Estado, en conjunto con el Gobierno federal, a través de la Secretaria del Trabajo y Previsión Social, así como de la Secretaria de Comercio, están implementando programas de financiamiento y apoyo para los micro, pequeños y medianos empresarios, programas que ofrecen capacitación, equipamiento y microcréditos; sin embargo, según datos aportados por los microempresarios, la información sobre estos apoyos no está debidamente canalizada, ya que según su opinión, la mayoría de ellos no conocen sobre dichos apoyos. Por parte de las organizaciones de comerciantes como la Cámara Nacional de comercio en Ciudad Juárez, ofrece la información y apoyos, únicamente a sus agremiados, quienes no estén inscritos dentro de la CANACO, no reciben la información sobre convocatorias y apoyos gubernamentales para las microempresas.

## CONCLUSIONES

- 1.- La falta de personal por parte de la Dirección de Comercio Municipal, disminuye la posibilidad de atención al fenómeno de la informalidad; el número de inspectores de comercio que dedica la dependencia no es suficiente para atender las necesidades del subsector informal.
- 2.- Aunque existen programas de apoyo diseñados específicamente para la atención a los micro empresarios por parte de los tres niveles de gobierno, los resultados del estudio indican que existe un problema grave de comunicación entre gobierno e informales; esta falta de comunicación inhibe el que los micro empresarios sean beneficiados con apoyos gubernamentales, ya que la información únicamente llega a los agremiados a los organismos de comerciantes, como el caso de la Cámara Nacional de Comercio.
- 3.- Sin embargo, se reconoce que el número de micro empresarios encontrados en los cinco principales mercados informales del sur oriente de la ciudad, es muy limitado; los productos que ofrecen estos micro empresarios con posibilidades de desarrollo, son en su gran mayoría, de alimentos y objetos ornamentales. Los cuales solicitan el apoyo en capacitación y apoyos económicos para la adquisición de equipo que permita el desarrollo de su empresa.

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# POLÍTICAS DE APOYO A LA INVERSIÓN DIRECTA AL EXTERIOR DE EMPRESAS MEXICANAS

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## RESUMEN

*El interés mostrado sobre la emisión de inversión directa al exterior de países en desarrollo ha sido muy poco, incluso cuando el envío de capitales de estos países ha incrementado durante la última década. En este sentido, no es sorprendente que la atención en el desarrollo de políticas dirigidas a promover e impulsar la emisión de este tipo de inversión en estos países ha sido escasa. La idea principal detrás del desarrollo de políticas en apoyo a la internacionalización de la empresa nacional a través de IED son los potenciales beneficios para la economía local. En otras palabras, la internacionalización de la empresa local contribuirá en la generación de mejores condiciones para competir con otras empresas tanto a nivel nacional como a nivel internacional. Además, esta internacionalización de la empresa local generará beneficios para la economía local; algunos de estos beneficios podrían ser el incremento en la renta nacional, transformación industrial, incremento de exportaciones, mejores condiciones laborales, entre otros. Esta investigación exploratoria considera la identificación, descripción y análisis de lo que ha sucedido en México en términos de políticas nacionales que promueven y apoyan la inversión directa al exterior de la empresa doméstica, encontrando con ello una escasez de información tanto a nivel gubernamental como académico, advirtiendo las implicaciones que estas carencias traen consigo.*

**PALABRAS CLAVE:** México, Inversión Extranjera Directa, Países en Desarrollo, Investigación Exploratoria

## POLICIES SUPPORTING MEXICAN ENTERPRISES DIRECT INVESTMENT ABROAD

### ABSTRACT

*The interest shown on outward foreign direct investment from developing countries has not been so relevant, not even when issuance of capitals from these countries have increased during the last decade. In this regard, is not surprising that attention in the development of policies addressed to promote and boost this kind of investments from these countries have been scarce. The main idea about the policies supporting home enterprise internationalization through FDI are the potential benefits on home countries. In other words, domestic enterprise internationalization will contribute with the development of better conditions to compete with other enterprises in both national and international level. Besides, this internationalization from home enterprises will create benefits for the local economy; some of these benefits could be the increase of national income, industrial transformation, exports increase, better labor conditions, among others. This exploratory research considers the identification, analysis and description of domestic policies in Mexico supporting home direct investment abroad, finding with it a lack of information at governmental and academic level and, pointing out what these lacks implies.*

**JEL:** F21, F23, H32, H81, H87, H89

**KEY WORDS:** Mexico, Foreign Direct Investment, Developing Countries, Exploratory Research.

## INTRODUCCIÓN

La emisión de Inversión Extranjera Directa (IED), durante décadas anteriores, ha recibido menos atención que la recepción de IED. Este comportamiento es aún más marcado en países en desarrollo, incluso cuando la inversión de estos países hacia el extranjero ha aumentado durante la última década. En este sentido, no es de sorprender que las políticas dirigidas a la promoción de emisión de IED en países en desarrollo han sido escasas. Una de las principales razones para que los gobiernos desarrollen políticas en apoyo a la inversión directa al exterior de empresas domésticas, son los beneficios potenciales en la economía local. Además, la expansión al exterior contribuirá en la generación de mejores condiciones empresariales para competir con otras empresas tanto a nivel nacional como internacional.

Estos beneficios potenciales y la carencia de atención en las políticas de apoyo para la expansión de las empresas locales a mercados externos, en el caso de países en desarrollo y particularmente en México, constituyen las motivaciones principales para realizar esta investigación exploratoria. La cual considera la identificación, descripción y análisis de lo que ha sucedido en México en términos de medidas políticas que promueven y apoyan la internacionalización de la empresa doméstica a través de IED. En el resto del documento se revisa literatura teórica y empírica relaciona con las medidas en cuestión. La sección II trata sobre la descripción de las políticas gubernamentales en México en apoyo a la inversión directa al exterior de la empresa doméstica. La sección III constituye el análisis e implicaciones para México. Las conclusiones será posible encontrarlas en la parte final del documento.

## REVISIÓN DE LITERATURA

Durante las últimas décadas, el comportamiento general acerca de las tendencias de internacionalización ha sido la continua expansión empresarial a países extranjeros. Esto sucede a nivel mundial y por supuesto incluyendo la creciente participación de empresas de países en desarrollo (Rasiah, Gammeltoft, & Jiang, 2010), (UNCTAD, 2011). Existen diferentes razones para la internacionalización de las empresas. Sin embargo, la decisión para expandirse al exterior también puede estar influenciada por instituciones. En este sentido, reglas políticas legales y sociales también son factores importantes (Peng, Wang, & Jiang, 2008). Empresas de países en desarrollo enfrentan carencias que les impiden la inserción en mercados extranjeros (Wang, Hong, Kafouros, & Wright, 2012) y la participación gubernamental ayuda para superar la escasez de información, costos de transacción y limitaciones en recursos durante el proceso de internacionalización (Khanna, Palepu, & Sinha, 2005).

En otro contexto, evidencia empírica sugiere a la internacionalización como una fuente de competitividad (Dunning & Lundan, 2008). En este sentido, algunos de los principales beneficios de las empresas cuando ingresan a mercados extranjeros a través de IED, son la adquisición o incremento de competitividad por la expansión internacional, reducción de costos de producción, experiencia por participación global, entre otros. Además, puede tener efectos positivos en el país local: transformación industrial, aumento del valor agregado, incremento de exportaciones,

incremento de la renta nacional, mejores condiciones laborales, efectos en otras empresas locales, etc. (UNCTAD, 2006).

Sin embargo, hay una gran cantidad de países que no prestan atención al desarrollo de políticas para promover la expansión al exterior de empresas locales (UNCTAD, 2007). Incluso cuando desarrollos recientes han surgido por parte de economías en desarrollo en apoyo a las empresas locales (Luo, Qiuzhi, & Binjie, 2010), estos comportamientos permanecen. En el caso de México, existe una importante carencia de estas políticas, y en relación a desarrollos académicos, la situación no es distinta.

### Políticas de Apoyo a la Inversión Directa en el Exterior

De acuerdo a UNCTAD, las medidas de apoyo para la expansión de las empresas al exterior, son instrumentos políticos, empleados por las empresas domésticas que eligen invertir en otros países, diseñados estos instrumentos para impulsar los flujos de IED hacia otros países (UNCTAD, 2001). Hasta ahora, no hay una clasificación estandarizada de estas medidas, de hecho, está continuamente cambiando (por ejemplo: UNCTAD (1995) y UNCTAD (2001)). Sin embargo, para el propósito de esta investigación, los instrumentos políticos en apoyo a la inversión directa al exterior se han dividido en cuatro grupos: medidas financieras, incentivos fiscales, seguro para inversión y asistencia técnica e información. En México, la institución gubernamental a cargo de fortalecer la participación de México en la economía internacional es ProMéxico. Uno de sus propósitos es promover y apoyar las exportaciones y la internacionalización de las empresas mexicanas (SEGOB, 2007). La misión de ProMéxico es “promover la atracción de inversión extranjera directa y las exportaciones de productos y servicios, así como la internacionalización de las empresas mexicanas...”

En el caso de los Lineamientos para la Operación de los Servicios y Apoyos ProMéxico 2012 (ProMéxico, 2012), en los objetivos específicos está considerada la internacionalización de empresas mexicanas, y en la sección de “Definiciones” el concepto de inversionista mexicano lo define como “la empresa mexicana interesada en internacionalizarse mediante inversiones en el extranjero”. Más aún, en ProMéxico existe un área especial denominada Coordinación de Procesos para la Internacionalización de la Empresa, y su objetivo es contribuir al incremento, expansión, avance, sustentabilidad y consolidación de las actividades de las empresas mexicanas en el exterior (ProMéxico, 2012). Sin embargo, la mencionada área depende de la Unidad de Promoción de Exportaciones.

Un último documento que sugiere el apoyo de las empresas locales en su expansión al exterior son los Estatutos Orgánicos de ProMéxico, los cuales tienen varios artículos (punto 3.2.2; artículo 5.II, 6.II, 12.VII, 14.III, 14.V, 15. I, 15.II, 15.IV, 15.V, 16.I, 16.III, 17.I, 17.II, 18.X, 20.II, 21.V, 25.VI) que manifiestan la promoción y apoyo para la internacionalización de la empresa mexicana (SEGOB, 2011). No obstante que la información anterior sugiere la existencia de políticas de apoyo para la inversión directa al exterior de empresas mexicanas, únicamente se ha ubicado una medida considerada técnica y estrictamente como política de apoyo en ProMéxico. Esta medida es llamada “*bolsa de viaje*” la cual es un reembolso financiero para viajes de negocios (ProMéxico, 2013).

De manera general, esta es la información disponible sobre las políticas de apoyo para la internacionalización a través de IED que ProMéxico provee. Sin embargo, ha sido identificado un documento que señala que instrumentos utilizados por ProMéxico para la promoción de exportaciones, son también utilizados por empresas mexicanas que buscan establecer sus actividades productivas en el extranjero (CEPAL, 2012). Este documento también menciona que la expansión de empresas mexicanas al exterior, hasta ahora, lo han realizado con ausencia de políticas específicas de apoyo, sin embargo, algunas iniciativas han comenzado a aparecer.

Otras política de apoyo consideradas en la clasificación antes mencionada, son aquellas relacionadas con aspectos fiscales. En México, una medida que pertenece a esta categoría son los Acuerdos para Evitar la Doble Tributación. En total, México tiene firmados acuerdos de este tipo con 45 países, aplicados en dividendos, intereses y regalías (SAT, 2013). De acuerdo a lo anterior y comparado con la clasificación de las políticas de apoyo a la internacionalización de las empresas, técnicamente México solo está ofreciendo una medida financiera (reembolso para viajes de negocios), y está cubriendo parcialmente los incentivos fiscales con los Acuerdos para Evitar la Doble Tributación.

### Análisis E Implicaciones

La información disponible hasta el momento revisada, permite observar que México tiene algunas medidas que se están utilizando para impulsar la expansión de empresas mexicanas en términos de inversión directa al exterior. No obstante la situación no refleja una política estrictamente desarrollada para este fin. Lo anterior es relevante, y también lo son las implicaciones que la carencia de estas políticas pueden tener para las empresas y la sociedad mexicana. De acuerdo con los beneficios teóricos generados por la internacionalización de las empresas, la falta de políticas orientadas a la expansión de la empresa doméstica al exterior, podría estar privando a empresas mexicanas de la adquisición de habilidades necesarias para competir en mercados extranjeros y también podría limitar la competitividad empresarial en el propio mercado local.

Esta situación es importante por sí misma, sin embargo, podría estar sucediendo algo más profundo haciendo referencia a empresas de Estados Unidos y España establecidas en México (de acuerdo con información disponible en UNCTAD, estos son los dos países más importantes con IED en México), ya que estos países sí cuentan con programas de apoyo dirigidos a la internacionalización de la empresa doméstica a través de IED. Y seguramente en México existen empresas que están siendo apoyadas por sus gobiernos, lo que significa una desigualdad de condiciones para empresas mexicanas en su propio país al contar con escaso acceso a herramientas que favorecen y promuevan el desarrollo de habilidades para competir con empresas extranjeras que estén siendo apoyadas por sus gobiernos en territorio mexicano.

También es importante tener en mente los posibles efectos positivos que empresas mexicanas con actividades en el exterior podrían tener en el país. Sin embargo, para realmente generar y obtener estos beneficios, el gobierno mexicano necesita crear los mecanismos a través de los cuales se puedan volver realidad. En este sentido, una manera de hacerlo sería a través de las políticas de apoyo, condicionando a las empresas beneficiadas a generar los potenciales efectos positivos. Otro punto importante a destacar es el siguiente. En términos generales, las grandes empresas mexicanas son las que están invirtiendo en mercados extranjeros (Basave & Gutiérrez-Haces, 2013). Relacionando esto con información teórica, estas empresas son las que están obteniendo mejores condiciones, competitividad y habilidades intrínsecas a las actividades de expansión a

otros países. Con este contexto, resulta aún más importante la intervención gubernamental para apoyar a Pequeñas y Medianas Empresas (Pymes) ofreciendo condiciones que promuevan su expansión al exterior, proporcionando con ello la oportunidad de mejorar sus habilidades internas y generando una situación un poco más equitativa.

Una situación más, basada en la premisa y la posibilidad de que algunos países no tienen institucionalizadas prácticas o programas en apoyo a la expansión de la empresa doméstica al exterior, lo cual podría ser el caso de México, y teniendo en mente el documento publicado por la CEPAL (2012), donde la única mención sobre este país y sus programas de apoyo a la internacionalización a través de IED está constituido únicamente por un par de párrafos, tiene implicaciones importantes. Una de estas implicaciones es el hecho de que el referido documento está mostrando a nivel internacional lo que actualmente está sucediendo en México. Por lo tanto, esta es otra razón relevante por la cual México debería regular sus políticas y programas para la promoción de inversión directa al exterior (si es el caso) y mostrar la preocupación y el interés que el país tiene en este tema relativamente nuevo y las repercusiones que tiene.

## CONCLUSIONES

Al parecer, el gobierno mexicano no cuenta con una política muy activa para promover y ofrecer mejores condiciones para empresarios domésticos al buscar la expansión al exterior a través de IED. De acuerdo con la clasificación general de las políticas de apoyo para la internacionalización de las empresas al exterior (incentivos financieros, incentivos fiscales, seguro de inversión y asistencia técnica y de información) y en línea con información revisada, México está aún muy lejos de cumplir con estos criterios. Algunas razones para desarrollar programas gubernamentales en favor de la expansión de la empresa doméstica a través de IED son los potenciales beneficios positivos que podría traer al país.

La carencia de este tipo de programas está limitando la competencia de empresas mexicanas no solo en mercados extranjeros, sino también en el propio país. Pero además, en cierto modo, se ha estado restringiendo a las empresas en relación a los beneficios potenciales que podrían tener, derivado de la internacionalización de empresas locales a través de IED. Con lo anterior en mente, en México, es notable la necesidad de desarrollar e institucionalizar un marco político relacionado con medidas en apoyo para la expansión de la empresa doméstica al exterior. En el mediano y largo plazo, este tipo de apoyo para las empresas podría significar una fuente que les provea de mejores condiciones para competir a nivel local y global, haciendo un ambiente empresarial más equitativo. Sin embargo, los políticos en el desarrollo de este “nuevo marco”, deben tener cuidado y asegurarse de que los beneficios potenciales de los programas de apoyo en cuestión, no solo van a tener un beneficio real para las empresas apoyadas, sino también tendrán impactos positivos para otras empresas nacionales así como para la sociedad en general.

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# ANÁLISIS MULTIDISCIPLINARIO DEL PROYECTO DE EFICIENCIA ENERGÉTICA Y RENDIMIENTO DE COMBUSTIBLE PROY-NOM- 163-SEMARNAT-ENER-SCFI-2012

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## RESUMEN

*La propuesta de norma oficial mexicana (PROY-NOM-163) publicada el 12 de Julio de 2012 representa la primera regulación importante para el ahorro de combustible y las emisiones de CO<sub>2</sub> en toda Latinoamérica, constituye la primera medida trascendental de México para intentar mitigar las emisiones que generan el cambio climático para frenar el crecimiento en el consumo de petróleo de la nación, pretende definir de manera obligatoria los objetivos de emisiones CO<sub>2</sub> para vehículos nuevos de automóviles ligeros de pasajeros en el 2014 al 2016. Actualmente la propuesta está siendo evaluada por la Comisión Federal de Reforma Regulatoria –COFEMER-. En el presente trabajo se realiza un análisis multidisciplinario que evalúa tres distintos rubros: un análisis de esta propuesta normativa comparada con la robustez técnica de la CAFE (2012) de los Estados Unidos; una valoración de la propuesta de ley mediante un análisis cualitativo a partir de la percepción de los consumidores finales y su posible repercusión en los autofabricantes de la industria automotriz mexicana y finalmente un contraste con opiniones obtenidas de especialistas en la materia mediante entrevistas de carácter formal. Los resultados mostraron que la propuesta de Norma Oficial 163 no responde de manera holística a la demanda de la sociedad, ni tampoco contempla la economía del mexicano promedio, resultando ser una copia a medias de una estructura exitosa y robusta implementada en Estados Unidos. La evidencia muestra que no existen incentivos financieros a las empresas automotrices establecidas en México, mientras que el desarrollo de automóviles con tecnología de vanguardia describe una relación cuadrática originando un incremento colateral en el costo final del automóvil de poco más de 35 mil pesos.*

**PALABRAS CLAVE:** PROY-NOM-163-SEMARNAT-ENER-SCFI-2012, Emisiones De CO<sub>2</sub>, CAFE, Promedio Corporativo Ponderado Meta (PCPM), Promedio Corporativo Observado (PCPO)

## MULTIDISCIPLINARY ANALYSIS OF PROY-NOM-163- SEMARNAT-ENER-SCFI-2012

### ABSTRACT

*The proposed Official Mexican Norm (NOM-163) issued on July 12, 2012 represents the first major regulation for fuel economy and CO<sub>2</sub> emissions in Latin America. It is the first transcendental measure of Mexico to try to mitigate the emissions that generate climate change and to slow the growth of oil consumption in the nation. This Norm defines a mandatory CO<sub>2</sub> emission targets for new light passenger vehicles starting from 2014 to 2016, currently, the*

*proposal is being evaluated by the Comisión Federal de Reforma Regulatoria-COFEMER. In this paper a multidisciplinary analysis evaluates this proposal with three different approaches: an analysis of this proposed legislation compared to technical robustness of U.S. CAFE (2012); a review of this proposal by a qualitative analysis based on the perception of final consumers and possible automakers' impacts on the Mexican automotive industry and finally a contrast with opinions obtained from experts in the field using formal interviews. Results showed that the proposed Legislation (NOM 163) does not holistically respond to the demand of Mexican society nor contemplates the average Mexican economy, resulting in an partial copy of a successful and robust structure implemented in the United States. The evidence shows that there is no financial incentives to automotive companies established in Mexico, while the development of vehicles with advanced technology describes a quadratic relationship causing a collateral increase in the final cost of the car just over 35 thousand dollars.*

**JEL:** O13

**KEYWORDS:** Proy-Nom-163-Semarnat-Ener-Scfi-2012, Co2 Emissions, Cafe, Co2 Weighted Corporate Average Target, Observed Co2 Weighted Corporate Average Target.

## INTRODUCCIÓN

La industria automotriz a nivel mundial está comprometida a contribuir en un enfoque integrado para reducir las emisiones de carbono, principal causa del efecto de invernadero. Los fabricantes de autos están constantemente desarrollando motores más eficientes y trenes de transmisión para reducir el consumo de combustible, y es así como un amplio rango de tecnología sofisticada al control de emisiones colocan autos más limpios y verdes en todos lados. En muchos países, los autos son sometidos a procedimientos rigurosos estandarizados para evaluar su consumo de combustible. Estas mediciones generalmente son realizadas en pruebas con autos en marcha sobre un dinamómetro de chasis, sin embargo, muchos de los procedimientos incluyen ciclos de prueba, mismos que simulan un rango variado de condiciones de manejo (Dieselnet, 2012). Por su parte naciones como los Estados Unidos de Norte América, Europa y Japón han creado sus propios organismos y procedimientos de prueba para determinar el consumo de gasolina y la emisión de gases causantes del efecto invernadero (GEI) para automóviles nuevos. Estas pruebas de consumo de combustible difieren de región a región puesto que las condiciones de manejo también difieren por región donde diferentes factores afectan el consumo de combustible, en estos se incluyen patrones de manejo en ciudad, carretera, temperaturas de ambiente, uso de aire acondicionado, gadgets y demás. (Dieselnet, 2012). En la mayoría de los países los gobiernos confían en la información publicada por los fabricantes de automóviles acerca de la economía de combustible. El Foro Mundial para la Armonización de los Reglamentos sobre Vehículos de la Comisión Económica para Europa (UN/ECE/WP29) ha venido trabajando en un procedimiento unificado para ser adoptado a nivel mundial, sin embargo aún faltaran años para hacer esto una realidad.

### Estado del Arte

La Unión Europea (UE) fue la primera en introducir estándares de CO<sub>2</sub> para vehículos de pasajeros en 2009 (ICCT, 2010). La regulación en 2009 fijaba una meta de 130 g CO<sub>2</sub>/Km a alcanzar en 2015 para la flota promedio de todos los fabricantes combinados. (REPC, 23/Abril/2009). La regulación de CO<sub>2</sub> existente en Europa ha guiado a obtener resultados impresionantes: el promedio de niveles de emisión de CO<sub>2</sub> disminuyó de 160 g CO<sub>2</sub>/Km en 2006 a 136 g CO<sub>2</sub>/Km en 2011 (EPRR, 20/06/2012) medidas de Nuevo Ciclo de Conducción Europeo

-NDEC-, por sus siglas en inglés, (ICCT, 2010). La meta propuesta para 2020 es una reducción a 95 g CO<sub>2</sub>/Km. (European Commission, 2012). Una comparación con el estándar de emisiones de CO<sub>2</sub> propuesta por la unión europea con regulaciones similares alrededor del mundo – previamente unificadas en NEDC - muestra que Estados Unidos de Norteamérica obligará a los vehículos de pasajeros a emitir un máximo de 93 g CO<sub>2</sub>/Km para 2025 (ICCT, 2010), Japón 105 g CO<sub>2</sub>/Km para 2020 y China 117 g CO<sub>2</sub>/Km para 2020. (POLICY UPDATE, 12/07/2012).

De acuerdo a la Organización Mundial de Productores Automotores (OICA, por sus siglas en inglés) a finales de 2011, México supera a España para colocarse en octavo lugar del ranking mundial de fabricantes de vehículos automotores, año en que México fabricó 2 millones 680,037 autos. Producción de la cual 1,657,080 fueron automóviles y 1,022,957 vehículos comerciales, lo que representa un incremento del 14.4% con respecto al 2010. De esta cantidad total de producción, 2 millones 130,143 unidades se destinaron a exportación (AMIA, 2012), y según cifras del Instituto Nacional de Ecología (2012), México contribuye con el 1.6 por ciento de las emisiones globales totales de gases de efecto invernadero, siendo el sector autotransporte una de las principales fuentes emisoras, contribuyendo con el 20.4% del total de las emisiones del país.

Es así como surge la inminente necesidad de crear una propuesta de ley de carácter obligatoria para el control de emisiones de CO<sub>2</sub>. La propuesta de Norma Oficial Mexicana -NOM-163-SEMARNAT-ENER-SCFI-2012 establece los parámetros y la metodología para el cálculo de los promedios corporativos meta y observado de las emisiones de bióxido de carbono expresados en gramos de bióxido de carbono por kilómetro (g CO<sub>2</sub>/km) y su equivalencia en términos de rendimiento de combustible, expresado en kilómetros por litro (km/l), con base en los vehículos automotores ligeros nuevos, con peso bruto vehicular que no exceda los 3 857 kilogramos - con excepción de corporativos que comercialicen en total hasta 500 unidades por año modelo- que utilizan gasolina o diesel como combustible y cuyo año modelo sea 2014 y hasta 2016 que se comercialicen en México, misma que será de observancia obligatoria para los que comercializan vehículos automotores ligeros nuevos, cuyo peso bruto vehicular no exceda los 3 857 kilogramos (DOF, 12/07/2012).

Esta propuesta de regulación se encuentra incluida en varios instrumentos de política pública nacional; como el Plan Nacional de Desarrollo 2007-2012, la Ley General de Cambio Climático, meta 24 del Objetivo 2.2.1, el Programa Nacional para el Aprovechamiento Sustentable de la Energía 2009-2012 y dentro de los principales objetivos están el incrementar el rendimiento del parque vehicular para autos nuevos de 2014 a 2016 a una meta corporativa ponderada de 14.9 km/L, es decir un promedio de 2.6% de mejora por año (ICCT, 2010), así como la reducción directa de las emisiones de gases invernadero y algunos de sus beneficios colaterales son la mejora de la calidad del aire y la reducción de los impactos negativos en la salud de la población.

De acuerdo a cifras presentadas por el gobierno, esta norma permitirá que México reduzca 70 mil millones de litros en el consumo de combustible, 170 millones de toneladas de CO<sub>2</sub> y 4 mil 170 millones de pesos por beneficios en salud, por enfermedades y muertes en el periodo de 2013-2030. Es evidente que dicha meta se estableció para hacer coincidir la normatividad y el nivel de exigencia de la flota mexicana con la flota del resto de Norteamérica, puesto que el proyecto de NOM se basa en las ecuaciones contenidas en la regulación para vehículos ligeros nuevos años-modelo 2012-2016, desarrolladas por la Administración Nacional de Seguridad del Tráfico en Carreteras (NHTSA, por sus siglas en inglés) y la Agencia para la Protección Ambiental (EPA, por sus siglas en inglés) de Estados Unidos. A diferencia de los estándares europeos basados en flexibilidad de acuerdo al peso (ICCT, 2010), la principal flexibilidad de esta norma tiene que ver con la estructura de los estándares que se basan en la sombra del vehículo. Se prevé que los

paquetes tecnológicos para lograr el cumplimiento de los estándares no tengan costos elevados en los consumidores finales, recordando que México oferta numerosa gama de vehículos de distintos corporativos siendo los más importantes: Chrysler de México Chrysler (Dodge, Hyundai, Jeep) General Motors México –GMM- (Chevrolet, GM Daewoo, GMC, Opel) Fiat, Ford Motor Company de México, Honda, Mazda, Mitsubishi Motors de México, Nissan Mexicana, Peugeot, Renault, Subaru, Suzuki, Toyota, Volkswagen de México (SEAT, Volkswagen).

Con lo expuesto anteriormente este estudio se centrará en comparar la propuesta PROY-NOM-163-SEMARNAT-ENER-SCFI-2012 en México, contra la norma para el control de eficiencia de combustible en Estados Unidos de Norteamérica (CAFE), a través de un análisis multidisciplinario valorando la propuesta de ley mediante un análisis cualitativo a partir de la percepción de los consumidores finales y su posible repercusión en los autofabricantes de la industria automotriz mexicana.

## **METODOLOGÍA**

Mediante el desarrollo del presente trabajo de investigación se compara la propuesta PROY-NOM-163-SEMARNAT-ENER-SCFI-2012 en México contra la norma para el control de eficiencia de combustible en Estados Unidos de Norteamérica (CAFE) a través de un análisis multidisciplinario, así como valorar la propuesta de ley mediante un análisis cualitativo a partir de la percepción de los consumidores finales y su posible repercusión en los autofabricantes de la industria automotriz mexicana. Para realizar esta investigación se recopilaron de diferentes fuentes información como son: libros, manuales establecidos en las normas oficiales mexicanas y extranjeras, informes de entidades gubernamentales nacionales y extranjeros (norteamericanas), leyes aplicables en materia de reforma ambiental para el control de emisiones de CO<sub>2</sub> en vehículos de transporte ligero, periódicos nacionales, revistas especializadas, páginas web oficiales y otros medios de información electrónicos. Una vez recopilada la información necesaria sobre la propuesta PROY-NOM-163-SEMARNAT-ENER-SCFI-2012, procedimos a explorar y seleccionar dicha información, de tal forma que nos pudiera ofrecer directrices para la interpretación de indicadores en esta materia. Para el sondeo de las percepciones de los consumidores de autos se utilizó un enfoque mixto: en la parte cuantitativa de la investigación elegimos una muestra probabilística y de tipo estratificada. La muestra cuantitativa fue de 203 consumidores de autos, con modelos 2010-2013 elegidos por medio de una selección aleatoria. Los resultados se analizaron empleando el software SPSS (Statistical Product and Service Solutions) versión 20, con el objeto de encontrar relación entre la variables definidas para este estudio.

En la parte cualitativa se realizaron 8 entrevistas dirigidas y estructuradas a profesionistas con perfiles multidisciplinarios, los cuales están relacionados con el giro automotriz, desarrollo de tecnología, finanzas, economía, medio ambiente, servicio a clientes y desarrollo social, en su mayoría las entrevistas fueron realizadas a catedráticos altamente distinguidos que laboran actualmente en la Benemérita Universidad Autónoma de Puebla (BUAP), así como a gerentes de ventas de agencias automotrices como SEAT y Volkswagen de México. Los ejes centrales de estas entrevistas son: a) percepción de la industria automotriz en México b) capacidad de la economía mexicana para adquirir un auto nuevo c) opinión sobre la propuesta PROY-NOM-164-SEMARNAT-SCFI-2012 d) posible repercusión económica al usuario final e) facilidades a fabricantes automotrices para la adopción de la Ley f) situación actual del parque vehicular mexicano. Una vez seleccionada la muestra y terminada la exploración de la información, nos permitimos determinar nuestras variables dependientes e independientes. Esto se realizó mediante la lectura y análisis de los reportes anuales comprendidos en los años 2010 a 2012. Por tanto las

variables aplicables a nuestra investigación son: decisión de compra de un auto nuevo y grado de responsabilidad ambiental como variables dependientes; edad, precio de venta de los autos nuevos, seguridad del auto, rendimiento de combustible, tamaño y forma del auto y reputación de la marca del auto como variables independientes.

En el presente trabajo de investigación se analizaron los impactos benéficos y adversos que implica la oficialización de la propuesta PROY-NOM-164-SEMARNART-SCFI-2012 en México, haciendo un comparativo de diversos estudios realizados por organismos federales y extranjeros, los que se contrastan con opiniones obtenidas de especialistas en la materia mediante entrevistas de carácter formal. Además, se discute la propuesta mexicana de regulación de eficiencia ambiental analizando la normativa actual para control de gases efecto invernadero en Norteamérica (CAFE) identificando las bondades y deficiencias en materia legislativa mexicana. Finalmente, se evalúa la opinión pública realizando una encuesta electrónica a diversos grupos sociales, información que permite identificar praxis holísticas a los organismos federales mexicanos.

## RESULTADOS

### Comparación de CAFE Vs NOM 163.

El proyecto de norma de emisiones de CO<sub>2</sub> busca regular la emisión de gases de efecto invernadero de los vehículos automotores ligeros nuevos mediante su rendimiento de combustible promedio de 14.9 kilómetros por litro para el año 2016 utilizando una metodología de promedios corporativos ponderados observados (PCPO) basada en la norma americana de eficiencia de combustibles Corporate Average Fuel Economy (CAFE). Mientras tanto la norma CAFE de Estados Unidos establece una meta de rendimiento de 15 kilómetros por litro para 2016 y de 23 kilómetros por litro para el año 2030, la cual está siendo implementada en ese país, Canadá, Australia, China, Unión Europea, Corea del Sur y Japón.

Sin embargo en todos se establecen incentivos económicos para que los usuarios compren vehículos más eficientes, además de que consideran las diferencias orográficas, de altura, alternativas de combustibles disponibles y urbanas promedio. La propuesta de norma mexicana a diferencia de la americana no tiene mecanismos de cumplimiento como lo son créditos que pueden acordarse en él, sobre cumplimiento de la norma cinco años hacia adelante o tres años hacia atrás; la transferencia de créditos entre fabricantes (incluso de sus ahorros). Con esto, se observa la poca flexibilidad que existe en la Nom 163, incluso en comparación la norma es exigente para México, y que el impacto de su aplicación es tan alto en un automóvil nuevo que el usuario preferirá adquirir autos usados. Este impacto en términos económicos sería de entre 30 y 35 mil pesos en cada automóvil nuevo.

El proyecto de Norma 163 tiene resultados muy limitados en materia de mitigación de gases de efecto invernadero. La Asociación Mexicana de la Industria Automotriz (AMIA) calcula que las toneladas de CO<sub>2</sub> netas mitigadas con la regulación en los próximos 33 años sólo llega a 8.4 millones de toneladas, cantidad equivalente a las emisiones de CO<sub>2</sub> de los autos usados importados que han entrado a nuestro país en los últimos cuatro años, mientras que se calcula que las emisiones generadas por los vehículos usados importados al país representan 8 veces más que aquellas que se pretenden evitar con la aplicación del proyecto de Norma 163 en materia de mitigación de gases de efecto invernadero.

### Resultados de Encuestas

La edad promedio de la muestra es de 33 años, el 50% tiene menos de 31 años, el 48% son hombres y el 52% son mujeres, el 61% de los encuestados tiene automóvil; el 41% de estos tiene 1 automóvil, el 15% tiene dos automóviles, el 5% tiene 3 automóviles, 39% no tiene automóvil. En cuanto al grado académico, sólo el 2% de los encuestados tiene estudios de posgrado, 39% cuenta con licenciatura terminada y 25% tiene preparatoria terminada, 30% tiene nivel básico de estudios y 4% no tiene estudios.

El 38% de los encuestados ha escuchado hablar de PROY-NOM-163-SEMARNAT-ENER-SCFI-2012 y pero sólo el 23% la conoce. Respecto a la percepción que tiene la población sobre la PROY-NOM-163-SEMARNAT-ENER-SCFI-2012, el 25% considera que es una regulación estricta de emisión de CO<sub>2</sub> en el aire aunque necesaria. Por otro lado, el 73% considera que es una estafa más del gobierno para cobrar impuestos. Resalta el hecho que el 41% hace énfasis en la necesidad de regular la entrada de los autos chocolates sin embargo el 69% estaría dispuesto a comprar un auto usado americano en buen precio, pues el 86% opina que el transporte público es de mala calidad y el 94% de ellos prefiere ocupar su automóvil en vez del transporte público urbano.

En este orden de ideas se puede señalar que se debe primero trabajar en campañas efectivas de concientización en el cuidado al medio ambiente pues los resultados de este trabajo de investigación apuntan a que el 83% no recuerda una campaña relativa al tema de cuidado al medio ambiente y uso eficiente del automóvil, lo que significa que los esfuerzos realizados por parte de diferentes organismos gubernamentales y empresas privadas no han logrado crear una cultura de cuidado al medio ambiente. En este sentido es notable citar que el 72% señaló que no estaría dispuesto a pagar un promedio de 35,000 pesos más por cada automóvil nuevo aunque éste tenga un impacto favorable en el medio ambiente, salvo que existiera un esquema de descuentos o deducciones fiscales, es decir, sólo mediante la obtención de beneficios se podría influir en la decisión de compra de un automóvil que cumpla con las nuevas regulaciones de emisión de CO<sub>2</sub>. En contraste, el 89% afirmó sentirse mal al pensar sólo en su economía personal antes que en el cuidado del medio ambiente, empero el 97% de ellos cambiaría su respuesta de gozar con una economía saludable.

### Resultados de Entrevistas.

Los principales mercados automotrices están incrementando su eficiencia vehicular para depender menos del petróleo. Vemos que, por ejemplo, Europa para el año 2015 su meta será de 20.7 km/l, EUA 14.9 km/l en 2016, China 15.7 km/L, Japón 20.0 km/l y Canadá de 14.7 km/l. El resultado de las entrevistas conduce a tener opiniones contrarias, pues existen organismos internacionales como el consejo internacional sobre Transporte Limpio –ICCT- que son cartas fuertes sustentando la viabilidad a esta propuesta de proyecto de norma de la SEMARNAT. Mientras que algunos entrevistados concuerdan con los estudios, comentarios aprobaciones y estimaciones de la ICCT, algunos argumentan que no se está valorando por completo el panorama socioeconómico de México, concluyendo que hacer caso únicamente a un(os) organismo(s) de prestigio es cerrarse a ver la complejidad de la implementación de esta norma en México. Varios organismos como la AMIA y empresas como Toyota,

Chrysler y GM han presentado juicios de nulidad contra la NOM 163, la mayoría de los entrevistados concuerda que México sí se está rezagando en este tipo de reformas al existir bloqueos por parte de estos organismos privados, de no adoptar medidas urgentes como la creación de una norma de eficiencia energética para los autos nuevos, el escenario actual será

insostenible en pocos años acentúan. Sin embargo, también asienten que en otros países las reformas energéticas y de eficiencia vehicular han estado presentes desde ya más de una década, logrando cambios graduales impresionantes en la reducción de emisiones de CO<sub>2</sub>, resaltando así que México como país no está preparado para enfrentar estas Normas de eficiencia vehicular similares a las reformas más estrictas a nivel mundial, no al menos en un periodo relativamente corto como pretende la reforma destacan, pues coinciden no sólo es un simple paso más a la sostenibilidad en México, sino un salto cuántico en hábitos de compra de consumidores mexicanos de automóviles, de hábitos de conducción, de cambio de mentalidad y sobre todo de tecnología automotriz.

Las consecuencias recalcan y corroboran los especialistas, pueden ser más costosas y poco viables para el poder adquisitivo del mexicano promedio, ya que para cumplir con la norma de eficiencia mexicana, las armadoras estarían coaccionadas a introducir nuevas tecnologías en el motor, la transmisión, aerodinámica y reducción del peso vehicular para incrementar la eficiencia en el uso de combustible. Según los expertos entrevistados esta tecnología tendrá una repercusión final promediada de al menos 41 mil pesos en el precio final del auto, algo mayor lo estimado por la AMIA de 35 mil pesos.

De acuerdo a los 10 modelos actuales de mayor venta en el país durante el primer trimestre del 2012, cuatro son subcompactos (Aveo, Tsuru, Spark y March) y cuatro son compactos (Versa, Jetta Clásico, Tiida Sedán y Nuevo Jetta), analizan los expertos y concluyen que si bien estas ventas representan las preferencias del consumidor mexicano por vehículos más eficientes también reflejan el poder adquisitivo del mexicano promedio, mismo que refieren ser menor de un promedio de 180 mil pesos mexicanos por auto nuevo. En ese sentido, objetan que la norma de eficiencia ofrezca una garantía base a los compradores de automóviles nuevos respecto al gasto que realizarán en gasolina, en donde se estima que el ahorro en combustible a lo largo de la vida útil del vehículo sea de \$46,000 pesos, pues claramente mencionan que los automóviles de preferencia actual no poseen la carga tecnológica para lograr dicho objetivo. Añaden también que tampoco la calidad de combustible ofertada en México es la idónea, pues argumentan que está lejos de asimilarse a la ofertada por países desarrollados. El problema es la errada adopción de los altos precios de tecnologías automotrices de vanguardia así como copias de reformas energéticas de países desarrollados pero con políticas cortoplacistas, salarios y combustibles de países claramente tercermundistas. En contraste, todos los entrevistados están de acuerdo en que la Norma Oficial de eficiencia energética ayuda a reducir las emisiones contaminantes de los automóviles, lo cual resultará benéfico para la salud de la población, al tiempo que permite a los consumidores actuar realizando compras responsables y eficientes.

Los expertos se han pronunciado en contra de la importación irrestricta de autos usados procedentes de Estados Unidos, pues impugnan existir suficiente evidencia del grave impacto que está causando esta apertura comercial de automóviles en malas condiciones de operación, sin convertidor catalítico y con elevadas emisiones de gases contaminantes. Concurren que los mexicanos compraran vehículos en malas condiciones sin valorar la eficiencia, los costos de uso y mantenimiento, ni la vida útil del auto, pues deriva de la mala economía que se vive en el país, incluso debaten es un reflejo del mercado automotriz que se ha conformado en nuestro país, mismo parecer ajeno a los criterios de eficiencia vehicular, lo cual termina afectando a la industria automotriz en general subrayan.

El grupo de expertos entrevistado conviene que el sector automotor es consciente de que en ninguna parte del mundo existe una Norma Oficial para regular el consumo de combustible que integre a los automóviles usados y los nuevos, no obstante manifiestan que de ser aprobada la

propuesta de Norma de Eficiencia Energética para autos nuevos ayudará a generar una cultura de compra de vehículos con la cual los consumidores mexicanos valorarán progresivamente el alto costo que representa la ineficiencia. Es duramente vituperado el hecho que la Norma Oficial de eficiencia energética a pesar de definir una nueva estrategia para la reducción de emisión de CO2 utilizando una metodología vanguardia resulta ser una copia a medias de la CAFE actual vigente en EUA; en México únicamente se toma lo que les conviene subrayan los expertos contrastando a EUA, donde se incentiva a la industria automotriz para poder lograr las metas en el tiempo estipulado. Concurren que en México se olvidan del cómo lograrlo ya que no existen apoyos ni incentivos de ninguna índole a la industria automotriz para lograr entusiasmo en las empresas automotrices asentadas en territorio mexicano. Concuerdan no existir una idea clara de ganar-ganar ni para los mexicanos, ni las empresas transnacionales ni para el cuidado del medio ambiente.

Los expertos enuncian que es indispensable que en la norma se busque también una solución integral a la contaminación y al consumo de combustible de los autos usados de importación. Invitan a la SENER y a la SEMARNAT abrir diálogos con la AMIA para poder proponer y encontrar una solución integral a los vehículos nuevos y chatarra, conociendo perfectamente que no es posible impedir la importación de autos usados debido a acuerdos comerciales con estados unidos, los cuales reiteran deben de respetarse en todo momento, pero argumentan que se debe exigir más en términos de seguridad, consumo, emisiones contaminantes y cantidad de autos usados que ingresen por año al país. Finalmente retiran que las medidas de la NOM 163 deben de incorporar todas las características que permiten que actualmente la norma en Estados Unidos – CAFE- sea viable y exitosa, mas no sólo una parte que lejos de beneficios augura traer mayores repercusiones para los usuarios finales.

## CONCLUSIONES

La propuesta de NOM 163 es necesaria en México, pues evitará un rezago comparado con las tendencias de otros países hablando en términos de una reforma energética. Sin embargo, es necesario tomar en cuenta factores como la orografía del país, tipo de combustibles y el otorgamiento de créditos por sobre cumplimiento, a fin de ampliar los márgenes de acción a la industria automotriz local. Se requiere una solución integral basada en una política encaminada no sólo al mejoramiento de autos nuevos, sino de todos los vehículos en circulación, así como la generación de incentivos que promuevan la renovación del parque vehicular. La creación de campañas de conciencia ambiental y uso eficiente del automóvil debiera ser tema político de discusión así como una reforma que permita conseguir subsanar el poder adquisitivo del mexicano promedio, los resultados apuntan hacia que un poder adquisitivo mejor beneficiará la cultura del cuidado del medio ambiente. En cuanto al plazo para las automotrices, se observa apresurado el cambio y se recomienda la implementación de la norma hasta 2015. De igual manera se requiere adoptar legislaciones completas y adaptarlas a la situación de cada nación. Es necesario incluir incentivos para los autos de bajas emisiones (SULEV) y autos híbridos (SULEVH) en el alcance de la propuesta de Norma puesto que no se hace referencia en ningún apartado de ella. Finalmente, vemos como primera necesidad exigir más regulaciones en términos de seguridad, consumo, emisiones contaminantes y cantidad de autos usados que ingresen por año al país antes de invertir en propuestas mal logradas que tienen un impacto más adverso que beneficio para la sociedad mexicana.

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# DETERMINACIÓN DE LAS DIFERENCIAS DE GÉNERO USANDO LAS ESCALAS DE LIMITACIONES EN EL TRABAJO (WLQ), COMPROMISO ORGANIZACIONAL (OC) Y MBI DE MASLACH EN UN GRUPO DE SERVIDORES PÚBLICOS DEL SECTOR SALUD

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## RESUMEN

*Este trabajo es una investigación de tipo descriptivo-correlacional, transversal con diseño no experimental sobre el impacto que tienen en el perfil sociodemográfico las sub-escalas del Modelo de Limitaciones en el trabajo, compromiso organizacional y MBI en un grupo de trabajadores que dan servicio al público en hospitales del sector de salud pública en México, entre los que se encuentran enfermeras, técnicos, recepcionistas, administrativos, etc. El objetivo principal fue identificar las diferencias en los niveles de compromiso organizacional, realización personal, despersonalización y agotamiento emocional, así como las condiciones de trabajo que impactan más; analizar las diferencias de género y detectar relaciones entre las subescalas. Se trabajó con una muestra de 200 empleados; en la recolección de los datos se utilizaron la escalas MBI de Maslach, Compromiso Organizacional de Allen y Meyer y El cuestionario de Limitaciones del Trabajo (WLQ), aunque debido a la baja confiabilidad que se obtuvo del MLQ, decidimos no incluir los análisis de éste en los resultados. Los resultados identificaron el estado que guardan las variables dentro de un nivel normal y que no existen diferencias en cuanto al género; además, se encontraron correlaciones fuertes, positivas y significativas entre las subescalas. Con ello se confirma la prevalencia de las perturbaciones afectivas emocionales (despersonalización, baja realización personal y agotamiento emocional) tal como se describe en estudios previos.*

**PALABRAS CLAVE:** Agotamiento Emocional, Burnout, Síndrome del Quemado, Despersonalización, Baja Realización Personal, Compromiso Organizacional, Condiciones de Trabajo, Enfermeras, Servidores Públicos

## ABSTRACT

*This study shows a descriptive, transversal research with a non-experimental design about the emotional affective state of public health workers. The main goal is to identify the levels of depersonalization, emotional exhaustion, personal achievement, organizational commitment related to the working conditions ; analyze gender differences and detect relationships between the subscales. We worked with a sample of 200 employees; in the collection of the data was used MBI, Organizational Commitment and Working Conditions scales. We decided not to include the results of the WLQ due to the low reliability value obtained in the questionnaire. The results identified the states within a normal level and no differences in gender, also found strong positive correlations between the subscales. This confirms the prevalence of emotional disturbances*

(*depersonalization, emotional exhaustion, personal achievement, commitment related to the working conditions*) as similar to previous studies.

**Keywords:** Burnout, Depersonalization, Emotional Exhaustion, Personal Achievement, Organizational Commitment, Working Conditions, Nurses

## INTRODUCCIÓN

El *burnout* y el compromiso organizacional han sido temas de gran interés en el mundo académico y profesional. En México, cada vez es más frecuente encontrar literatura que estudie este fenómeno, debido a la gran necesidad que existe de concientizar al sector salud público del riesgo que los trabajadores corren al estar expuestos a condiciones de trabajo que dañan su estado emocional y que impactan la productividad y calidad del servicio que ofrecen a los usuarios (Mendoza y García, 2011). Asimismo, el número de artículos publicados que se enfocan en estimar la carga económica que representa para la organización la enfermedad física y mental de los empleados ha ido en aumento, especialmente en servidores públicos, cuyo rendimiento impacta la calidad de atención que brindan al usuario. (Anis, Zhang, Bansback, Guh, Amarsi, y Birmingham, 2010; Health Canadá, 2003).

Los profesionales del sector salud que tienen que estar expuestos a precarias condiciones de trabajo, recursos limitados, imposibilidad de dar servicio a una población cada vez más demandante y creciente que está descontenta con el servicio que se presta en los hospitales públicos y que exige mejores servicios y más rápida respuesta a sus necesidades de salud, así como el contacto directo con pacientes en estado terminal afectan su salud emocional (Abreu, 2011, De Vargas y Dias, 2011). Estos padecimientos son comunes en servidores públicos de hospitales que han sido considerados como una profesión de prevalencias altas de trastornos psicológicos que, en cierta forma, repercuten negativamente en su salud y calidad de vida provocando ausentismo laboral y afectación en la calidad de su trabajo (Lerma-Martínez, Rosales-Arellano, y Gallegos-Alvarado, 2009).

En igual forma, el *burnout* es un trastorno del estado del ánimo que se presenta en los trabajadores de la salud que, al igual que el estrés, también afecta los resultados organizacionales, tales como: un aumento del ausentismo, antagonismo, falta de compromiso con la organización, insatisfacción en el trabajo o conflictos interpersonales (Flores-Villavicencio, Troyo-Sanromán, Valle y Vega-López, 2010, Gil-Monte, 2010). El *burnout* ha sido ampliamente estudiado a partir de Maslach en 1981, y su instrumento ha sido el más utilizado para medir este síndrome. El síndrome de *burnout* incluye las escalas de agotamiento emocional, despersonalización y baja realización personal y ocurre en individuos que dan servicio al público (Maslach & Jackson, 1986, p. 1). El agotamiento emocional es la variable que se refiere a sentimientos de estar drenado emocionalmente. La despersonalización se refiere a actitudes negativas, cínicas y de desprendimiento emocional hacia otras personas. Finalmente, la baja realización personal se refiere a una declinación en los sentimientos propios de competencia y valor, llevando a una tendencia de evaluarse negativamente en particular con respecto al trabajo de uno hacia otras personas (Cherniss, 1980; Freudenberger, 1974; Maslach, 1982).

A finales de la década de 1970, aparecieron los primeros estudios sobre profesiones relacionadas con la atención a pacientes (enfermería, medicina, etc.); dentro de éstos destacan investigaciones sobre el síndrome de desgaste profesional (*burnout*) las cuales giraron en torno al agotamiento profesional como resultado de las actividades propias de la prolongada prestación de servicios y

cuidado de personas con problemas de salud (Hurtado y Pereira, 2012). Al respecto, Garcés, (2002) citado en Miño (2012) sostiene que el síndrome se presenta debido a que las requerimientos del trabajo exceden los recursos que la persona posee para dicha actividad. A nivel internacional se tiene evidencia de numerosas investigaciones sobre los niveles emocionales del personal del sector salud (Alves, Alves y Pineda, 2007; Martínez, Centeno, Sanz-Rubiales y Del Valle, 2009; López, Zegarra y Cuba, 2006; Abreu, 2011). En México existen pocos estudios reportados (Flores-Villavicencio, et al., 2010; Enríquez, et al., 2011); sin embargo, considerando que el sistema de salud pública presenta una problemática muy grave por la falta de recursos y el creciente número de pacientes que demandan atención médica, es imprescindible dirigir la atención a la evaluación los factores que inciden en la salud de este tipo de profesionales.

Con referencia a las limitaciones del trabajo, estudios previos han demostrado que los servidores públicos que asisten al trabajo cuando no se sienten bien debido a problemas físicos o mentales como depresión, burnout, agotamiento emocional, estrés entre otros, presentan un bajo rendimiento, lo que significa altos costos y baja productividad en la organización (Sanderson et al., 2006). El interés por medir y contabilizar el efecto de la salud en la productividad organizacional ha resultado en el desarrollo de numerosos instrumentos para capturar este concepto. De acuerdo con Mattke et al. (2007), existen más de 20 instrumentos que asocian la productividad con los estados físicos y emocionales de los trabajadores, entre los que se encuentra el WLQ. Con referencia a la productividad, más de la mitad de trabajadores con problemas de salud mental como estrés o burnout reportan una productividad reducida, resultando en una pérdida promedio de 2.0 horas por día por trabajador (Meerding et al., 2004).

Asimismo, el compromiso organizacional ha sido asociado al burnout en servidores públicos y enfermeras de hospitales por autores tales como Leiter y Maslach desde la década de los ochentas. El compromiso organizacional ha sido definido como la identificación que el empleado siente hacia su organización (Mowday, Steers and Porter, 1979). Asimismo, en estudios previos se ha encontrado relación entre el compromiso organizacional y el agotamiento emocional. Se observa que un empleado con alto compromiso, sentirá mas apego a la organización y menor burnout (Price and Mueller, 1981; Steers, 1977). Esta investigación tiene como propósito identificar los niveles de Desgaste emocional y compromiso organizacional; analizar las diferencias de género, esto es, comprobar si el nivel de las subescalas mencionadas se ve influenciado por el hecho de que el trabajador sea hombre o mujer; y, adicionalmente, identificar si existen asociaciones entre las subescalas del burnout y las subescalas del compromiso organizacional. El logro de este propósito aporta elementos importantes para el diseño de estrategias de prevención adecuadas a las necesidades del colectivo de trabajadores del sector estudiado.

## MÉTODO

Esta investigación consiste en un estudio con diseño no experimental, transversal, identificado como descriptivo-correlacional; descriptivo por tener la intención de especificar el nivel de burnout, compromiso organizacional y las limitaciones de trabajo de los empleados del sector salud pública y correlacional por tener la finalidad de identificar la probable existencia de asociación entre las variables.

Participantes En este estudio participaron 200 empleados del sector salud de los cuales el 85.5% eran mujeres y 14.5% hombres; el 66% de los respondientes tenían más de 46 años de edad; el 53.5% eran casados Con relación a la escolaridad, el 58% eran técnicos en enfermería. Respecto al turno de trabajo, el 87% trabajaban en turno completo en hospital. Instrumento de medición Por lo que refiere al instrumento utilizado, éste es un paquete de tres escalas (de 24 ítems la de

limitaciones del trabajo, 22 la de burnout y 21 la de compromiso organizacional) de tipo Likert, ordinal de cinco puntos de severidad/frecuencia para medir la extensión de cuales estados han experimentado durante la semana pasada. **WLQ** (Work Limitations Questionnaire, Lerner et al, 2001) de 24 preguntas que contiene cuatro variables que miden las limitaciones del empleo, las cuales son: exigencias físicas (6 ítems), demanda de tiempo (5 ítems), exigencias mentales-interpersonales (9 ítems) y demanda de rendimiento (5 ítems).

La escala de respuesta que presenta este cuestionario de 1 a 5. Las puntuaciones se convierten numericamente de 0 a 120 de acuerdo al puntaje respondido. La consistencia interna que ha presentado este instrumento en estudios previos ha sido de Alfa de Cronbach para exigencias físicas de 0.89, demanda de tiempo de 0.89, exigencias mentales-interpersonales de 0.91 y demandas de rendimiento 0.88 (Lerner et al, 2001). Debido a que la consistencia interna que obtuvimos de este cuestionario fue negativa, decidimos no incluir los análisis en los resultados. Con respecto al **MBI** de Maslach, este instrumento se compone de 22 reactivos, 3 subescalas que presenta una escala de respuesta de 1 a 5, con una consistencia interna global de alfa entre 0.42 y 0.64 en la mayoría de estudios realizados. En este estudio, se obtuvieron los resultados que se muestran en la tabla de 1 de Confiabilidad. Asimismo, para medir el Compromiso Organizacional, se utilizó la escala de Allen y Meyer, 1990 (CO) que se compone de 21 reactivos con escalamiento Likert de 1 a 5, distribuidos en tres subescalas que miden el compromiso afectivo, el compromiso normativo y el compromiso de continuidad.

Tabla 1: Confiabilidad

VARIABLES		Alfa de Cronbach (unidad de análisis N=200)	Número de Ítem
COMPROMISO ORGANIZACIONAL	Compromiso Afectivo	0.694	7
	Compromiso Calculado	0.697	8
	Compromiso Normativo	0.775	6
	GLOBAL	0.526	21
M.B.I.	Agotamiento Emocional	0.706	10
	Despersonalización	0.417	5
	Logros Personales	0.527	7
	GLOBAL	0.516	22

Fuente: investigación propia.

Tratamiento de datos En el análisis de los datos se utilizó el paquete Statistical Package for the Social Sciences (SPSS) para frecuencias, estadísticos descriptivos, la confiabilidad ( $\alpha$  de Cronbach); otras técnicas utilizadas fueron U Mann-Whitney para muestras independientes, la cual se utilizó como una aproximación para establecer las desigualdades entre grupos, es decir, si existen diferencias significativas entre ellos. La determinación de la correlación entre las subescalas se realizó a través del cálculo del coeficiente y su interpretación se basó en la Tabla 2:

Tabla 2: Valores Para la Interpretación del Coeficiente de Spearman

RANGO		RELACION	
0.00	a	0.25	Nula o escasa
0.26	a	0.50	Débil
0.51	a	0.75	Entre moderada y fuerte
0.76	a	1.00	Entre fuerte y perfecta

Fuente: Martínez, et al. (2009)

Para realizar la identificación del Compromiso Organizacional se empleó una escala construida (Tabla 3) a partir del número de ítems de cada cuestionario, en donde cada pregunta tiene cinco alternativas y considerando que solo existe una alternativa de respuesta para cada ítem

Tabla 3: Baremo de Intensidad para Compromiso Organizacional

Rango			Categoría
1	→	35	Nulo
36	→	70	Medio
71	→	105	Elevado

Fuente: Elaboración propia

Tabla 4: Baremo de Intensidad Para Desgaste Emocional

Rango			Categoría
1	→	37	Normal
38	→	74	Medio
75	→	120	Severo

Fuente: Elaboración propia

Respecto a la identificación del Desgaste emocional (*Burnout*) se utilizó la escala construida (Tabla 4) a partir del número de ítems del cuestionario, en donde cada pregunta tiene cinco alternativas y considerando que solo existe una alternativa de respuesta para cada ítem:

## RESULTADOS

Antes de realizar las pruebas estadísticas, los datos se sometieron al cumplimiento de los requisitos para la aplicación de las pruebas paramétricas, recurriendo para ello a la identificación de la normalidad de los datos a través de la aplicación de la prueba de Kolmogorov-Smirnov. La hipótesis estadística ( $H_0$ ) fue “el Desgaste emocional (*Burnout*) y el Compromiso Organizacional pueden modelarse con una distribución normal”. La Tabla 5 muestra que el nivel p para la prueba de Kolmogorov-Smirnov es significativo (esto es,  $p < 0.05$ ) por tanto se rechaza la hipótesis de manera que, las variables no pueden modelarse con una distribución normal por lo que hay que recurrir a las pruebas no paramétricas.

Tabla 5: Pruebas de Normalidad

	Kolmogorov-SmirnovaShapiro-Wilk			
	Estadístico	gl	Sig.	Estadísticogl Sig.
DESGASTE EMOCIONAL GLOBAL	.163	200	.000	.910 200.000
COMPROMISO ORGANIZACIONAL GLOBAL	.368	200	.000	.598 200.000

Desgaste Emocional Global a. Corrección de la significación de Lilliefors

De acuerdo a su media ( $\mu=68.55$ ), la evaluación general (Tabla 6) del Desgaste emocional de los empleados del sector salud través de las tres variables (agotamiento, despersonalización y logros personales), muestra un nivel medio, aunque se encuentra en el umbral del nivel alto de acuerdo al baremo establecido (Tabla 4).

Tabla 6: Estadísticos descriptivos/Desgaste Emocional

	Empleados del sector salud
N	200
Media	68.55

Mediana	69.00
Desviación Típica	6.67
Error Típico	0.471
Mínimo	52
Máximo	92

Fuente: *Elaboración propia con resultados de trabajo de campo Desgaste Emocional y género*

Para la identificación de la influencia del género sobre el desgaste emocional, la información recabada fue sometida a la prueba U Mann-Whitney para datos independientes. El valor de  $Z = -0.827$  asociado al valor  $p (.408)$  permiten afirmar que la distribución del Desgaste emocional es la misma entre las categorías de género (Femenino y Masculino; esto es no existen diferencias significativas entre los géneros; esto significa que el hecho de que los profesionales de la salud sean hombres o mujeres no influye en el desgaste que les genera el trabajo en la institución. Como previo a la identificación se determinaron los indicadores estadísticos; la Tabla 7 describe para cada género, los rangos promedio y la suma de rangos la media.

Tabla 7: Prueba de U Mann-Whitney. Rangos

VARIABLE	GENERO	N	Rangos promedio	Suma de rangos
Desgaste Emocional	Femenino	171	101.88	17422.00
	Masculino	29	92.34	2678.00
U Mann-Whitney 2243	Total:	200		
Z= -0.827, p = .408				

Fuente: *Elaboración propia con datos de campo Compromiso Organizacional Global*

De acuerdo a su media ( $\mu=64.52$ ), la evaluación general (Tabla 8) del Compromiso Organizacional de los empleados del sector salud través de las tres variables (afectivo, normativo y de continuidad), muestra un nivel favorable de compromiso con su organización; lo cual significa que el estado psicológico que caracteriza la relación entre los empleados y su organización es medio, de acuerdo al baremo establecido (Tabla 3)

Tabla 8: Estadísticos Descriptivos/Compromiso Organizacional

Empleados del sector salud	
N	200
Media	64.52
Mediana	66.00
Desviación Típica	5.96
Error Típico	0.42
Mínimo	41
Máximo	74

Fuente: *Elaboración propia con resultados de trabajo de camp Compromiso Organizacional y género*

Para la identificación de la influencia del género sobre el compromiso organizacional, la información recabada fue sometida a la prueba U Mann-Whitney para datos independientes. El valor de  $Z = -2.85$  asociado al valor  $p (.004)$  permiten afirmar que la distribución del Compromiso Organizacional es diferente entre las categorías de género (Femenino y Masculino; esto es existen

diferencias significativas entre los géneros; esto significa que el hecho de que los profesionales de la salud sean hombres o mujeres influye en su compromiso con la institución. Como previo a la identificación se determinaron los indicadores estadísticos; la Tabla 9 describe para cada género, los rangos promedio y la suma de rangos la media.

Tabla 9: Prueba de U Mann-Whitney. Rangos

VARIABLE	GENERO	N	Rangos promedio	Suma de rangos
Compromiso organizacional	Femenino	171	104.94	17945.00
	Masculino	29	74.31	2155.00
	Total:	200		
U Mann-Whitney 1720 Z= -2.85, p = .004				

Fuente: Elaboración propia con datos de campo

*Determinación de las diferencias entre el género y las subescalas del Modelo de Desgaste emocional (Burnout) y Compromiso Organizacional.* Para comprobar si esas diferencias son estadísticamente significativas se aplicó la prueba de U de Mann Whitney, cuyos resultados se describen en la Tabla 10, ahí se aprecia que el valor p asociado a las variables Agotamiento emocional ( $p=.975$ ) son mayores a 0.05 por tanto no es significativo. Con base en estos resultados es posible afirmar que no existen diferencias significativas entre estas variables; es decir, el género no conduce a niveles estadísticamente diferentes de Agotamiento emocional. Lo cual significa que el género no tiene impacto significativo en esta variable.

Mientras que, en esa misma Tabla se observa que las variables Compromiso afectivo, Compromiso calculado, Compromiso normativo, Despersonalización y Logros personales tienen un valor p menos a 0.05, por tanto, el género tiene un impacto significativo en estas variables.

Tabla 10: Pruebas de Hipótesis/U Mann-Whitney

Hipótesis Nula	Valor p	Decisión
La distribución de AGOTAMIENTO es la misma entre las categorías de género	.975	Retener hipótesis nula
La distribución de la DESPERSONALIZACIÓN es la misma entre las categorías de género	.001	Rechazar la hipótesis nula
La distribución de la LOGROS PERSONALES es la misma entre las categorías de género	.000	Rechazar la hipótesis nula
La distribución del COMPROMISO AFECTIVO es la misma entre las categorías de género	.005	Rechazar la hipótesis nula
La distribución del COMPROMISO NORMATIVO es la misma entre las categorías de género	.001	Rechazar la hipótesis nula
La distribución del COMPROMISO CALCULADO es la misma entre las categorías de género	.005	Rechazar la hipótesis nula

Fuente: Elaboración propia con datos de campo

#### Asociación entre variables del Desgaste emocional y Compromiso organizacional

Tabla 11: Coeficiente de Correlación Rho de Spearman de las Subescala del Desgaste Emocional y Compromiso Organizacional

		CA	CC	CN	AG	DE	LP
Compromiso Afectivo (Ca)	Coeficiente de correlación	1.000					
	Sig. (bilateral)	.					
Compromiso Calculado (Cc)	Coeficiente de correlación	-.515**	1.000				
	Sig. (bilateral)	.000	.				
Compromiso Normativo (Cn)	Coeficiente de correlación	-.622**	.579**	1.000			
	Sig. (bilateral)	.000	.000	.			

Agotamiento Emocional (Ag)	Coefficiente de correlación	.066	-.126	.115	1.000
	Sig. (bilateral)	.350	.076	.106	.
Despersonalización (De)	Coefficiente de correlación	-.119	.127	.029	-.156* 1.000
	Sig. (bilateral)	.094	.073	.682	.028
Logros Personales (Lp)	Coefficiente de correlación	-.056	-.069	.059	-.258**-.124 1.000
	Sig. (bilateral)	.430	.328	.404	.000 .080

\*\* La correlación es significativa al nivel 0,01 (bilateral). \* La correlación es significativa al nivel 0,05 (bilateral).

Fuente: Elaboración propia con datos de campo

## DISCUSIÓN

En este artículo se analizaron los niveles de burnout y compromiso organizacional que los empleados encuestados presentaron. El Desgaste emocional de los empleados del sector salud a través de las tres variables (agotamiento, despersonalización y logros personales), muestra un nivel medio, tendiente a alto, ya que se encuentra en el umbral del nivel alto de acuerdo al baremo establecido aunque el compromiso organizacional observado (Compromiso afectivo, de continuidad y normativo) en los empleados encuestados muestra un nivel favorable de compromiso, lo cual significa que el estado psicológico que caracteriza la relación entre los empleados y su organización es medianamente buena, estos resultados son inconsistentes con estudios previos (Rizzo et al., 1970; Greenhaus et al., 1989), ya que a pesar de que el compromiso de los empleados es aceptable, su nivel de agotamiento emocional tiene una tendencia alta. Esta característica se debe a que las organizaciones de salud públicas en México ofrecen estabilidad y mejores beneficios a los empleados, por lo que éstos se identifican rápidamente con la organización y una vez que ingresan no desean abandonar su empleo hasta su jubilación. Sin embargo, las sobrecargas de trabajo y los altos volúmenes de pacientes y exigencias mentales y físicas a que son sometidos, les ocasionan los niveles de agotamiento que se observan. A diferencia de otros estudios donde el agotamiento emocional y el compromiso observan una tendencia similar, donde la rotación de los empleados hospitalarios es alta y su nivel de burnout es alto. Asimismo, en todas las subescalas se observan diferencias significativas entre los géneros en la forma de experimentar las variables del estudio, excepto en el agotamiento emocional. En cuanto a la relación entre el agotamiento emocional y el compromiso organizacional, se observa una relación muy baja, solo en la subescala de realización personal es moderadamente significativa. Limitaciones y oportunidades de investigación futuras Primero, la muestra fue aplicada en un solo hospital público. Aunque la muestra fue considerablemente alta, se recomienda que se aplique simultáneamente en varios hospitales públicos para comparar los resultados. Segundo, los resultados en las pruebas de confiabilidad obtenidos para el instrumento de las Limitaciones del Trabajo (WLQ) fueron negativos, y los otros dos instrumentos presentaron confiabilidades muy bajas, por lo que se recomienda volver a aplicar los instrumentos cerciorándose de que no haya preguntas sin responder y que los empleados comprendan como contestar la encuesta.

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### RESUMEN

*El comportamiento de viajeros de la tercera edad o adultos mayores se ha transformado en un área susceptible e interesante de investigar debido a su tamaño actual y a su crecimiento esperado. En Estados Unidos hay un mercado creciente de niños que viajan sin papás, no se confunda, Vacacionan los abuelos con los nietos. El propósito de la primera parte de este estudio es primero: determinar cuántos adultos mayores vacacionan con sus nietos y segundo: a dónde prefieren viajar y por qué. Estudios e investigaciones demuestran que México tiene una población importante de adultos mayores, misma que mostrará una tendencia creciente en número por varias décadas. Esto tiene implicaciones importantes para el Turismo, el mercadeo y el desarrollo de productos. El sustento teórico metodológico de la investigación cualitativa, el lograr la descripción del fenómeno de estudio resulta completa y muestra el entorno de los sujetos a medir, que reflejan la realidad en el momento histórico de cada sujeto, en donde la observación directa y participativa, la entrevista, la encuesta, el autorreportaje, nos dieron el preámbulo hasta este momento, sin embargo no hay que olvidar que como seres humanos, nos involucramos más de lo debido y trabajar de manera hermenéutica.*

**PALABRAS CLAVE:** Turismo, Adultos Mayores, Nietos, Implicaciones, Tendencia, Desarrollo, Mercadeo

## TRAVELING WITH MY GRANDPARENTS

### ABSTRACT

*The behavior of senior travelers has become a relevant area of interest because of its market size and potential of growth. In the United States there is a growing market of children going on vacation without parents. This is children who travel along with their grandparents. The aim of the first stage in this study is to highlight: first; how many senior travelers in Guadalajara Jalisco, México go on vacation along with their grandchildren, and two: know where they prefer to go and why. A questionnaire and interviews were held combining quantitative and qualitative data. According to research Mexico shows an important senior population which will grow for decades. This has important implications for tourism, marketing and product development. The theoretical basis of qualitative research methodology, achieving the description of the phenomenon of study is complete and shows the environment of the subject to be measured, which reflect the reality in the historical moment of each subject, wherein the direct and participant observation, the conversational interview, the survey, self-report, we received the preamble to this point, however we must not forget that as human beings, we engage more than they should and work hermeneutics.*

**JEL:** L, I83, L84

**KEYWORDS:** Tourism, Senior Travelers, Grandchildren, Implications, Tendency, Development, Marketing.

## INTRODUCCIÓN

Las personas de más de 60 años, también llamados en México personas de la tercera edad o adultos mayores, se han transformado en los representantes de un mercado potencial digno de tomarse en cuenta y al cual sin duda, habrá que dirigir la mirada dado su tamaño actual y su crecimiento pronosticado.

Las previsiones demográficas brindan la enriquecedora posibilidad de anticiparse a demandas que atañen a diversos sectores productivos. El Consejo Nacional de Población (CONAPO) de la Secretaría de Gobernación, en sus proyecciones de la población de México 2000-2050, indican que los adultos mayores crecerán de una población media de 6 870 753 personas en el 2000 a una media de 36 222 237 personas el 2050, es decir, entre 2000 y 2050 la proporción de adultos mayores en México pasará de 7 a 28 por ciento. En la actualidad hay en el mundo alrededor de 1824 millones de niños (0 a 14 años), de acuerdo con las proyecciones de población de las Naciones Unidas, de los cuales 89 por ciento vive en los países menos desarrollados. En Latinoamérica residen 168 millones de niños (9.2% de los niños del mundo). En México reside alrededor de 20 por ciento de los niños latinoamericanos y cerca de 2 por ciento del total del mundo (CONAPO, 2006).

La población México ocupa el lugar número 11 en el mundo, siendo el tercero en América, por debajo de Estados Unidos de Norteamérica y Brasil. En el año 2000 residían en México 6.9 millones de personas de 60 años y más, en 2030 serán 22.2 millones y se estima que para el 2050 se alcance la cifra de 36.2 millones de personas. En el año 2005, siete entidades concentran casi a la mitad de la población total del país, Jalisco entre ellas con 6.8 millones de personas. De acuerdo con los resultados del II Censo de Población y Vivienda 2005, el país registró 103.3 millones de habitantes; de los cuales, 51.3% son mujeres y 48.7% son hombres. Lo anterior indica una relación de 95 hombres por cada 100 mujeres, aspectos que pueden ser significativos al atender las preferencias o tendencias por género. El Instituto Nacional de Geografía y Estadística en México (INEGI), creado por decreto presidencial el 25 de enero de 1983. Indica que desde hace 35 años se empezó a notar un ligero incremento en la cantidad de mujeres respecto a los hombres. Advierte igualmente que en 2010, esta diferencia se ha acentuado hasta llegar a 2.6 millones más de mujeres que de hombres. Según el último censo de población al 2010, hay 95 hombres por cada 100 mujeres. Lo anterior adquiere una importancia relevante si se considera que los hombres mueren más que las mujeres en todas las edades. Tal evento suscita que haya más mujeres que hombres de edades avanzadas. El Consejo Nacional de Población por su parte indica asimismo, que este comportamiento es característico del proceso de envejecimiento en todos los países del mundo, pero que se acentúa en los países desarrollados.

Haciendo referencia a los grupos de edad que brinda el Censo de Población y Vivienda 2005 referido con anterioridad, poco menos de la tercera parte de la población son niños menores de 15 años (30.6%), los jóvenes (15 a 29 años) representan 26.3%, los adultos (30-59 años) 32.3% y los mayores de 60 años, 8.1 por ciento, 2.7% de los habitantes no especificaron su edad. Si se suma 30.6% de los menores de 15 años al 8.1 % de mayores de 60 años, resulta que un 38.7% sería el porcentaje de niños viajando sin papás, un mercado potencial digno de tomarse en cuenta. De

acuerdo con las proyecciones de población, a mediados de 2013 el país contará con 33.6 millones de personas menores de 15 años de edad, quienes representarán el 28.4% del total de la población en México; se estima que para 2020 la cantidad de niños disminuya a 33.1 millones, que representará el 26% de la población total. Por grupos de edad se tiene que, actualmente, los niños menores de un año representan el 1.9% de la población total, los que tienen entre uno y cinco años el 9.4% y quienes tienen entre seis a catorce años de edad representan 17.1%. Para 2020 se tiene proyectado que el porcentaje niños menores de un año, respecto a la población total, sea de 1.7%, que el grupo de uno a cinco años represente 8.7% y el de seis a catorce años el 15.7%. (CONAPO, 2013).

El Consejo Nacional de Población, advierte que en México, el proceso de envejecimiento avanza de manera vertiginosa, ya que actualmente hay unas seis millones de personas que son adultos mayores con un crecimiento del 3.5 % anual, cifra que se duplicará en 2020. Durante la presentación del Programa Nacional de Población 2008-2012, Vélez Fernández subrayó que dicho ritmo de crecimiento implicará que su número se duplicará cada 20 años, por lo que se espera que su crecimiento alcance el 4.2% anual en 2020. Las dos fuentes de información anteriores demuestran que México tiene una población importante de adultos mayores, misma que mostrará una tendencia creciente en número por varias décadas. Esto tiene implicaciones importantes para el Turismo, el mercadeo y el desarrollo de productos.

Según datos de la Secretaría de Turismo (SECTUR); el mercado doméstico es de gran importancia dentro del sector, ya que se estima que representa alrededor del 80% de la actividad turística de México.

Si a esto se le añade una actitud que se ha venido observando crecer en algunos países como Estados Unidos de Norteamérica por ejemplo; la de “viajar sin papás”, es decir ver que abuelos y nietos viajan juntos y disfrutan períodos vacacionales más y más cada día, hace pensar que en México se esté dando la misma tendencia, aunque muy probablemente, dadas las diferencias socioculturales, no con las mismas características. Para poder determinar las características de los adultos mayores en México que viajan con sus nietos, será necesario estudiar: los hábitos de viaje del adulto mayor (genérico) al vacacionar con sus nietos, las actividades que realizan, el nivel de gastos efectuados, los sentimientos que les provocan los viajes, las preferencias y las motivaciones que los inducen a viajar, y aspectos como: la duración, el destino y la procedencia del viaje por mencionar sólo algunos, son indudablemente aspectos y conductas que habrán de investigarse y no perder de vista.

### Objetivos

El objetivo principal es analizar el perfil y el comportamiento de los adultos mayores que viajan y hacen turismo doméstico. Es decir: que viajan con sus nietos sin salir de las fronteras del país. Esto servirá para evaluar de manera práctica el potencial que desde la perspectiva del turismo, por mencionar un eje disciplinar, tiene la unión de estos dos universos de la población mexicana, lo que puede provocar o ya esta provocando. Habrá que indagar cómo desarrollar, planear y comercializar para bien cuidar, lo que parece ser un segmento de mercado digno de ser considerado tanto por Gobiernos e instituciones, así como por diversas empresas del sector y desde luego por instituciones educativas.

Los objetivos particulares son:

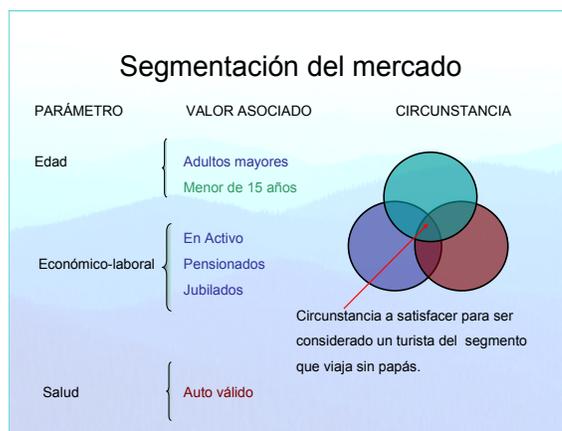
- Evaluar de manera práctica el potencial que desde la perspectiva del turismo, tiene la unión de estos dos universos de la población en la Región Valles y Guadalajara en Jalisco.

- Fundamentar el desarrollo, la planeación y la comercialización “sostenida” de este segmento de turismo.
- Diversificar la investigación en el segmento de Adultos Mayores.
- Comparar o constatar perfiles y comportamientos del Segmento Adultos Mayores en estudios o investigaciones hechas por diversas instancias investigativas.
- Averiguar si los adultos mayores de Guadalajara y Ameca, hacen turismo con sus nietos.
- Averiguar entre otros aspectos a dónde prefieren viajar, cuándo y por qué.
- Depurar instrumentos de captura de datos y datos para la siguiente fase de la investigación
- Detectar el género predominante en los adultos mayores las comunidades referidas anteriormente.

### Definición

Un adulto Mayor es: Toda persona mayor de 60 años: auto válida, que trabaja o bien tiene una jubilación o una pensión y que puede viajar con sus nietos menores de 15 años y pernoctar en un destino turístico. Ver Figura 1.

Figura 1: Muestra la Segmentación de Mercado



### Mercado Potencial

Entre 2000 y 2006 la población de adultos mayores creció en 1.5 millones de personas, al pasar de 6.7 a 8.2 millones, lo que representa un incremento de cerca de 20 por ciento. En el II Censo de Población y Vivienda 2005, el país registró 103.3 millones de habitantes:

*51.3% son mujeres.*

*48.7% son hombres.*

*30.6% son niños menores de 15 años (poco menos de la tercera parte de la población).*

Hay aproximadamente 84 hombres por cada 100 mujeres en edades avanzadas en México. 58% vive en ciudades con más de 15 mil habitantes. En 1 de cada 4 hogares vive un adulto mayor. 6.4% de los hogares está integrado exclusivamente por adultos mayores.

*En 2000 la proporción de adultos mayores fue de alrededor de 7.0 %. Se estima que en 2020 el porcentaje se incremente a 12.5 % y en 2050 alcance el 28.0 %*

*En 2000 había 20.5 adultos por cada 100 niños. Se espera:*

*que el número de adultos mayores sea igual al de niños alrededor de 2034*

*que el índice llegue a 166.5 adultos mayores por cada 100 niños en 2050.*

*Se espera que en 2050 haya poco más de 36 millones de adultos mayores, de los cuales más de la mitad tendrán más de 70 años.*

A través de la tabla 1, en 2013 se puede observar la información de índices demográficos 2010-2050:

Tabla 1: Muestra de Algunos Indicadores Demográficos

República Mexicana: Indicadores demográficos, 2010-2050					
Indicador	2010	2011	2012	2013	2014
Población a mitad de año	114,255,555	115,682,868	117,053,750	118,395,054	119,713,203
Hombres	55,801,919	56,519,798	57,174,268	57,810,955	58,435,900
Mujeres	58,453,636	59,163,070	59,879,482	60,584,099	61,277,304

Fuente: CONAPO. En: [http://www.conapo.gob.mx/es/CONAPO/De\\_las\\_Entidades\\_Federativas\\_2010-2050](http://www.conapo.gob.mx/es/CONAPO/De_las_Entidades_Federativas_2010-2050)

El Mercado Doméstico constituye alrededor del 80% de la actividad turística de México. Desde que en el año 2001 se llevó a cabo la Encuesta Urbana de Turismo Doméstico en Hogares, no se contaba con información sobre el comportamiento de los viajeros residentes de la República Mexicana. La Cámara de Comercio Servicios y Turismo de México, advierte que el estudio de Hábitos de Consumo del Turista Nacional se concretó a través de una encuesta a turistas reales de los tres mercados emisores de turismo doméstico: Ciudad de México, Guadalajara y Monterrey. Es de suma importancia considerar el factor salud a la hora de hacer turismo, ya que el incremento en la población de adultos mayores requiere de atenciones cada vez mayores y servicios oportunos para la prevención de enfermedades que permitan alcanzar una longevidad con calidad de vida. De acuerdo a estimaciones de la Encuesta Nacional de Salud y Nutrición 2006 (ENSANUT), el padecimiento más frecuente en personas de 65 años y más es la hipertensión (35 %), seguido por la diabetes (17), enfermedades del corazón con (10.0%), insuficiencia renal (2.1%) y cáncer (1.4%).

## METODOLÓGIA

La metodología para llevar a cabo la presente investigación; parte de un estudio realizado en 2006-2007 y se reforzará con una investigación durante 2013-2014 con el fin de hacer cruces de información una vez concluidas ambas investigaciones. Ambos esfuerzos; son investigaciones de corte cualitativo, que recurren a técnicas como la etnográfica, la entrevista, la encuesta y el cuestionario. El interés por investigar cualitativamente en a través de alumnos del Centro Universitario de los Valles encuentra fundamentado en la afirmación por parte de investigadores (Jesús Ibáñez, 1992; Jesús Galindo, 1994; Francisco J. Mercado, 1996; Rosanna Reguillo, 1996) en cuanto a que la investigación cualitativa es una de las actividades que ha generado un creciente interés en los últimos años. Se ha de confesar que la investigación cualitativa significa para mí un reto personal, que puede ser descrito fácilmente retomando las palabras de Rossana Reguillo cuando enfatiza que uno de los “problemas centrales de la metodología es el análisis interpretativo” (Reguillo, 2002, p. 36). Ese reto personal resulta apasionante precisamente por la dificultad que ofrece la interpretación de una determinada realidad. En este tenor se coincide

ampliamente y se afirma, al igual que Reguillo lo hace, que “la investigación no se agota con el registro de la realidad. Los datos no “hablan, se los hace hablar” (Reguillo, 2002, p. 36). Así pues el reto a vencer es lograr que los datos hablen.

### Cronograma

FASE I: (mayo/julio 06)

Acciones Metodológicas

Etnografía y entrevistas abiertas.

FASE II: (septiembre/noviembre 06)

Elaboración y aplicación de un cuestionario a residentes de la Región Valles y Guadalajara. (Estudiantes de 1° y 6° de Turismo en el área de Inglés).

FASE III: (enero/mayo 07)

Acciones Metodológicas

Interpretación de la información (posibles modificaciones o adaptaciones).

FASE IV: (mayo/julio 13)

Acciones Metodológicas

Etnografía y entrevistas abiertas.

FASE V: (septiembre/noviembre 13)

Elaboración y aplicación de un cuestionario a residentes de la Región Valles y Guadalajara. (Estudiantes de 1° y 6° de Turismo en el área de Inglés).

FASE VI: (enero/mayo 14)

Acciones Metodológicas

Interpretación de la información (posibles modificaciones o adaptaciones).

### **CONCLUSIONES**

A la fecha y de acuerdo a los resultados obtenidos a través de las primeras tres fases de la investigación; el tipo de turismo que hacen los nietos y los abuelos “*Viajando con mis Abuelos*”, debe considerarse en México como un mercado meta si se considera que es un país que envejece. Es necesario efectuar adecuaciones en paquetes turísticos, hoteles, agencias de viajes, líneas aéreas, etc. A fin de que abuelos y nietos puedan compartir tiempo de calidad en sus vacaciones en la medida de sus presupuestos. En México los adultos mayores viajan más que antes y también viajan con sus nietos. En México casi por regla general los abuelos comparten la vivienda con familiares (nietos entre ellos); de tal forma al vacacionar con ellos pareciera que simplemente modifican el espacio común e idealmente refuerzan el afecto y los lazos familiares que los unen. Por el número de habitantes de México, por el promedio de vida tanto de hombres como de mujeres y por el nivel de gasto que efectúa al salir de vacaciones; el adulto mayor mexicano que viaja con sus nietos puede llegar a ser un turista que las diversas empresas del ramo turístico no querrán desaprovechar.

Si el nuevo segmento de turismo diagnosticado; que hemos denominado “Viajando con mis Abuelos”, efectuado por abuelos y nietos se englobara dentro de la categoría Turismo Social; tendría que fomentar una actividad turística a bajo costo, propiciar que las personas de escasos recursos económicos conozcan su región, su estado, su país y al hacer turismo, y al cumplir con

sus propósitos personales al hacerlo disfruten, compartan experiencias y desde luego mejoren sus relaciones interpersonales, contribuyan al conocimiento de su identidad cultural y muy importantemente hagan consciencia y aprendan a valorar la necesidad de preservar la riqueza natural y cultural del mundo y no sólo de una región o de un país.

Al englobar este nuevo segmento de turismo en Turismo Gerontológico, habría que diagnosticar cuántos abuelo viajan con sus nietos y cuántos lo hacen sin ellos, e idealmente descubrir la razón de lo anterior.

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# USO DE LAS TECNOLOGÍAS DE INFORMACIÓN Y COMUNICACIÓN. UNA CONTEXTUALIZACIÓN DESDE EL CASO DE LAS PYMEs MEXICANAS.

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## RESUMEN

*El ambiente competitivo en que viven las pequeñas y medianas empresas, hace presión para que ellas adopten tecnologías de información y comunicación con el fin de agilizar sus procesos, de participar en la generación de innovación, de obtener información más veraz, oportuna y confiable que conlleva a la creación de valor. Estas empresas constituyen más del 90% de las empresas en México, son una fuente de empleo y autoempleo, así como también albergan la mano de obra poco calificada. En este sentido, el objetivo de este trabajo es identificar el entorno en que se desarrollan las pequeñas y medianas empresas (PYMEs) con la adopción de las tecnologías de información y comunicación, especialmente en el caso mexicano. Los resultados revelan que las empresas mexicanas, especialmente las PYMEs, reflejan una mejora en la adopción de TICs, sin embargo, es notoria su inclinación por el uso de las TICs básicas, la PC, el Internet, el correo electrónico. Por tamaño de empresa se advierte una amplia brecha digital, siendo las grandes empresas las que mayor uso hacen de estas tecnologías y son las de menor tamaño quienes no aprovechan los beneficios que aportan estas tecnologías.*

**PALABRAS CLAVE.** TICs, PYMEs

## USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES. CONTEXT FROM A CASE OF MEXICAN SMEs.

### ABSTRACT

*The competitive environment where the small and medium enterprises live presses for them to adopt information and communication technologies in order to streamline their processes, to participate in the generation of innovation, to obtain more accurate and reliable information that create value. These companies account for 90 % of companies in Mexico, they are a source of employment and self-employment. In this sense, the purpose of this work is to identify the environment in which the small and medium enterprises (SMEs) adopt information and communication technologies, especially in the Mexican case. The results reveal that Mexican firms, especially SMEs, reflect an improvement in ICT adoption, however, they use basic ICT, as PC, Internet, e-mail. By size of company, there are a wide digital divide, where the larger companies use most of these technologies and the smaller ones are those who do not take advantage of the benefits provided by these technologies*

**JEL:** M15, M13

**KEYWORDS.** ICT, SMEs

### INTRODUCCIÓN

El entorno empresarial cada vez más dinámico y complejo exige a las empresas la búsqueda de valor y estrategias y herramientas que permitan adaptación en un mercado global. Las tecnologías de información y comunicación como una parte importante del capital estructural que poseen las empresas ofrecen la posibilidad de agilizar los procesos, de participar en la generación de innovación, de obtener información más veraz, oportuna y confiable que conlleva a la creación de valor (Barney, 1991) y a la generación de conocimiento (Pérez y Dressler, 2007) para que la empresa no sólo sea competitiva en el corto, sino también en el largo plazo. En este entorno, ya difícil para el sector empresarial, se advierte aún más incertidumbre en torno a aquellas empresas que por su tamaño ya presentan una limitante; su gran representatividad en número, la aportación que hacen a la economía, la oportunidad que representan como fuente de autoempleo, además de dar albergue a la mano de obra no especializada, hacen que se muestre un particular interés por su estudio.

## REVISIÓN LITERARIA

### Tecnologías de Información y Comunicación

Las Tecnologías de información y comunicación (TICs) son múltiples herramientas tecnológicas dedicadas a almacenar, procesar y transmitir información; aunque no son una panacea ni representan una solución a un problema específico, si son mecanismos que agilizan la comunicación, eficientan la gestión administrativa, participan en los procesos de innovación, colaboran en la gestión del conocimiento, entre otras aportaciones, en una organización. The Global Information Technology Report 2003-2004, citado en Garduño (2004) con el uso de TICs, una empresa puede beneficiarse: 1) Reduciendo costos y haciendo más eficientes las operaciones al reemplazar los procesos manuales, 2) Incrementando ingresos mediante publicidad con su sitio Web, 3) Abarcando nuevos mercados nacionales e internacionales y clientes mediante el uso de Internet, 4) Facilitando la interacción con clientes, proveedores, empleados, accionistas, visitantes, etc. El convencimiento a las PYMEs sobre la adopción de TICs, implica mostrarles los beneficios que la inversión les retribuirá; así podemos encontrar estudios que desde diferentes ópticas pretenden reflejar esas ventajas. Las TICs aportan beneficios a la organización cuando a la par de su adopción se realizan inversiones complementarias en capacitación, cambios organizacionales e innovación, es decir, sin ellas, el impacto puede ser limitado (OCDE, 2002). Balboni, Rovira y Vergara (2011) estudian la adopción de las TICs y su resultado en la productividad y encuentran que efectivamente existe una relación, siempre y cuando incorporen otras variables como son calidad del capital humano, capacidades innovadoras y cambios organizacionales. Rohrbeck (2010) estudia los efectos que tienen las TICs sobre las ventajas competitivas sostenibles y llegan a la misma conclusión, el uso de las TICs no genera beneficios por el sólo hecho de adoptarlas.

Dibrell, Davis y Craig (2008) evidencian que el aporte esencialmente indirecto de las TICs al mejoramiento del desempeño de las empresas se da a través de las actividades de innovación. Las TICs generan mejoras en el desempeño empresarial, pero los resultados no se dan de forma automática por el sólo hecho de adoptarlas, su potencialización depende de que la introducción de estas tecnologías esté acompañada por cambios profundos en los procesos internos y en las relaciones de la empresa con proveedores, clientes y socios (OCDE, 2004). Balboni, Rovira y Vergara (2011) investigan el vínculo entre TIC y productividad en las empresas de Argentina, Chile, Colombia, Perú y Uruguay, poniendo énfasis en la complementariedad de las TIC con otros factores determinantes para el desempeño económico de las firmas, como la calidad del capital humano, las capacidades innovadoras y los cambios organizacionales. La adopción de las

TICs traerá beneficios a la empresa cuando ésta se acompañe de capacitación del capital humano por ser el principal elemento del que depende la capacidad de absorción (Cohen y Levinthal, 1990). La presión competitiva y la relación con clientes y proveedores, así como sus exigencias pueden influenciar positivamente la propensión hacia la incorporación y utilización de TICs en las empresas (Dutta y Evrard, 1999). Otro importante aspecto a considerar lo representa el marco normativo del país o región que exige a las empresas ciertas condiciones tecnológicas para dar cumplimiento, como es el caso, del desarrollo del e-government que ha motivado u obligado a las empresas a realizar trámites como la declaración de impuestos, declaraciones informativas, trámites de alta, baja o cambio de giro, trámites aduaneros, firma electrónica, facturación electrónica, entre otros (Ca'Zorzi, 2011; Arduini, Nascia y Zanfei, 2010) que requieren de otras tecnologías que garanticen la seguridad de la información (Rivas y Stumpo, 2011).

Por otra parte, la existencia de una diferencia relevante entre la incorporación de una determinada tecnología y el uso que se da a la misma, son aspectos asociados con las especificidades tanto sectoriales como empresariales; por ejemplo, existen sectores que intensifican más el uso de las TICs, tienen mayor conocimiento sobre ellas, que otros (Torrent-Sellens y Ficopal-Cusi, 2010). La competitividad del sector en que participan influye para que empresas de un mismo sector tiendan a adoptar tipologías de TICs similares, esto como un resultado de características y actitudes homogéneas con respecto a cómo asumen el cambio técnico, además de contar con empleados con actitudes también parecidas hacia la incorporación de nuevas tecnologías (Salmerón y Bueno, 2006). Para el caso de las tecnologías de comunicación, la banda ancha, la calidad de la conectividad y el grado de apropiación requieren complementarse con acciones que impulsen el desarrollo de los activos intangibles, en especial en innovación y recursos humanos y empresariales (Cimoli y Correa, 2010).

### Tecnologías de la Información y la Comunicación y las Pymes

La introducción de TICs en PYMEs ha evidenciado cómo el grado de adopción depende en gran medida de las propias características de la empresa y de sus competencias endógenas (Dutta y Evrard, 1999), como es el caso del tamaño de la empresa que ha sido una de las variables explicativas más analizadas en la literatura. Se usa el tamaño de la empresa como el indicador de los recursos propios; las grandes empresas disponen de una mayor cantidad de recursos materiales, financieros y humanos lo cual les permite invertir más en TICs, además de afrontar cualquier riesgo de manera más fácil que pudiera ser el resultado de la introducción de una nueva tecnología (Haller y Siedschlag, 2011; Arduini, Nascia y Zanfei, 2010; Boschma y Weltevreden, 2008; Lal, 2009).

Las TICs impactan al desempeño siempre y cuando vayan acompañadas de inversiones complementarias en capacitación, cambios organizacionales o innovación, es decir, sin ellas, el impacto puede ser limitado (OCDE, 2002). En este contexto se observa que las empresas de menor tamaño se encuentran en desventaja por la dificultad para acceder y retener trabajadores que poseen niveles elevados de conocimiento y de habilidades que permitan el aprovechamiento de las potencialidades de las TICs, problemática que se ve afectada aún más por la debilidad y baja eficacia de las políticas públicas en las áreas de formación y capacitación (OCDE, 2012) que ofrecen organismos gubernamentales en apoyo a la competitividad de este importante sector. Otra limitante, es la elevada centralización de procesos en la toma de decisiones, donde la actitud hacia las TICs y la familiaridad con las mismas por parte del propietario de la firma o de su administrador, influyen fuertemente en las posibilidades de incorporar estas tecnologías (Lal, 2009; Huaroto, 2012). Es latente que aquellas PYMEs que participan exclusivamente en el

mercado interno, con producción de bienes de bajo valor agregado e intensiva utilización de mano de obra poco calificada, también tienen una incorporación reducida de TICs (Katz, 2009).

## METODOLOGÍA

El estudio de las pequeñas y medianas empresas representa un conflicto por las diferencias que existen en cuanto a la clasificación que por su tamaño, cada país o zona geográfica define; realizan sus propias estratificaciones de acuerdo a número de empleados o de ingresos, situación que a veces hace difícil la comparación. Adicionalmente estas clasificaciones por tamaño incluyen otra, que se enfoca a cada sector de actividad. En México la estratificación de empresas publicada en el Diario Oficial de la Federación el 30 de marzo de 1999 se basa en el número de empleados, de esta manera se tiene para el sector manufactura: micro 0-10, pequeña 11-50, mediana 51-250, grande 251 en adelante; para el sector comercio: micro 0-10, pequeña 11-30, mediana 31-100, grande 101 en adelante; y para el sector servicios: micro 0-10, pequeña 11-50, mediana 51-100, grande 101 en adelante. El otro problema es el incipiente uso de las TICs que hacen las PYMEs; razones por las que esta investigación pretende hacer una aportación a la literatura mediante el objetivo: identificar el entorno en que se desarrollan las pequeñas y medianas empresas (PYMEs) con la adopción de las tecnologías de información y comunicación, especialmente en el caso mexicano; para ello se hace una revisión de la literatura, se acude a estadísticas y se realiza un análisis de la base de datos de INEGI en cuanto al uso que hacen de las TICs. En primer lugar se presentan los resultados por sector de actividad y en segundo por sector de actividad y tamaño de empresa.

## RESULTADOS

### Contexto de la Adopción de Tics en las Pymes Mexicanas

*Por sector de actividad:* El uso de las TICs en México es bastante limitado (Saavedra y Zúñiga, 2011), durante 2011, según el Módulo sobre disponibilidad y uso de las tecnologías de la información en los hogares, los usuarios de computadoras correspondieron a un 41.9%, de donde el 30% estaba en los hogares, el uso de internet fue de 37.2%, de donde el 23.3% también se identificó en los hogares. Las PYMEs utilizan de forma regular los medios más esenciales de TICs como son el correo electrónico, procesadores de textos, hojas de cálculo y en menor medida el uso de página de Internet, éste sólo para actividades de promoción de sus productos; específicamente para el sector manufacturero del estado de Coahuila, el 92% utiliza el correo electrónico, 37% tiene página de Internet, y por medio de ella el 87% se relaciona con sus clientes y proveedores (Hernández, De la Garza y Rodríguez, 2007).

En el caso de la industria manufacturera y maquiladora de la ciudad de Ensenada, Baja California, el 32% de estas empresas cuenta con una red de área local con acceso a Internet y el resto sólo tienen computadoras sin ninguna red, el 56% ha implementado sistemas ERP (Enterprise Resource Planning) y un 50% tiene sistemas de información de control de personal (López, et al., 2006). Esparza, Navarrete y Sansores (2012) realizaron un estudio en PYMEs del centro y sur del estado de Quintana Roo, ellos concluyeron que las empresas familiares utilizan con menor intensidad las TICs, a diferencia de aquellas que no son familiares; en estas últimas, sus propietarios o gerentes quienes poseen una mayor formación académica conocen los beneficios de la aplicación de las TICs, cuentan con un plan estratégico formal y se preocupan por la capacitación de sus trabajadores. En Aguascalientes, un estudio reveló que las micro, pequeña y medianas empresas con mayor grado de utilización de las TICs obtienen un mayor rendimiento, basado en medidas de eficiencia y productividad; su implementación generalmente

afecta favorablemente a todas las áreas funcionales de la organización permitiendo una mayor agilidad en la generación, acceso y distribución de la información, así como una mayor coordinación en la toma de decisiones, mejora en la conexión y asistencia a clientes y proveedores; la hipótesis permitió verificar que las TICs representan una gran oportunidad para que las empresas, especialmente para que las PyMEs mejoren su nivel de competitividad (Maldonado, et al., 2010).

Las principales causas que han impedido la adopción de las TIC en las empresas mexicanas son: 1) la baja percepción de los beneficios relacionados a la apropiación de TIC entre empresarios y en la población en general; 2) las barreras de entrada y rezagos regulatorios que inhiben una competencia más vigorosa en el sector de telecomunicaciones; 3) la desigualdad económica y social del país; 4) la falta de planeación y visión en las políticas públicas para impulsar la adopción de TICs (AMITI et al., 2006). De acuerdo al Censo Económico 2009, en la sección relacionada con la innovación tecnológica y su uso (INEGI, 2009:104-109), de las 70769 unidades económicas únicas y matrices, 79.5% utilizó computadoras en el desarrollo de sus actividades, de las cuales 96.7% empleo internet para la realización de sus labores. En cuanto al tipo de redes de comunicación utilizadas de las 70769 unidades económicas que utilizaron la computadora, 76.8% también utilizaron algún tipo de red (extranet, intranet o internet), en este contexto, 77.2% de las unidades económicas emplearon internet como herramienta de apoyo en sus actividades sustantivas, mientras que 20.6% contó con una red de intranet y sólo 5.9% con una de extranet. De las principales tareas en las que utilizaron internet, un poco más de 54000 unidades económicas utilizaron internet como complemento al desarrollo de sus actividades sustantivas. Cabe mencionar que: 1) 68.0% de las unidades económicas utilizaron internet para realizar búsquedas de información que coadyuvaran a mejorar sus procesos productivos o contactar clientes y proveedores; en este uso, nuevamente las actividades de los servicios destacaron con 13432 unidades económicas, de las cuales 48.7% formaron parte de los servicios de alojamiento temporal y de preparación de alimentos y bebidas; 2) 63.9% de las unidades económicas usaron internet para realizar operaciones bancarias y financieras; 3) 52.8% de las unidades económicas usaron internet para realizar trámites o gestiones gubernamentales; 4) 34.8% de las unidades económicas usaron internet para gestión de la empresa; 5) 34.7% de las unidades económicas usaron internet para comprar o vender productos (INEGI, 2009:104-109).

Las diferencias que existen en cuanto al uso de equipo de cómputo en las empresas evidencian una brecha digital variable que depende de los sectores económicos en donde operan las empresas y de las zonas geográficas del país. Según el censo 2003, INEGI reportó que en México en el sector comercio, el 9.3% emplea TICs para realizar procesos administrativos, 5.9% emplea Internet en sus relaciones con clientes y proveedores, 3.6% emplea equipo de cómputo en procesos técnicos o de diseño, 3.4% desarrolla programas o paquetes informáticos para mejorar sus procesos (Ver tabla 1).

Tabla 1: Empresas del Sector Comercio Que Usan Tics

Número de empresas	Emplea equipo de cómputo en procesos administrativos		Emplea internet en sus relaciones con clientes y proveedores		Emplea equipo de cómputo en procesos técnicos o de diseño		Desarrolla programas o paquetes informáticos para mejorar sus procesos	
	Si emplea	No emplea	Si emplea	No emplea	Si emplea	No emplea	Si desarrolla	No desarrolla
1580587	146226	1434361	93297	1487290	57356	1523231	53163	1527424
	9.3%		5.9%		3.6%		3.4%	

Fuente. Elaboración propia en base a INEGI (2004)

En el sector manufactura, el 12.3% emplea TICs para realizar procesos administrativos, 9.2% emplea Internet en sus relaciones con clientes y proveedores, 8.7% emplea equipo de cómputo en procesos técnicos o de diseño, 4.9% desarrolla programas o paquetes informáticos para mejorar sus procesos (Ver tabla 2).

Tabla 2: Empresas del Sector Manufactura Que Usan Tics

Número de empresas	Emplea equipo de cómputo en procesos administrativos		Emplea internet en sus relaciones con clientes y proveedores		Emplea equipo de cómputo en procesos técnicos o de diseño		Desarrolla programas o paquetes informáticos para mejorar sus procesos	
	Si emplea	No emplea	Si emplea	No emplea	Si emplea	No emplea	Si desarrolla	No desarrolla
328718	40576	288142	30398	298320	28561	300157	16185	312533
	12.3%		9.2%		8.7%		4.9%	

Fuente. Elaboración propia en base a INEGI (2004)

En el sector servicios, el 15.7% emplea TICs para realizar procesos administrativos, 10.3% emplea Internet en sus relaciones con clientes y proveedores, 8.5% emplea equipo de cómputo en procesos técnicos o de diseño, 5.9% desarrolla programas o paquetes informáticos para mejorar sus procesos (Ver tabla 3).

Tabla 3: Empresas del Sector Servicios Que Usan Tics

Número de empresas	Emplea equipo de cómputo en procesos administrativos		Emplea internet en sus relaciones con clientes y proveedores		Emplea equipo de cómputo en procesos técnicos o de diseño		Desarrolla programas o paquetes informáticos para mejorar sus procesos	
	Si emplea	No emplea	Si emplea	No emplea	Si emplea	No emplea	Si desarrolla	No desarrolla
1013743	159429	854314	104045	909698	85938	927805	59860	953883
	15.7%		10.3%		8.5%		5.9%	

Fuente. Elaboración propia en base a INEGI (2004)

Derivado de las tablas anteriores, se puede observar que el uso que le dan a las TICs por sector, se manifiesta:

1. En cuanto al empleo de equipo de cómputo en procesos administrativos, el primer lugar lo ocupa el sector servicios, el segundo el sector manufacturero y el tercer lugar lo ocupa el sector comercio.
2. En cuanto al empleo de internet en sus relaciones con clientes y proveedores el primer lugar lo ocupa el sector servicios, el segundo el sector manufacturero y el tercer lugar lo ocupa el sector comercio.
3. En cuanto al empleo de equipo de cómputo en procesos técnicos o de diseño, el primer lugar lo ocupa el sector manufactura, el segundo el sector servicios y el tercer lugar lo ocupa el sector comercio.
4. En cuanto al desarrollo de programas o paquetes informáticos para mejorar sus procesos el primer lugar lo ocupa el sector servicios, el segundo el sector s manufactura y el tercer lugar lo ocupa el sector comercio.

La adopción de las TICs depende en gran medida de la capacitación del personal (Cohen y Levinthal, 1990; OCDE 2002; OCDE 2012), y aunque en México, esta actividad es aún

incipiente, ya existen avances, de acuerdo a lo reportado por INEGI en el módulo de innovación e investigación del censo económico 2004. Se encuestaron 138492 empresas de donde se observa que la capacitación se da en el 56% de las empresas de manufactura, 47% en las empresas de servicios y 57% en las empresas de comercio; es el sector servicios quien está más rezagado. Del total de empresas que capacitan en el uso de nuevas tecnologías el sector manufactura participa con un 14%, servicios con 26% y el sector comercio con 60%, siendo este último el que despunta (Ver tabla 4).

Tabla 4: Empresas Por Sector de Actividad Que Capacitan al Personal en el Uso De Nuevas Tecnologías o Procesos de Trabajo 2003

Número de empresas	Sectores de actividad									Total que si capacita
	Manufactura			Servicios			Comercio			
138492	Total	si	no	Total	si	no	Total	si	no	75110
	19266	10771	8495	40642	19169	21473	78584	45170	33414	
		56%			47%			57%		
		14%			26%			60%		100%

Fuente. Elaboración propia en base a INEGI (2004). Módulo de innovación e investigación del censo económico 2004

#### Por Sector de Actividad y Tamaño De Empresa

La brecha digital en el uso de TICs por tamaño de empresa es bastante amplia, de tal suerte que se puede observar que en el sector comercio, el empleo equipo de cómputo en procesos administrativos se da para las empresas grandes en un 95%, en las empresas medianas 93%, las empresas pequeñas 84% y 7% en las microempresas. El uso de Internet en sus relaciones con clientes y proveedores se da para las empresas grandes en un 80%, en las empresas medianas 74%, las empresas pequeñas 60% y 4% en las microempresas. El empleo de equipo de cómputo en procesos técnicos o de diseño se da para las empresas grandes en un 56%, en las empresas medianas 47%, las empresas pequeñas 35% y 3% en las microempresas. Y el desarrollo programas o paquetes informáticos para mejorar sus procesos se da para las empresas grandes en un 66%, en las empresas medianas 48%, las empresas pequeñas 35% y 2% en las microempresas (Ver tabla 5).

Tabla 5: Establecimientos Por Tamaño, del Sector Comercio Que Usan Tics

Tamaño de empresa	Total	Emplea equipo de cómputo en procesos administrativos		Emplea internet en sus relaciones con clientes y proveedores		Emplea equipo de cómputo en procesos técnicos o de diseño		Desarrolla programas o paquetes informáticos para mejorar sus procesos	
		Si emplea	No emplea	Si emplea	No emplea	Si emplea	No emplea	Si desarrolla	No desarrolla
Total	1580587	146226	1434361	93297	1487290	57356	1523231	53163	1527424
Micro	1533865	105851	1428014	62996	1470869	39090	1494775	34503	1499362
Pequeña	33031	27630	5401	19924	13107	11478	21553	11399	21632
Mediana	9976	9229	747	7412	2564	4715	5261	4798	5178
Grande	3715	3516	199	2965	750	2073	1642	2463	1252
Micro		7%		4%		3%		2%	
Pequeña		84%		60%		35%		35%	
Mediana		93%		74%		47%		48%	
Grande		95%		80%		56%		66%	

Fuente. Elaboración propia en base a INEGI (2004)

Tabla 6: Establecimientos Por Tamaño, del Sector Manufactura Que Usan Tics

Tamaño de empresa	Total	Emplea equipo de cómputo en procesos administrativos		Emplea internet en sus relaciones con clientes y proveedores		Emplea equipo de cómputo en procesos técnicos o de diseño		Desarrolla programas o paquetes informáticos para mejorar sus procesos	
		Si emplea	No emplea	Si emplea	No emplea	Si emplea	No emplea	Si desarrolla	No desarrolla
Total	328718	40576	288142	30398	298320	28561	300157	16185	312533
Micro	298678	17026	281652	11667	287011	13340	285338	5567	293111
Pequeña	19754	13866	5888	10128	9626	7687	12067	5096	14658
Mediana	7235	6727	508	5866	1369	4892	2343	3379	3856
Grande	3051	2957	94	2737	314	2642	409	2143	908
Micro		6%		4%		4%		2%	
Pequeña		70%		51%		39%		26%	
Mediana		93%		81%		68%		47%	
Grande		97%		90%		87%		70%	

Fuente. Elaboración propia en base a INEGI (2004)

En el sector manufactura, el empleo equipo de cómputo en procesos administrativos se da para las empresas grandes en un 97%, en las empresas medianas 93%, las empresas pequeñas 70% y 6% en las microempresas. El uso de Internet en sus relaciones con clientes y proveedores se da para las empresas grandes en un 90%, en las empresas medianas 81%, las empresas pequeñas 51% y 4% en las microempresas. El empleo de equipo de cómputo en procesos técnicos o de diseño se da para las empresas grandes en un 87%, en las empresas medianas 68%, las empresas pequeñas 39% y 4% en las microempresas. Y el desarrollo programas o paquetes informáticos para mejorar sus procesos se da para las empresas grandes en un 70%, en las empresas medianas 47%, las empresas pequeñas 26% y 2% en las microempresas (Ver tabla 6).

En el sector servicio, el empleo equipo de cómputo en procesos administrativos se da para las empresas grandes en un 93%, en las empresas medianas 92%, las empresas pequeñas 69% y 13% en las microempresas. El uso de Internet en sus relaciones con clientes y proveedores se da para las empresas grandes en un 77%, en las empresas medianas 68%, las empresas pequeñas 45% y 8% en las microempresas. El empleo de equipo de cómputo en procesos técnicos o de diseño se da para las empresas grandes en un 61%, en las empresas medianas 54%, las empresas pequeñas 36% y 7% en las microempresas. Y el desarrollo programas o paquetes informáticos para mejorar sus procesos se da para las empresas grandes en un 57%, en las empresas medianas 50%, las empresas pequeñas 28% y 4% en las microempresas (Ver tabla 7).

Tabla 7: Establecimientos Por Tamaño, del Sector Servicio Que Usan Tics

Tamaño de empresa	Total	Emplea equipo de cómputo en procesos administrativos		Emplea internet en sus relaciones con clientes y proveedores		Emplea equipo de cómputo en procesos técnicos o de diseño		Desarrolla programas o paquetes informáticos para mejorar sus procesos	
		Si emplea	No emplea	Si emplea	No emplea	Si emplea	No emplea	Si desarrolla	No desarrolla
Total	1013743	159429	854314	104045	909698	85938	927805	59860	953883
Micro	960135	120320	839815	77386	882749	64409	895726	42391	917744
Pequeña	43835	30046	13789	19595	24240	15918	27917	12272	31563
Mediana	5179	4788	391	3534	1645	2787	2392	2571	2608

Grande	4594	4275	319	3530	1064	2824	1770	2626	1968
Micro		13%		8%		7%		4%	
Pequeña		69%		45%		36%		28%	
Mediana		92%		68%		54%		50%	
Grande		93%		77%		61%		57%	

Fuente. Elaboración propia en base a INEGI (2004)

Aprovechar todas las ventajas que emanan del uso de las TICs, se limita cuando el personal no está capacitado, problema muy particular de las PYMEs. La brecha digital permanece también en este concepto y mantiene la misma tendencia por sector, siendo el tamaño el que delimita su mayor o menor uso, son las grandes quienes más capacitan a su personal y las microempresas las que menos realizan esta actividad. En el sector manufacturero las grandes capacitan un 83%, las medianas un 67%, las pequeñas 50% y las microempresas sólo capacitan a un 20% de sus trabajadores en el uso de nuevas tecnologías. En el sector servicios las grandes capacitan un 74%, las medianas un 72%, las pequeñas 59% y las microempresas sólo capacitan a un 29%. Por su parte en el sector comercio las grandes capacitan un 83%, las medianas un 70%, las pequeñas 60% y las microempresas capacitan a un 52% de sus trabajadores. Se observa que En este último sector la capacitación es más intensa en las microempresas, que en los sectores manufactura y servicios (Ver tabla 8).

Tabla 8: Empresas Por Tamaño del Establecimiento Que Capacitan al Personal en el Uso de Nuevas Tecnologías o Procesos de Trabajo 2003

Tamaño de empresa	Sectores de actividad								
	Manufactura			Servicios			Comercio		
	Total	si	no	Total	si	no	Total	si	no
Micro	3224	653	2571	19791	5690	14101	44610	22993	21617
Pequeña	6433	3237	3196	12183	7153	5030	21211	12740	8471
Mediana	6629	4413	2216	4424	3180	1244	9078	6377	2701
Grande	2980	2468	512	4244	3146	1098	3685	3060	625
Micro		20%			29%			52%	
Pequeña		50%			59%			60%	
Mediana		67%			72%			70%	
Grande		83%			74%			83%	

Fuente. Elaboración propia en base a INEGI (2004). Módulo de innovación e investigación del Censo Económico 2004.

## CONCLUSIONES

Las PYMEs han incrementado el uso de TICs, sin embargo, es notoria su inclinación por el uso de las TICs básicas, la PC, el Internet, el correo electrónico. La literatura señala que, si bien las PYMEs han reducido la brecha en infraestructura de TICs básica, el rezago de este grupo de empresas aumenta de manera importante cuando se consideran las tecnologías de nivel más

complejo y sofisticado. Las TICs son usadas por PYMEs mexicanas con mayor intensidad en el sector servicios, el empleo de internet se encamina hacia la comunicación con clientes y proveedores y es el sector que más desarrolla programas o paquetes informáticos para mejorar sus procesos. De manera obvia, el sector manufacturero destaca en el empleo de equipo de cómputo en procesos técnicos o de diseño.

Por tamaño de empresa se advierte una amplia brecha, siendo las grandes empresas las que mayor uso hacen de estas tecnologías y son las de menor tamaño quienes no aprovechan los beneficios que aportan estas tecnologías. Para cerrar la brecha digital, es necesario resolver uno de los problemas clave en el sector empresarial que se representa con la baja percepción sobre las TIC como fuente de mejoras en la productividad y eficiencia de las empresas. Entre los principales retos está aumentar el número de empresas que realicen una planeación estratégica de sus inversiones en TICs, se requiere un esfuerzo adicional para que las empresas capaciten a su personal en el uso de estas nuevas tecnologías, que busquen nuevas formas de utilización. Esto refuerza la idea de que para aprovechar los beneficios potenciales de las TICs las empresas tienen que generar un sistema de relaciones en el cual haya sinergias entre las actividades de innovación, las capacidades de los trabajadores, los cambios organizacionales y las TICs. Reto importante que no sólo las empresas deben enfrentar, sino también el gobierno mediante políticas que den a conocer las ventajas que trae el uso de TICs, así como establecer programas de financiamiento que permitan a este importante grupo de empresas acceder de manera más rápida a la adopción de TICs.

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# INDUSTRIAL SECTOR EXPORTS IN COLOMBIA: EFFICIENT FRONTIER ANALYSIS

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## RESUMEN

*Este trabajo realiza un análisis comparativo entre los sectores industriales de Colombia más empleadores en el periodo 2000-2011. Se utiliza la simulación dinámica y se aplica la técnica DEA (Análisis Envolvente de datos), para obtener un índice global de eficiencia técnica de los sectores industriales en Colombia en el uso de sus recursos y establecer un ranking de la eficiencia de los sectores industriales para exportar. Este índice determina la presencia de recursos ociosos, información útil en el diseño de estrategias para apoyo a las exportaciones. Metodología: El análisis se fundamenta en un diagnóstico por medio de simulación dinámica de Montecarlo para determinar los valores promedios del periodo para las variables de entrada: número de establecimientos, personal ocupado, activos y energía consumida utilizados para producir las variables de salida: producción bruta y exportaciones. Se pretende contrastar la efectividad de los factores productivos para generar exportaciones y determinar las posibilidades de mejoramiento de los sectores ineficientes en aras de participar adecuadamente en los procesos de internacionalización.*

**PALABRAS CLAVE:** Simulación dinámica, Análisis Financiero, DEA, exportaciones

## ABSTRACT

*In this paper, a comparative analysis is carried out among the industrial sectors in Colombia that have the most employees during 2000-2011. A dynamic simulation is used, and a Data Envelopment Analysis (DEA) is applied in order to obtain an overall index of technical efficiency in Colombia's industrial sectors for the use of resources. Similarly, an industrial sector efficiency ranking for exports is drawn up. This index determines the presence of unused resources, which is useful to devise strategies to support exports. Methodology: The analysis is based on a Monte Carlo simulation forecast to determine the average values of the period for the input variables: number of businesses, employees, assets, and energy used to produce the output variables. That is, gross production and exports. The purpose is to compare the effectiveness of the factors of production to generate exports, and determine the possibility of improving inefficient sectors. The goal is to participate in the internationalization process in a proper way.*

**KEYWORDS:** Dynamic Simulation, Financial Analysis, DEA, Exports

## INTRODUCTION

DEA is an analysis model through which homogeneous decision making units can be compared with regard to inputs and outputs. This generates a production or relative efficiency measure. The basic principle is to calculate the relative technical efficiency of each unit by means of a ratio that results from the quotient between the weighted sum of the outputs and the weighted sum of the inputs. The weights are determined according to Pareto criteria, where each unit's efficiency, for the input version, must be less than or equal to the unit (Charnes et al., 1997:6). EfficiencyThe

word "efficiency" comes from the Latin word *efficientia*, which means: production, force, action. From a long-term point of view, the concept of efficiency involves getting the maximum profit at the lowest possible cost, Farrell (1957).

From an economic point of view, the concept takes into account the lowest amount of inputs (capital, raw materials, man hours, machine hours, and so on) to get to a certain amount of outputs (profits, production, value added, goals met, etc.). Therefore, efficiency involves using society's resources as efficiently as possible to meet individual wants and needs (Samuelson & Nordhaus, 2002). It also involves the best possible use that a society makes of limited resources (Gregory, 2004). Similarly, achieving the highest production at the lowest possible cost is considered efficiency (Pinzón, 2003), as well as the capacity of a system or economic agent to meet certain goals by using resources as little as possible (Simón, 2005).

According to management theories, on the other hand, the concept is approached as the proper use of resources or available means of production. It is expressed by means of the equation  $E=P/R$ , where P are the resulting products, and R the resources used (Chiavenato, 2004). It is also defined as the achievement of goals with the minimum use of resources (Koontz & Wehrich, 2004). In other words, getting the best results with the lowest investment (Robbins & Coulter, 2005), or working in such a way that resources are used more properly (Reinaldo, 2002).

The ideal condition is to be effective and efficient at the same time. Thus, the concept is made up of two elements: technical efficiency and allocative efficiency. The focus of the former is the use of human resources or capital in the production of goods and services (Trillo, 2002), whereas the latter considers the concept of maximizing profits and minimizing costs in a production unit (Hernández de Cos, et al., 1995).

Simulation Simulation is taken to mean the development of a system's logical-mathematical model to imitate the operation of a real process or system over time. The words "system" and "model" are very important in the previous definition. A system is understood as the collection of variables that interact with each other within certain limits to achieve a goal. On the other hand, the model is a representation of the system's objects, and it expresses the activities in which such objects are involved (Azarang & García, 2006). Simulation is a means that can adapt to the analysis of many situations. Therefore, the pros and cons of using simulations are detailed in Table 7.

Table 7: Pros and Cons of Simulation

<b>Models can be modified to analyze diverse scenarios.</b>	
<b>It is cheaper to improve a simulated system than a real system.</b>	
Pros	It is easier to understand and view simulation methods than purely analytical methods. Analytical methods involve many assumptions and simplifications, whereas simulation models analyze more complex or detailed systems. In some cases, simulation is the only way to get a solution. It takes a lot of time to develop and validate simulation models.
Cons	

Source: (Azarang & García, 2006).

Data Envelopment Analysis – DEA Models DEA is a means to measure efficiency. It is based on the generation of an efficiency frontier whose starting point is a set of observations of a given event without the estimation of production functions. That is, a functional relation between inputs and outputs is not necessary. It becomes an excellent non-parametric alternative to obtain information from a set of observations. Parametric methods aim to obtain the best adjustment of the observations by generating a hyperplane. On the other hand, the purpose of DEA is to optimize each analysis unit's efficiency measure, and create an efficient frontier. Since it would

be based on real data, it would be efficient and feasible based on the Pareto criterion (Charnes *et al.* 1997). The procedure first involves creating an empirical production frontier, and then evaluating the efficiency of each observed unit that is not limited to the efficiency frontier. From this point of view, it is a parametric model because it does not assume the existence of an input/output functional relation. It is not statistical because it does not assume that efficiency adjusts to any sort of probability distribution as do the input and output consistency tests with the production frontier implemented by (Hanoach & Rothschild, 1972), and (Sengupta, 1987). The tests mentioned above have the sole purpose of proving the validity of certain hypotheses about the production function, such as quasi-concavity, monotonicity and homothety, based on the observations about inputs and data avoiding any parameterization of the production function (Hannoch & Rothschild (1972:256)).

The evaluation criterion is based on the hypothesis that a productive unit belongs to the production frontier when it generates more out of an output without producing less out of the rest, and without consuming more inputs. In other words, it is efficient when it uses less out of an input, without using more out of the rest, and it generates the same products (Charnes C. y Rhodes, 1981).

In the comparison, the efficient and technically homogeneous unit may not be real, but the linear combination of other real units. This characteristic is in line with what was proposed by (Farrell, 1957), and it features two assumptions: first, the possibility of using supplies continually. Second, the efficiency frontier is convex. The first assumption guarantees that the inputs are divisible, whereas the second guarantees that the linear combination of two or more units belonging to the feasible group also has this characteristic. The models have been widely implemented in multiple organizational and social scenarios. In finance, for instance, there is an application to measure the productivity efficiency of textile sector companies' current resources. The purpose is to devise plans to enlarge installed capacity and apply for credit from the financial sector (Restrepo & Vanegas, 2009).

In hospital management, the performance of 45 university hospitals in Brazil is analyzed in order to study the situation of such units through the technical efficiency achieved with a DEA model (Frainer, 2012). Likewise, the technical efficiency of primary care in Costa Rica during 2004 – 2010 is studied through traditional DEA models and Bayesian methods (Salazar, 2012). In the social sphere, a model to evaluate the impact of information asymmetries on the management of social organizations is developed. To this end, DEA models were assessed based on the pillars of information economics in order to express the goals of the members of an organization: principal and agent. The multipliers estimated are understood as assessments allocated by the director and the agent of the social processes. A DEA model with asymmetrical information (AI-DEA) was developed and applied to incorporate the differences in these assessments. It was applied to the system of federal universities in Brazil. The Ministry of Education (MEC) is the director, and the presidents of the universities are considered federal agents. It was found that the DEA model enabled the evaluation of the impact of information asymmetries on the management of federal universities (Franca, 2013).

### Materials and Methods

The DEA method will be used. With it, a concrete indicator of an economic unit (company or sector) can be obtained in relation to the best results from the rest of units in the group of observations. Setting a standard of comparison with the best results guarantees getting such results by improving a company's process and management. The units of measure are independent of the variables used in DEA models

In order to make the technique more operational, and adjust it to the reality of the problem addressed, the version suggested by (Banker, et al., 1984), known as the DEA-CCR input-oriented version, will be used. Below is the structure of the DEA-CCR mathematical model in order to be able to determine both the technical efficiency index of each sector, and the weightings allocated to the several inputs and outputs:

$$\text{Min}_{\theta, \gamma, \delta^+, \delta^-} Z_0 = \theta - \varepsilon(I\delta^+ + I\delta^-)$$

Subject to:

$$\gamma Y = Y_{0+} \delta^+ \quad (1)$$

$$\gamma X = \theta X_0 - \delta^-$$

$$\vec{1}\gamma = 1$$

$$\gamma, \delta^+, \delta^- \geq 0$$

The industrial sector is represented by the sub-index  $\theta$ .  $X$  and  $Y$  represent the input and  $i$  output  $r$  amounts of the sector  $j$  respectively.  $\lambda$  reflects the weightings (unknown) allocated to the input  $i$  and output  $r$  of the sector being evaluated. Finally,  $\theta$  represents the efficiency rate of the evaluated sample unit.

Data

#### Variables Used in the Input-Oriented DEA-CCR Model

In order to develop the proposed index, a relation needs to be established between the inputs (number of businesses, employees, assets, energy consumed) and outputs (exports, gross production of the industrial sectors that generate the highest rate of employment during 2000-2011). The variables used are described below:

Number of businesses (NB): the number of businesses registered in the country per industrial sector

Employees (E): the employees reported by the companies of each sector in the Annual Manufacturing Survey (AMS)

Assets (AT): the assets of the industrial sectors in thousands of millions of pesos

Energy Consumed (EC): the energy consumed in kW/h by the industrial sector as reported in the AMS

Exports (EX): the sector's exports in millions of dollars

Gross Production (GP): what each industrial sector produced in thousands of millions of pesos

In order to compare the industrial sectors in Colombia, information broken down by sector is needed. The information provided by DANE solves this need with the studies of companies. The data to develop the DEA were provided by the export reports per sector and the AMS of 2000-2011. The values were expressed in Colombian pesos, and the exports in dollars. Estimated DEA Model The DEA technique was used in order to find out each sector's export efficiency. Applying

the data envelopment analysis implies the definition of a utility function. That is, the description of two outputs and four inputs. For the outputs, the EX and GP variables were used. Regarding the inputs, they are incorporated as general factors that determine efficiency: number of businesses, employees, amount of assets, electric energy consumed.

Table 8: Results of the Dea-Ccr Input-Oriented Model

Sector	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
CIIU15	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
CIIU18	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
CIIU24	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
CIIU17	0.5603	0.5786	0.5406	0.5302	0.5534	0.5497	0.6212	0.8117	0.8443	0.6360	0.5659	0.5627
CIIU25	0.5917	0.6329	0.6322	0.6093	0.6260	0.7553	0.7443	0.7045	0.7314	0.6338	0.6812	0.6050
CIIU26	0.6699	0.7238	0.7335	0.7402	0.7274	0.6897	0.7177	0.7503	0.7102	0.6698	0.6812	0.7152
CIIU36	0.6694	0.6126	0.6630	0.6630	0.6337	0.6871	0.9571	0.7328	0.9341	0.8980	0.9005	0.8474
CIIU22	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9713
CIIU28	0.7461	0.7938	0.8316	0.8316	0.8575	0.9362	0.9712	1.0000	0.9883	0.8885	0.9005	0.8665

Source: developed by the authors on Risk Simulator

Table 8 shows that the sectors CIIU15, CIIU18 and CIIU24 are on the production frontier. On the other hand, the sectors CIIU17, CIIU25, CIIU26, CIIU36 and CIIU28 have been inefficient during 2000-2011. It is important to note that CIIU22 is out of the efficiency frontier in 2011, and the improved efficiency of

CIIU36, which in the last five years reached levels of over 80%. For inefficient sectors, the probability mass function was determined in order to be able to perform the simulation. The results are shown in Table 3.

Table 9: Results of DEA-Input-Oriented For 2011

sector	nb	e	at	ec	ex	gp
ciu15	1,771.00	152,675.00	27,407.37	3,102.46	4,767.82	53,715.18
ciu24	827.00	75,554.00	13,495.92	1,768.66	3,053.18	23,389.80
ciu18	1,021.00	60,705.00	1,671.57	130.45	539.55	5,197.12
ciu25	434.74	32,191.90	3,967.32	441.74	751.22	8,099.34
ciu17	<b>235.78</b>	<b>18,688.91</b>	<b>2,608.45</b>	<b>321.52</b>	<b>564.27</b>	<b>4,872.76</b>
ciu26	319.40	27,534.75	4,942.89	559.53	859.87	9,687.47
ciu28	510.57	32,201.47	1,790.06	177.21	419.00	4,339.23
ciu36	462.00	28,790.53	1,364.62	142.34	375.20	3,312.50
ciu22	510.25	32,166.16	1,781.22	176.20	417.53	4,322.43
ciu29	585.00	31,246.00	1,927.67	148.17	409.16	3,652.15
improvement percentages per sector						
ciu15	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ciu24	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ciu18	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ciu25	43.91%	39.50%	39.50%	63.12%	0.00%	0.00%
ciu17	<b>43.73%</b>	<b>59.35%</b>	<b>43.73%</b>	<b>64.17%</b>	<b>0.00%</b>	<b>0.00%</b>
ciu26	35.99%	28.48%	58.89%	67.39%	83.13%	0.00%
ciu28	31.00%	13.35%	13.35%	26.41%	30.77%	0.00%
ciu36	33.81%	15.26%	15.26%	27.16%	0.00%	2.52%
ciu22	25.29%	2.87%	37.70%	2.87%	124.03%	0.00%
ciu29	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Source: developed by the authors based on the AMS 2011 data on Risk Simulator

Table 10: Input Reduction in Numbers to Reach the Efficiency Frontier

	NB	E	AT	EC	EX	GP
CIIU15	0	0	0	0	0	0
CIIU24	0	0	0	0	0	0
CIIU18	0	0	0	0	0	0
CIIU25	340	21,016	2,590	756	0	0
CIIU17	<b>183</b>	<b>27,283</b>	<b>2,027</b>	<b>576</b>	<b>0</b>	<b>0</b>
CIIU26	180	10,967	7,079	1,156	390	0
CIIU28	229	4,961	276	64	141	0

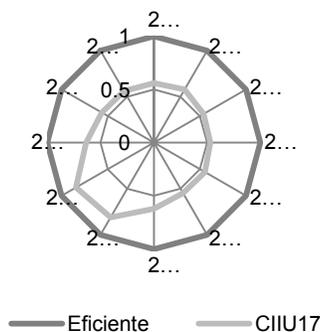
CIIU36	236	5,185	246	53	0	81
CIIU22	173	949	1,078	5	231	0
CIIU29	0	0	0	0	0	0

Source: developed by the authors on Risk Simulator

The sectors CIIU25, CIIU17, CIIU26, CIIU28, CIIU36 and CIIU22 have been inefficient in 2011. The efficiency was determined for the period 2000-2011. However, for illustration purposes, the results are presented in Table 9, but the analysis per sector is carried out for 2011, and only for CIIU17. The rest of the sectors are analyzed in a similar way. According to results which shows input and output information for 2011, CIIU17 has the following inputs: 419 businesses; 45,972 employees; assets are worth 4,635 million; and there was a consumption of 897,000 million in energy. This generated 564,000 million dollars worth of exports, and a gross production of 4,873 million. The results of the DEA model are shown in Table 9. According to these, sector 17 – highlighted in red – must have an NE input of 236 for it to reach the efficient border. Thus, the current basis is reduced by 43,73%, which means 183 fewer businesses. The number of employees must be about 18,688, which is a reduction of 59,35%. This is equivalent to the loss of 27,283 jobs in the sector. The total amount of assets must go from 4,635 million to 2,208. This is a reduction of 43,73%, which means 2,027 million less in assets. The EC would go from 897 to 321. This is a reduction of 62,52%, which means 576,000 million pesos less in consumption. The other sectors are analyzed similarly with the information in Table 8, Table 9 and Table 10.

Table 11: Comparison of Sectors and Weights

	CIIU1 5	CIIU2 4	CIIU2 8	CIIU2 9
CIIU1 5	1.0000			
CIIU2 4		1.0000		
CIIU1 7		0.2865		
CIIU2 5			0.1576	
CIIU2 6			0.3615	
CIIU3 6	0.0590		0.5817	
CIIU2 8		0.0369	1.0000	
CIIU2 9				1.0000
CIIU2 2	0.0131			
CIIU2 1		0.0029		0.8278
		0.2932		



Source: developed by the authors based on the data provided by AMS 2000-2011

Table 11 features the comparison of sectors. It shows that the efficient sectors have a value of 1.0 when cross-checked. On the other hand, the inefficient sectors are compared with the efficient ones. Thus, the degree of inefficiency of, for instance, sector CIIU17, becomes evident. It should adopt the administrative practices of CIIU24 to come close to the production frontier, since it is at 28,65% of CIIU24. Likewise, the chart on the right shows the efficiency results for CIIU17 during 2000-2011. It has always been below the efficiency frontier. It had values of over 80% in 2008, but in 2001, it sank to historical levels, and it has 56,27%. The charts for all the inefficient sectors can be viewed in Appendix 2. Conclusions and Recommendations In spite of the importance that the industrial sector has in the country's development, it has weaknesses related to technical efficiency that undermine its competitiveness. Similarly, these weaknesses increase the sector's vulnerability before new globalization challenges posed by the world's dynamics. This study provides entrepreneurs with elements to understand the importance of managing technical efficiency. Likewise, entrepreneurs will find its interpretation by means of efficiency indicators that provide information about the productivity of the sectors' current resources.

As shown, a high percentage of the sectors must reduce their inputs (NB, E, AT, EC) to reach the efficiency frontier of production, or increase their outputs without changing the combination of inputs. The data shown above are key to making plans to enlarge installed capacity, and applying for credit from the financial sector. It is imperative to check which resources are not used, and the impact they have on the generation of value. In view of the value generation concepts, every single inefficient sector is undermining the value of our economy. Despite the fact that EBITDA is deemed an appropriate measure to determine the generation of a company's value, problems arise when this is the only way to measure an organization's performance. One of the reasons is that it does not take efficiency into account. It is necessary to combine a company's financial performance with risk- and efficiency measures. This paper presents a non-parametric method to measure the latter. Risk-measurement is suggested as a complement to determine the real effect that it will have on value for stakeholders. Entrepreneurs must reflect carefully on the aspects mentioned above. They may be more important than the results obtained in the mere figure of cash flow and EBITDA.

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# COMPETITIVIDAD DEL TRANSPORTE AÉREO Y MARÍTIMO DE MÉXICO EN EL MARCO DEL COMERCIO EXTERIOR

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## RESUMEN

*Las tendencias del comercio internacional han modificado la estructura de costos, precios, logística, cadenas de suministros y por consiguiente de las ventajas comparativas, estas tendencias de igual manera han definido la competitividad comercial de los países siendo cada vez más relevante el nivel de integración de las redes mundiales de transporte como factor impulsor del comercio internacional. En este trabajo se evalúa, a través del Análisis de Componente Principales, la competitividad del transporte aéreo y marítimo internacional considerando a su vez las variables más importantes que inciden en este sector y el desempeño de las economías respecto de dichas variables, estudiando la estructura del sistema de transporte aéreo y marítimo internacional para veintinueve países, entre ellos siete de América Latina. Los resultados mostrados en el índice de competitividad del transporte internacional, señalan que los países más competitivos en materia de transporte aéreo y marítimo internacional de acuerdo a las variables analizadas son, en orden descendente, Estados Unidos, China, Australia, Panamá, Alemania, Hong Kong, Chile, Singapur, Corea, Argentina, Bélgica, España, Canadá, Japón y Reino Unido. Destaca también que los países de América Latina con mayores puntuaciones en este rubro son Panamá, Chile, Argentina, Brasil, México, Perú y Costa Rica.*

**PALABRAS CLAVE:** Transporte aéreo internacional, transporte marítimo internacional competitividad, comercio exterior, Análisis de Componentes Principales.

## COMPETITIVENESS OF AIR AND MARITIME MEXICAN TRANSPORT UNDER THE FOREIGN TRADE

### ABSTRACT

*International trade trends have changed the cost structure, pricing, logistics, supply chain and hence comparative advantages, such trends have similarly defined the trade competitiveness of countries becoming more relevant the level of integration of global transport networks as a driver of international trade. In this paper we evaluate through Principal Component Analysis methodology the international transport competitiveness considering the most important variables that affect this sector and the economic performance of these variables on transportation, analyzing the structure of the international transport system of twenty-nine countries including seven Latin American countries. The results shown in the competitiveness index of international transport, indicate that the most competitive countries in the field of international aviation and maritime transport according to the variables analyzed are, in descending order, the United States, China, Australia, Panama, Germany, Hong Kong, Chile, Singapore, Korea, Argentina, Belgium, Spain, Canada, Japan and the UK. Also stresses that the*

*Latin American countries with higher scores in this category are Panama, Chile, Argentina, Brazil, Mexico, Peru and Costa Rica.*

**JEL:** F02, F40, F16, F12 y M16.

**KEY WORDS:** International air transport, International shipping competitiveness, foreign trade, Principal Component Analysis

## INTRODUCCIÓN

Actualmente la competitividad en los mercados internacionales ya no depende únicamente de las variables intrínsecas de los productos como calidad y precio, puesto que las exigencias del mercado, así como la propia globalización han hecho que factores dentro de la cadena logística por la que atraviesan los productos para poder llegar a los consumidores sean crucial en términos de competitividad.

Uno de los elementos clave de la logística del comercio internacional es sin lugar a dudas el transporte que habrá de utilizarse para hacer llegar la mercancía del almacén del exportador hasta las manos del consumidor. Por lo que, si se busca la competitividad de las economías en el marco del comercio global es necesario que los elementos que inciden tanto en el precio, como calidad y tiempos sean igualmente competitivos, de lo contrario tenderán a mermar el posicionamiento de los productos domésticos en los mercados foráneos.

El transporte internacional se puede dividir en cuatro rubros principales: transporte marítimo, transporte aéreo, transporte carretero y transporte ferroviario. Adicionalmente se puede considerar el transporte por ductos y cables para productos específicos. A pesar de que los cuatro tipos de transporte son sumamente relevantes, el presente trabajo se enfoca al estudio del transporte aéreo y marítimo únicamente, esto con el objetivo de hacer un análisis más profundo de los sectores mencionados.

En sus inicios el transporte aéreo no fue planeado como transporte de carga, debido al diferencial de costos respecto de otros tipos de transporte. No obstante, las ventajas que ofrece este medio de transporte aunadas a las exigencias del mercado han hecho que el transporte aéreo poco a poco se esté posicionando en el comercio mundial, y aunque actualmente solo mueve el 0.5 por ciento en volumen, mueve el 35 por ciento en valor (Oxford Economics, 2012). Entre las ventajas del transporte aéreo destacan: la rapidez de entrega, la seguridad (bajo índice de robos y/o hurtos), la puntualidad de entrega, bajos gastos de almacenaje y la continuidad de las rutas (OMC, 2012).

El transporte marítimo representa el 80 por ciento del volumen del comercio mundial, por lo que actualmente se considera la columna vertebral del transporte internacional, por lo cual en años recientes, los servicios marítimos han experimentado una considerable expansión impulsada por la mundialización. Muchas políticas marítimas restrictivas han desaparecido o se han dejado de aplicar. La revolución tecnológica del contenedor y los avances en buques de carga han acelerado el crecimiento de este transporte (ONU, 2013).

En este contexto, la finalidad del presente trabajo es determinar cuáles son las principales variables que inciden en los niveles de competitividad del transporte aéreo y marítimo internacional en los países con mayor participación en el comercio internacional, así como conocer el grado de competitividad de dichos países en materia de transporte aéreo y marítimo internacional; para lo cual se utiliza como herramienta metodológica el Análisis de Componentes Principales, la cual permite un análisis multidimensional y multivariante. Para el análisis empírico

fueron seleccionados 29 países, 25 países considerados por la Organización Mundial de Comercio (OMC) como los principales exportadores e importadores mundiales de mercancías (OMC, 2013) siendo estos: Alemania, Australia, Bélgica, Brasil, Canadá, China, Corea, Dinamarca, España, Estados Unidos, Francia, Hong Kong, India, Indonesia, Italia, Japón, México, Panamá, Reino Unido, Rusia, Singapur, Suiza, Suecia, Tailandia y Turquía. Adicionalmente se incluyeron en la investigación otros 4 países de América Latina con mayor flujo en su comercio exterior: Argentina, Chile, Costa Rica y Perú, con la finalidad de tener un mejor panorama de la situación de América Latina respecto del transporte aéreo y marítimo internacional como factor de competitividad del comercio exterior.

Este trabajo se divide en cinco secciones, incluida esta introducción. En la sección II se realiza una revisión de la literatura sobre la importancia del transporte internacional como factor de competitividad del comercio exterior. Mientras que, en la sección III se detalla la metodología utilizada y se presentan los datos empleados en el análisis empírico. En la cuarta sección se analizan los resultados obtenidos y en la quinta se resumen las principales conclusiones alcanzadas y algunas consideraciones pertinentes.

## REVISIÓN DE LITERATURA

Sin duda, el transporte internacional es un elemento clave en la logística del comercio exterior, puesto que es el que garantiza el desplazamiento físico del producto desde el lugar de generación del valor, hasta el mercado donde los consumidores están dispuestos a adquirirlo. Por lo que el estudio de las variables que determinan el papel del transporte internacional como factor de competitividad en el Comercio Exterior resulta trascendental si se busca hacer más eficiente la participación de los países y empresas en los mercados internacionales.

Existen diversos estudios que buscan analizar las variables determinantes del transporte de carga internacional entre los que destacan:

El estudio realizado por Chemonics International, Inc. donde analiza los componentes principales del sistema de transporte y la cadena logística marítima de Swaziland, particularmente revisando los factores que afectan la competitividad de la industria textil de la región. Dentro de los hallazgos derivados del estudio se concluyó que existen retrasos significativos en los tiempos estipulados y altos costos del transporte (Chemonics International, Inc., 2004).

Boske (2001); Boske y Harrison (1995); Buxbaum (2006); Herrera (2005); Kruse et al. (2004) y Mireles (2005) concluyen en sus estudios que la frecuencia del servicio, la flexibilidad de horarios, la infraestructura desarrollada y los plazos de ejecución son variables determinantes de la competitividad del sistema de transporte internacional.

De acuerdo con Fuller et al (2001) al realizar mejoras en el sistema sudamericano del transporte de exportaciones de maíz y frijol de soya, estas se incrementaron en un 8 y 2 por ciento respectivamente, las áreas optimizadas fueron seis: aumento de la eficiencia en los puertos, mayor navegabilidad en los ríos considerados clave (parte baja del Rio Paraná), aumento de la extensión del sistema ferroviario, mejora de caminos pavimentados y construcción de caminos pavimentados (carretera BR-163) y la privatización de algunas vías ferroviarias en Argentina y Brasil (Fuller, Yu, Fellin, Lalor, & Krajewski, 2001).

Smith, Miller y Parhizkar (2008) afirman que el mejorar los sistemas de transporte es un elemento crítico en el éxito de los negocios, comunidades y la gente; lo que conlleva a la mejora de la

competitividad internacional. En su estudio concluyen que, en cuanto al problema de la falta de competitividad del transporte, destacan: los elevados costos, la infraestructura del transporte (carretera, vías férreas y puertos).

La Comisión Económica de las Naciones Unidas para Europa en su estudio *Global Supply Chains, Transport and Competitiveness* (2009) considera al transporte como una de las fuerzas motoras del crecimiento económico y el desarrollo social. De tal forma, resulta crítico el estudio del transporte a fin de lograr incrementar su eficiencia. Este mismo estudio señala como los indicadores estadísticos más relevantes: los modales, de capacidad, de desempeño y del ambiente (Pesut, 2009).

Chow y Gill (2011), señalan que la infraestructura de transporte es uno de los componentes principales de los índices de competitividad logística internacional, donde considera como variables clave de la red de transporte el despliegue de contenedores, capacidad de contenedores, número de compañías de transporte, tiempo promedio y tiempo máximo de duración del transporte (Chow & Gill, 2011).

Ante un debilitamiento de la competitividad logística en el comercio exterior del Noreste Asiático, Song y Na (2012) buscan desarrollar una red de transporte más eficiente y confiable, al analizar la situación actual del sistema de transporte entre el Noreste Asiático y Europa y sus características técnicas, considerando el transporte marítimo y el ferroviario. Las variables utilizadas en este trabajo fueron las distancias, los días que toma realizar la traspotación, carga o tonelaje y los costos. Destaca entre sus conclusiones la importancia de la reducción de los tiempos requeridos para el transporte por lo que Song y Na realizan diversas propuestas de medidas en este sentido. Así mismo, los autores destacan la importancia de la eficiencia en el sistema de transporte internacional, particularmente el férreo para la integración de las regiones objeto de estudio (Song & Na, 2012).

## **DATOS Y PROCEDIMIENTOS METODOLÓGICOS**

El Análisis Factorial de Correspondencias, ideado por el estadístico francés Benzecri en 1973, fusiona al Análisis de Proximidades con el Análisis de Componentes Principales logrando un análisis de similaridad (Callealta, 2005).

El Análisis Factorial es una técnica estadística multivariante cuyo objetivo principal es la definición de una estructura subyacente en una matriz de datos. El análisis factorial permite resolver el problema del análisis de la estructura de las interrelaciones (correlaciones) existentes en un número elevado de variables y casos, definiendo un número de dimensiones comunes subyacentes, denominadas componentes.

Esta metodología ha sido utilizada en publicaciones reconocidas como lo son el cálculo del índice de competitividad de *The Global Competitiveness Report* del Foro Económico Mundial (*The World Economic Forum*), el cálculo del índice de competitividad del *IMD World Competitiveness Yearbook (WCY)*, publicaciones de la CONAPO y el CIDE entre otros.

Cabe destacar que existen diversos métodos de extracción de factores y la elección del modelo a utilizar depende de diversas cuestiones como son el objetivo de la investigación, el tipo de información a procesar. Dentro de la variedad de métodos de extracción de factores que existen destaca: el de Máxima Verosimilitud utilizado generalmente cuando los datos tienen el comportamiento de una distribución normal, otro método es el de Factores Principales, siendo

una modalidad el de Factores de Componentes Principales y otra la de Factores Principales Iterados; el primer método asume que las varianzas comunes son iguales a 1 y por tanto las varianzas únicas son cero y el segundo comienza con un procedimiento similar al de factores principales y se repite hasta que todas las cargas factoriales convergen.

No obstante, las bondades de los diferentes métodos de extracción de factores o estimación de cargas factoriales, se ha seleccionado el de componentes principales, puesto que se busca explicar la varianza total y no solamente la varianza común de la matriz de las variables originales ya que se consideran tanto la varianza total y estima los factores que contienen proporciones bajas de la varianza única, y en algunos casos la varianza del error.

Esta metodología estudia la dependencia entre las variables y la asociación entre atributos logrando una revisión de la intensidad de las atracciones y repulsiones entre las modalidades que pueden presentar las características cualitativas, realizándose a partir del estudio de las frecuencias conjuntas observadas y recogidas (Miquel, Bigné, Lévy, Cuenca, & Miguel, 1997).

Adicionalmente del análisis de atracción-repulsión entre modalidades de atributos (variables) diferentes, la técnica del Análisis Factorial de Correspondencias también permite realizar estudios de proximidad (similaridad/disimilaridad) entre las modalidades de una misma variable; es decir, permite evaluar la homogeneidad o sustituibilidad de las mismas. Para esto, se realiza la proyección de las modalidades sobre un espacio métrico en el que se aplica el Análisis de Componentes Principales para facilitar la interpretación causal simple de los comportamientos de similitud-atracción (Kim & Mueller, 1978).

El análisis de la similaridad (proximidad) existente entre las modalidades de un atributo (variable) -representadas por las respectivas distribuciones de frecuencias- condicionadas a su vez, por la distribución de modalidades de otro atributo, permite analizar la homogeneidad de éstos en dos espacios diferentes, uno de dimensión  $q$  y otro de dimensión  $p$ ; para lo que se introduce y emplea la distancia de Benzecri, que es una ponderación entre los puntos de manera inversamente proporcional a sus frecuencias (Castillo & Rodriguez, 2002). El análisis de la asociación entre modalidades de los dos diferentes atributos será el resultado de conectar estos dos espacios y en consecuencia, proyectarlos en un espacio común tridimensional donde la proximidad será interpretada como atracción y el alejamiento como repulsión, aplicando para esto el Análisis de Componentes Principales (Kruskal & Wish, 1981).

El Análisis Factorial de Correspondencias consta de cuatro fases principales: las pruebas de confiabilidad, el cálculo de una matriz que exprese la variabilidad conjunta de las variables, la estimación de las puntuaciones gráficamente, y la determinación del índice de competitividad.

## RESULTADOS Y DISCUSIÓN

Los primeros resultados de la investigación, se obtienen de la Matriz de Componentes Rotados, donde quedan ya claramente definidas las variables en un espacio (Pérez, 2006) y (Kendall, 1990). A fin de determinar la variables del transporte aéreo y marítimo que inciden en la política comercial, se agrupan las variables de la siguiente manera: en el factor uno, quedan alineadas las variables transporte aéreo de carga, número de aeropuertos, número de aeropuertos pavimentados y terminales portuarias; en el factor dos se localizan los indicadores puertos y aeropuertos distancia exportación (km), puertos y aeropuertos costos de exportación (USD), puertos y aeropuertos distancia importación (km) y puertos y aeropuertos costos de importación (USD); en el factor tres, tráfico de contenedores puerto (TEU), índice de conectividad del transporte

marítimo (valor máximo=100) y el comercio de mercancías (porcentaje del PIB); en el factor cuatro se encuentran los indicadores servicios de transporte (porcentaje de las importaciones, balanza de pagos), calidad de la infraestructura portuaria y calidad de actividades relacionadas con el transporte; en el quinto factor servicios de transporte (porcentaje de las exportaciones de servicios, balanza de pagos) y marina mercante; y, por último, en el factor seis, los indicadores puertos y aeropuertos plazos de ejecución exportación (días) y puertos y aeropuertos plazos de ejecución importación (días).

La matriz de componentes rotados, de manera adicional, da cuenta de la relación que existe entre las propias variables, puesto que aquellas que se encuentren correlacionadas o bien que de alguna manera tengan el mismo enfoque o perspectiva de la problemática a estudiar tenderán a agruparse en un mismo componente, lo que permite ver qué variables están interconectadas entre si y respecto del componente (véase tabla 2).

De acuerdo con los primeros resultados obtenidos, se agrupan las variables con aquellas que tengan más asociación y por el grado de la varianza que están explicando, de modo que en este caso las variables se agrupan en seis dimensiones. El primer factor agrupa a los indicadores relacionados con la infraestructura del transporte aéreo y marítimo internacional, distinguiéndose por ser las de mayor peso al explicar el 26.205 por ciento de la varianza. El segundo factor considera los indicadores que muestran las distancias y costos en el transporte aéreo y marítimo internacional cuya proporción de la varianza explicada es de 19.82 por ciento. El tercer factor tiene una varianza explicada de 10.89 por ciento con los indicadores vinculados en el tráfico y comercio de mercancías. El factor cuatro explica los indicadores que se relacionan con la calidad y transporte aéreo y marítimo siendo del orden del 10.336 por ciento de la varianza. El factor cinco toma los indicadores asociados a los servicios de transporte y marina mercante con una proporción de la varianza del 8.378 por ciento y el factor seis representa a los indicadores asociados con plazos de ejecución del transporte aéreo y marítimo internacional con el 6.309 por ciento (ver tabla 3).

Tabla 2: Matriz de Componentes Rotados, Transporte Aéreo y Marítimo Internacional

	Componente					
	1	2	3	4	5	6
Puertos y aeropuertos distancia exportación (km)	.033	.822	-.017	.091	.323	.109
Puertos y aeropuertos plazo de ejecución exportación(días)	.060	.108	.091	.233	.091	.869
Puertos y aeropuertos costos de exportación (USD)	-.092	.554	.485	.180	-.214	.335
Puertos y aeropuertos distancia importación (km)	.019	.909	.075	.002	.014	-.046
Puertos y aeropuertos plazo de ejecución importación(días)	.087	.138	-.014	.030	.116	.864
Puertos y aeropuertos costos importación (USD)	.008	.821	.208	.158	-.257	.322
Servicios de transporte (% de las exportaciones de servicios, balanza de pagos)	-.105	-.025	-.079	.090	.933	.082
Servicios de transporte (% de las importaciones de servicios, balanza de pagos)	-.189	.209	.050	-.643	.528	.083
Tráfico de contenedores Puerto (TUE)	.324	.136	.769	.000	.034	-.090
Índice de conectividad del transporte marítimo (valor máximo = 100)	.137	.127	.763	.420	.065	.067
El comercio de mercancías (% del PIB)	-.416	.114	.506	.276	.194	.286

Calidad de la infraestructura portuaria, WEF (1 = muy poco desarrollado a 7 = bien desarrollada y eficiente)	-.053	.137	.220	.809	.309	.256
Calidad de actividades relacionadas con el transporte	.120	.242	.171	.880	-.132	.172
El transporte aéreo de carga (millones de toneladas/km)	.870	-.039	.390	.158	-.011	.076
Número de aeropuertos	.911	-.005	.091	-.049	-.119	.078
Número de aeropuertos pavimentados	.942	-.042	.121	.014	-.082	.078
Terminales portuarias	.732	.185	-.374	.207	-.046	-.054
Marina mercante	-.109	.012	.444	-.126	.642	.149

*Método de extracción: Análisis de componentes principales.*

*Método de rotación: Normalización Varimax con Kaiser.*

*La rotación ha convergido en 7 iteraciones.*

*Fuente: Elaboración propia con base en los resultados obtenidos del Análisis Factorial de Correspondencias.*

Al analizar los resultados obtenidos por factores, se puede precisar con mayor detalle cuales son las áreas de oportunidad y las fortalezas para cada uno de los países analizados en materia de competitividad del transporte internacional. La determinación del índice de competitividad se deriva a partir de la información que se obtiene de las puntuaciones factoriales o factor scores (Cox y Cox, 1994). Para obtener las puntuaciones factoriales es necesario calcular un promedio ajustado de las cargas factoriales rotadas. Este promedio ajustado se obtiene de la suma de los valores absolutos de las cargas factoriales elevadas y divididas entre el número de variables con carga factorial en cada factor en cuestión; siempre y cuando estas variables estén altamente correlacionadas y no tengan alta correlación con otros factores distintos (Martínez, 2010).

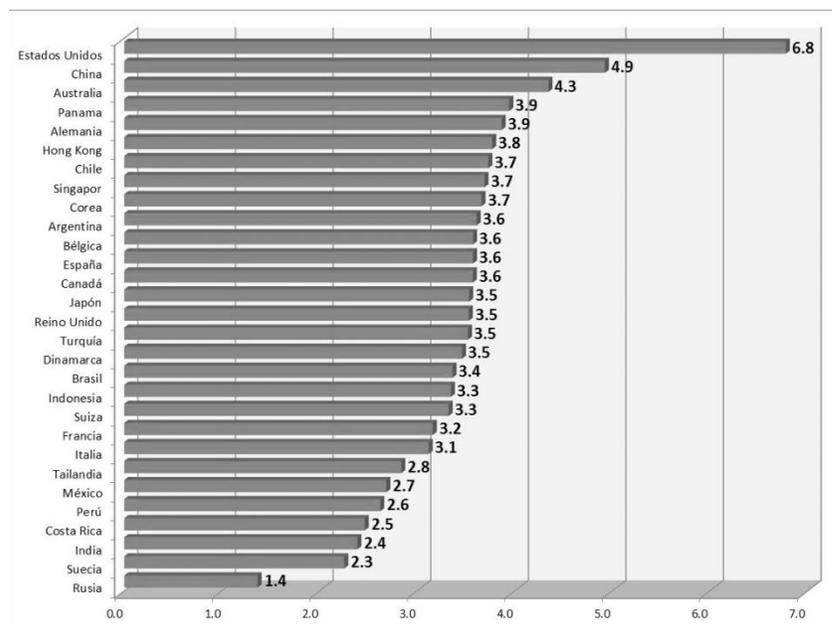
Tabla 3. Variables Agrupadas del Transporte Aéreo y Marítimo Internacional

Factor	Dimensión	Proporción de Varianza Explicada
Factor 1	Infraestructura del transporte aéreo y marítimo internacional	26.205%
Factor 2	Distancias y costos en el transporte aéreo y marítimo internacional	19.82%
Factor 3	Tráfico y comercio de mercancías	10.89%
Factor 4	Calidad y transporte aéreo y marítimo internacional	10.336%
Factor 5	Servicios de transporte de carga y marina mercante	8.378%
Factor 6	Plazos de ejecución del transporte aéreo y marítimo internacional	6.309%

Fuente: Elaboración propia.

El índice de competitividad de la variable transporte aéreo y marítimo internacional revela que el país más competitivo en materia de transporte aéreo y marítimo internacional es Estado Unidos, seguido en orden descendente de China, Australia, Panamá, Alemania, Hong Kong, Chile, Singapur, Corea, Argentina, Bélgica, España, Canadá, Japón y Reino Unido. En la parte media se encuentran Turquía, Dinamarca, Brasil, Indonesia, Suiza y Francia. Mientras que en la parte baja se localizan Italia, Tailandia, México, Perú, Costa Rica, India, Suecia y Rusia (ver figura 5).

Figura 5. Competitividad en el Transporte Aéreo y Marítimo Internacional



Fuente: Elaboración propia con base en los resultados obtenidos del Análisis Factorial de Correspondencias.

## CONCLUSIONES Y CONSIDERACIONES FINALES

En este trabajo se analizaron las principales variables que influyen en los niveles de competitividad del transporte internacional como factor determinante del comercio exterior y se presentó un índice derivado del análisis empírico del grado de competitividad de los 29 países objeto de estudio en materia de transporte internacional. Los resultados obtenidos a través del Análisis de Componentes Principales indican que si bien todas las variables incluidas en el estudio influyen en la competitividad del transporte aéreo y marítimo internacional, las variables con un mayor peso son la infraestructura del transporte aéreo y marítimo internacional (con el 26.205 por ciento de la varianza explicada) seguida de las distancias y costos en el transporte aéreo y marítimo internacional (19.82 por ciento).

El índice de competitividad del transporte internacional los países más competitivos en materia de transporte aéreo y marítimo internacional son en orden descendente Estados Unidos, China, Australia, Panamá, Alemania, Hong Kong, Chile, Singapur, Corea, Argentina, Bélgica, España, Canadá, Japón y Reino Unido. En la parte media se encuentran Turquía, Dinamarca, Brasil, Indonesia, Suiza y Francia. Resaltando que los países con mayores puntuaciones en este rubro de América Latina son Panamá, Chile, Argentina, Brasil, México, Perú y Costa Rica.

Si bien todavía queda mucho por examinar con respecto a la importancia del transporte internacional y particularmente del transporte aéreo y marítimo, sus variables y particularmente de la competitividad de este sector como parte del proceso de apertura comercial, este trabajo constituye un marco inicial dada la escasez de estudios sobre el tema particularmente en América Latina. Como es obvio, la profundización en esta área puede ser de gran ayuda para la comprensión de las diferencias regionales y la formulación de políticas comerciales.

Los resultados que aquí se presentan ofrecen un espacio para debatir sobre la importancia del transporte en el marco del comercio internacional, así como las variables que tienen una mayor incidencia en el flujo de bienes. Cabe señalar que los retos del sistema de transporte se han incrementado debido a una mayor demanda en la especialización de las unidades, a una tendencia acelerada hacia el apoyo de redes logísticas más flexibles, a la minimización de inventarios, al incremento de los requerimientos para aumentar la rentabilidad del servicio de transporte sobre grandes distancias, aunado a los incrementos del precio del combustible y los costos de transporte.

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# PERCEPCIÓN DE LA CALIDAD DEL SERVICIO EDUCATIVO DOCTORAL

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## RESUMEN

*Esta investigación tiene como objetivo analizar la percepción de la calidad del servicio educativo de los alumnos de un grupo de doctorado en educación de un Centro Universitario Particular, campus Mexicali, durante el cuatrimestre 2013-1. El estudio parte del análisis de las dimensiones: Elementos tangibles, confiabilidad, capacidad de respuesta, seguridad y empatía. Se aplica una versión modificada del SERVQUAL, el SERVQUALing, se trabajan los datos con las técnicas estadísticas descriptivas y multivariantes como la correlación de Pearson, regresión múltiple y reducción factorial, se realizan pruebas de validez y fiabilidad, como el coeficiente alfa de Cronbach, se utiliza el software SPSS versión 20.0 y se utilizan las técnicas de grupo focal, entrevista a profundidad, en el análisis cualitativo, apoyado con el software ATLAS.TI, versión 7.2, se categorizan y describen las relaciones conceptuales. El paradigma epistemológico utilizado es transparadigmático, en un estudio de caso, utiliza un traslape en el análisis cuantitativo y cualitativo que enriquecen los resultados y conclusiones obtenidas, para la contribución a la planeación estratégica, en el diseño e implementación de estrategias de mejora en la calidad de la educación superior de nivel doctoral.*

**PALABRAS CLAVE:** Servqual, Servqualing, satisfacción del cliente

## ABSTRACT

*This research aims to analyze the perception of the quality of education of students in a group of doctoral education of a Private University Center , Mexicali campus during the semester 2013-1 . The study of the analysis of the dimensions : Tangibles , reliability , responsiveness , assurance and empathy . It applies a modified version of SERVQUAL , the SERVQUALing , data is working with descriptive and multivariate statistical techniques such as Pearson correlation , multiple regression and factor reduction , are tested for validity and reliability , as Cronbach 's alpha coefficient was using SPSS version 20.0 software and techniques used focus groups, depth interviews , qualitative analysis , supported with ATLAS.TI software , version 7.2 , are categorized and described the conceptual relationships . The transparadigmatic epistemological paradigm is used in a case study using an overlap in the quantitative and qualitative analysis to enrich the results and conclusions obtained for the contribution to strategic planning in the design and implementation of strategies for improving the quality higher education doctoral level.*

**JEL:**123

**KEYWORDS:** Servqual, Servqualing, Customer satisfaction

## INTRODUCCION

Esta investigación es importante en la actualidad porque toca el concepto de la calidad del servicio percibido por el cliente como una de las estrategias que utiliza actualmente la administración para mejorar la producción de servicios en las empresas gubernamentales,

privadas, sin fin o con fin de lucro, con ello mantenerse y en lo posible liderar el mercado de servicios. Otro aspecto importante que se destaca en esta investigación es el estudiar la percepción de la calidad del servicio, al ser un elemento más complicado para su medición que la calidad del producto, ya que la calidad del servicio es doblemente abstracta o subjetiva debido a la percepción del cliente. Pero ha sido demostrado el hecho de ser confiable medir las percepciones con instrumentos como la escala de actitudes hacia el servicio llamada escala Likert o la escala de Diferencial Semántico. Además, el tema de la administración de la educación a nivel universitario resulta relevante y novedoso porque no es una acción cotidiana medir la percepción de la calidad del servicio educativo de sus clientes (estudiantes). La formulación del problema es ¿Qué relación existe entre la percepción de la calidad del servicio educativo y la importancia atribuida a las dimensiones que integran la calidad del mismo, de los estudiantes de la Generación 15 del Doctorado en Educación del Centro Universitario Tijuana Campus Mexicali?. Se plantea la hipótesis general: La percepción de la calidad del servicio educativo está relacionada con la importancia atribuida a las dimensiones que integran la calidad del mismo. El presente estudio es relevante al utilizar la propuesta de Parasuraman adaptada a la administración de la educación con el instrumento Servqual y Mejías, mide la calidad del servicio, denominado Servqualing. La calidad se determina por las interrelaciones entre los factores como el producto, usuario, y servicio. Se presenta un instrumento de investigación cuantitativo, en el cual se revelan nuevas dimensiones latentes en la percepción del servicio educativo universitario de estudiantes investigados, en este caso, de la generación 15 del doctorado en educación del Centro Universitario, Campus Mexicali. Es un instrumento confiable y válido para ser utilizado en contextos similares. Otro aporte sustancial es complementarlo con técnicas cualitativas para conocer más la singularidad de la percepción de la calidad del servicio educativo de los sujetos bajo estudio.

La propuesta metodológica es un avance epistemológico al ubicarse en el paradigma epistemológico multirreferencial que permite un estudio más completo del objeto en el proceso de investigación.

La escala cualitativa de medición “Likert” es un instrumento de apoyo para la toma de decisiones y la planeación estratégica del desarrollo institucional del Centro Universitario. Es una fuente bibliográfica y modelo de la utilización de técnicas de medición de la percepción de la calidad del servicio en general y la aplicación de los métodos estadísticos multivariantes como el coeficiente de fiabilidad alfa de Cronbach\* y el Análisis factorial (Reducción de factores) para el estudio de variables latentes, así como el uso de técnicas de investigación de carácter cualitativo, que permitirán conocer al objeto de estudio desde una perspectiva epistemológica multirreferencial. El objetivo general es analizar la relación que existe entre la percepción de la calidad del servicio educativo y la importancia atribuida a las dimensiones que integran la calidad del mismo. Esta investigación se delimita al estudio de caso de la población generación 15 del Doctorado en Educación del Centro Universitario, Campus Mexicali, utilizando muestras a conveniencia del investigador, por lo que los resultados obtenidos son de carácter descriptivo correlacional cuya aplicación a otros contextos será mediante el uso de analogías y no con el rigor científico de paradigma epistemológico cuantitativo.

## REVISIÓN DE LITERATURA

El análisis de la Calidad del Servicio se inicia formalmente en 1985 con los autores Parasuraman, Zeithami y Berry (1985), los cuales proponen un modelo de medición de la CS comparando las expectativas y las percepciones de los clientes, el cual es redefinido y denominado SERVQUAL por los mismos autores en 1988. Desarrollaron un modelo de medición de la calidad en el servicio en el que se presenta a ésta como un proceso multidimensional. Concluyen que: las percepciones

de calidad de los clientes están influenciadas por una serie de diversas diferencias que ocurren en el lado de quien ofrece el servicio y proponen la necesidad de examinar la naturaleza de la asociación entre la CS percibida por el cliente y sus determinantes (denominados gaps). Primero identifican 10 determinantes y después las reducen a 5 dimensiones. Concluyen que los factores encontrados son determinantes en la CS. Implican principalmente; comunicación y procesos de control que deben ser analizados a través de datos cuantitativos de estudios exploratorios. La mayoría de las investigaciones llevadas a cabo hasta ahora se basan en el trabajo original de Parasuraman et al. (1985, 1988). De una u otra forma, han criticado, han ampliado o por lo menos lo han tomado como punto de comparación. Este mismo trabajo es el principal sustento teórico en que se basa el modelo SERVQUALing propuesto por Mejías, A., (2006), Mejías, Reyes, Maneiro (2006), Reyes, M & Reyes, O., (2011), Reyes, O., Reyes, M. & Rodríguez P. (2011), Reyes, O., & Reyes, M. (2012), Reyes (2012), para medir la percepción de la Calidad del Servicio en las instituciones educativas, en las cuales no contaba con antecedentes formales, se adaptaron las dimensiones a la educación superior: Elementos Tangibles. *Apariencia de las instalaciones Físicas, Equipos, Personal y Materiales de Comunicación. Confiabilidad. Habilidad para ejecutar el Servicio Prometido de Forma Fiable y Cuidadosa. Capacidad de respuesta. Disposición y Voluntad del Personal de la Institución para ayudar al estudiante y proporcionar el servicio. Seguridad. Conocimientos y atención Mostrados por el personal de la institución y sus habilidades para inspirar credibilidad y confianza. Empatía. Atención individualizada que ofrece la institución a los estudiantes.*

Para mejorar la calidad en las instituciones de educación superior, enfocadas como empresas de servicios, es necesario cumplir con las peticiones de la sociedad, porque ella es la que decide ingresar a la mejor escuela para recibir una educación de calidad. Como consecuencia de los cambios socioeconómicos y tecnológicos analizados surge un nuevo paradigma organizacional y empresarial caracterizado precisamente por la forma en que aparecen esos cambios que no aparecen como hasta ahora de manera gradual y sobre todo predecible sino de forma compulsiva e inesperada. Por eso, si el entorno cambia y lo hace tan bruscamente y de manera tan inesperada, inevitablemente han de hacerlo las estructuras organizacionales, la configuración y diseño del producto o servicio que se ofrece en el caso educativo será intangible, pero perceptible- las formas de empleo y por supuesto la atención al cliente o usuario. (Tobón, et al, 2006). La percepción de la calidad del servicio por parte del estudiante es de gran interés para las instituciones de educación superior, porque en la actualidad existe más universidades tanto públicas como privadas que compiten por estar certificados con las normas ISO9000 y ofrecer el mejor servicio de educación pero no saben que es lo que piensan los usuarios al respecto.

Por lo tanto es importante hacer distinción entre calidad y evaluación, pues mientras la calidad de la educación implica un proceso de mejora continuo sobre sus elementos, también requiere necesariamente de la evaluación, Garduño (1999). Cabe mencionar que no todas las instituciones de educación superior en México públicas o privadas cumplen con los requerimientos de calidad y algún tipo de certificación por algún tipo de organismo acreditador u organización. También es indispensable conocer las necesidades que demandan los estudiantes, para que con ayuda de sus aportaciones, sirven para crear un instrumento que realice las mediciones de la calidad del servicio de acuerdo a lo que ellos piden. Conocer las características que los usuarios requieren en el servicio, para conocer si se cumple con lo que los alumnos solicitan. Una estrategia para incrementar la calidad en estas instituciones es satisfacer la demanda de servicio de los alumnos, con el fin de cumplir con esa parte donde la empresa tiene que satisfacer a su cliente y haciendo hincapié al mundo cambiante que se vive en la actualidad con la globalización, para que el día de mañana la universidad sea reconocida como una institución de buena calidad recomendada por los estudiantes, como clientes satisfechos.

## METODOLOGÍA

La presente investigación se delimitó al estudio de caso del universo de un Centro Universitario Particular Campus Mexicali, de un grupo del Doctorado en Educación. Se utilizó el Paradigma Epistemológico Transparadigmático sobreponiendo Paradigmas métodos y técnicas cuantitativas y cualitativas, utilizando muestras a conveniencia del investigador por lo que los resultados son de carácter descriptivo y descriptivo correlacional cuya aplicación a otros contextos será mediante el uso de analogías y no con el rigor científico de paradigmas epistemológico cuantitativo. El estudio de caso se inicia con el paradigma epistemológico cuantitativo, Hipotético Deductivo. Es un estudio correlacional. Este, es el procedimiento o camino que sigue el investigador cuantitativo para hacer de su actividad una práctica científica. El método hipotético-deductivo tiene varios pasos esenciales. Observación, del fenómeno a estudiar, creación de una hipótesis para explicar dicho fenómeno, deducción de consecuencias o proposiciones más elementales que la propia hipótesis y verificación de la verdad de los enunciados deducidos comparándolos con la experiencia. Este método obliga al científico a combinar la reflexión racional o momento racional (la formación de hipótesis y deducción) con la observación de la realidad o momento empírico (la observación y la verificación) Se continúa con el Paradigma Epistemológico Cualitativo, con el Método del Interaccionismo Simbólico y la Fenomenología de Schutz su esencia radica en conocer la subjetividad de los Sujetos. El Interaccionismo Simbólico, examina los significados dentro del lenguaje escrito y hablado y en el comportamiento en la interacción social, se analiza la acción humana abordándola como una ciencia interpretativa en busca de su significado y no como una ciencia natural, la cual busca leyes. La fenomenología tiene como sustento cuatro conceptos, la temporalidad se refiere al tiempo vivido la espacialidad el espacio vivido la corporalidad el cuerpo vivido y la racionalidad o la comunidad que se refiere a la relación humana, Álvarez- Gayou Jurgenson (2006)

A partir de la teoría de Alfred Schutz se interpretó la experiencia de los sujetos participantes en el P E-A, la acción social es descrita por los sujetos actores basándose en las distintas tipificaciones que le son provistas por su situación biográfica su acervo de conocimientos a mano y la intersubjetividad, Schutz (1993 y 1995). Para esta investigación se conoce el mundo de significados con respecto a la calidad del servicio educativo, universitario, expresados de acuerdo a sus opciones creencias y vivencias en el Centro Universitario Particular bajo estudio. Se utilizaron las técnicas de entrevista a profundidad y Grupos Focales “Focus Group”, se obtuvieron los documentos primarios respectivos y se procesarán en el software Atlas ti. Creando citas, códigos y memorándums, redes conceptuales o “networks” y a partir de ellos se generaron reportes que llevaron a la creación y/o confirmación de categorías conceptuales de la percepción de la calidad del servicio educativo universitario. Como punto de partida se utilizaron las categorías técnicas del SERVQUALing como categorías a priori, pero con la posibilidad de construir categorías a posteriori producto de la experiencia particular de esta investigación.

*Universo:* La población total de alumnos de este estudio es de 28 alumnos de un grupo de Doctorado en Educación de un Centro Universitario Particular, Campus Mexicali.

*Muestra:* Se trata de un estudio de caso de un grupo de 28 estudiantes. Se incluye una encuesta escala tipo Likert y una guía de entrevista a profundidad y para grupo Focal, los cuales permitieron el análisis de los datos generados mediante el uso de métodos estadísticos multivariantes y el análisis de contenido y construcción de conceptos con apoyo de Software Atlas ti. utilizado en la investigación cualitativa. Para esta investigación los criterios de inclusión es

todo el universo por su reducido tamaño. Se operacionalizaron las variables con su definición conceptual y operacional de cada una de ellas.

## RESULTADOS

Tabla 1: Estadísticos Descriptivos. Dimensiones Teóricas de la Calidad de Servicio Educativo

Dimensión	Media	Desviación estándar
Elementos tangibles	2.6696	0.748
Confiabilidad	3.0429	0.917
Capacidad de respuesta	3.2679	0.990
Seguridad	3.2679	0.907
Empatía	2.9929	0.826
Media general	3.0482	0.768

Se realizó la reducción factorial. Se calcularon las pruebas de adecuación muestral: Determinate,  $p = 0.000$ , Prueba de Kaiser-Meyer-Oklín 0.727 y Prueba de esfericidad de Bartlett, Chi-cuadrada 524.841 con un p-valor de 0.000, resultando adecuadas para el análisis factorial de la muestra (Visauta-Martori, 2003).

Tabla 2: Correlaciones Entre Dimensiones Teóricas de la Calidad de Servicio Educativo

Dimensión	Elementos tangibles	Confiabilidad	Capacidad de respuesta	de Seguridad	Empatía	Media general
Elementos tangibles	1	0.614**	0.692**	0.493**	0.529**	0.750**
Confiabilidad	0.614**	1	0.808**	0.724**	0.649**	0.877**
Capacidad de respuesta	0.692**	0.808**	1	0.816**	0.785**	0.947**
Seguridad	0.493**	0.724**	0.816**	1	0.852**	0.898**
Empatía	0.529**	0.649**	0.785**	0.852**	1	0.876**
Media general	0.750**	0.877**	0.947**	0.898**	0.876**	1

\*\* La correlación es significativa en el nivel 0,01 (2 colas).

Tabla 3: DIMENSIONES EMPÍRICAS o LATENTES

Estadísticos descriptivos		
Dimensión	Media	Desviación estándar
Atención empática	3.1389	0.88354
Confiabilidad responsable	2.9714	1.0121
Servicio eficaz	3.3643	0.86076
Horarios de atención	3	1.08866
Infraestructura y equipo	2.0357	1.00856
Media general	2.9021	0.6996

Atención empática. El personal brinda una atención con disposición y confianza.

Afirmaciones: 12, 13, 14, 15, 17, 20, 21 y 22.

Confiabilidad responsable. El personal ofrece un servicio cuidadoso y puntual.

Afirmaciones: 5, 6, 7, 8 y 11.

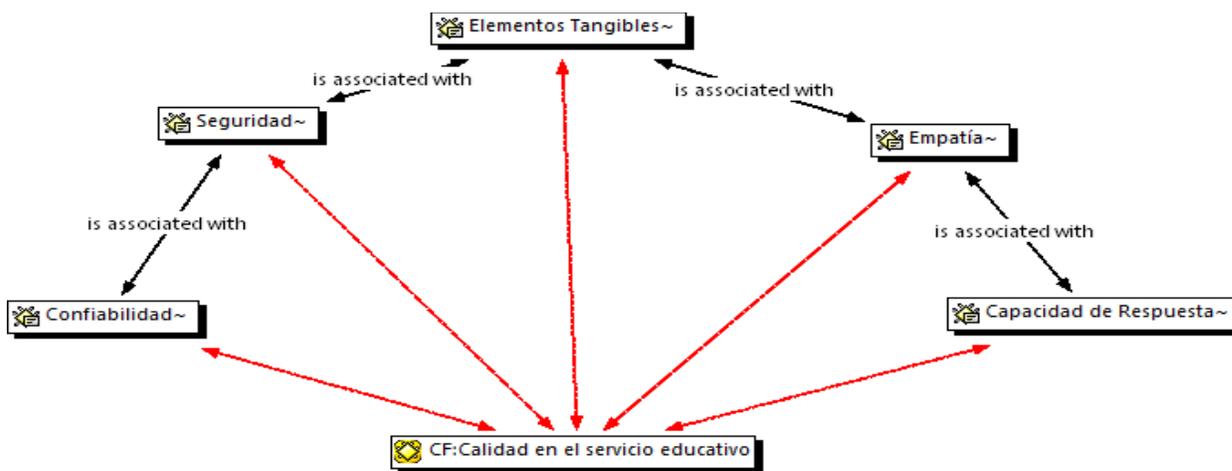
Servicio eficaz. El personal tiene buena apariencia, es amable, comunicativo y no comete errores.

Afirmaciones: 3, 4, 9, 10 y 16.

Horarios de atención. La institución tiene horarios de trabajo adecuados para todos sus estudiantes. Afirmación: 19.

Infraestructura y equipo. La institución tiene instalaciones físicas atractivas y equipos actualizados. Afirmaciones: 1 y 2.

Figura 1: Mapa Conceptual de la Relación Entre Dimensiones Teóricas de la Percepción de la Calidad del Servicio Educativo Doctoral



## CONCLUSIONES Y RECOMENDACIONES

1. Se confirmó la hipótesis de la asociación entre la percepción de la calidad del servicio educativo y la importancia atribuida a las dimensiones que integran la calidad del mismo, de los estudiantes de un grupo de Doctorado en Educación de un Centro Universitario Particular, Campus Mexicali.

2. Se partió de las dimensiones teóricas (a priori) de Parasuraman y Mejías y Reyes (Elementos

*tangibles, Confiabilidad, Capacidad de Respuesta, Seguridad y Empatía), se obtuvieron en los alumnos, a través del análisis de factores, análisis de los componentes principales y rotación Varimax y se obtuvieron las dimensiones empíricas (o subyacentes) de: atención empática, confiabilidad responsable, Servicio eficaz, horarios de atención e infraestructura y equipo de los estudiantes de Doctorado. Se analizó la correlación de cada una de las dimensiones con la media general de la calidad del servicio, obteniéndose los siguientes coeficientes de correlación de Pearson\* y su significancia  $p < 0.01$ . Elementos tangibles 0.750, Confiabilidad 0.877, Capacidad de Respuesta 0.947, Seguridad 0.898, Empatía 0.876, la correlación más alta se observó entre la capacidad de respuesta con la media general de la percepción de calidad de servicio educativo. La percepción de la calidad del servicio educativo de los estudiantes, obtuvo una media de 3.04, la cual significa que el estudiante no está ni de acuerdo ni en desacuerdo con el servicio educativo doctoral recibido. En los instrumentos cuantitativos propuestos por Parasuraman y Mejías, hacen énfasis en la apariencia, en cambio en los datos cualitativos recogidos en el grupo focal y entrevistas a profundidad, hacen más referencia a la cantidad y calidad de los elementos tangibles.*

En los resultados cualitativos, los estudiantes perciben que el personal administrativo da buena atención, es personalizada e inmediata, cuando no hay respuesta al momento le dan seguimiento hasta resolver el problema. Horario funcional, adaptable y adecuado. Pero en cuanto al equipamiento de las aulas no hay la misma atención. La institución no muestra interés en trabajar en grupo colegiado, esto demerita el servicio pues los estudiantes no aprovechan al 100% el trabajo cursado durante todo el postgrado. La atención de los docentes es profesional de tal forma que cubren las expectativas de los estudiantes en cuanto a la atención, sin embargo, la institución no produce investigadores y por ende conocimiento suficiente debido a que esta responsabilidad no es compartida, recae en el docente que imparte los seminarios de titulación. Esta falta de comunicación dentro de la institución y dentro del grupo de docentes es otro aspecto que no favorece la formación de investigadores y desarticula las materias.

La apariencia no es adecuada para una institución académica de este nivel y la limpieza de los inmuebles requiere más atención por razones de salud. Por otro lado el servicio de internet no es suficiente. Por último, la presentación del personal es adecuado. Se sugiere aplicar el instrumento de investigación aquí utilizado en otras instituciones similares dentro del contexto nacional y reafirmar su validez y confiabilidad.

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# IDENTIFICACIÓN DE NUEVOS COSTOS DE OPORTUNIDAD DEL DESPERDICIO AUTOMOTRIZ CON DAÑO AMBIENTAL

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## RESUMEN

En este trabajo de investigación se analiza el papel que juegan los nuevos costos de oportunidad del desperdicio automotriz con daño ambiental, concretamente el reciclado de llantas dentro de la industria automotriz poblana a través de la empresa Tire Chip, teniendo como ejes la innovación tecnológica y la competitividad empresarial, los cuales tienden a generar una nueva cultura empresarial en materia de costos ambientales. La empresa Tire Chip es una entidad joven cuya actividad principal es el reciclaje de llantas. Actualmente depende financieramente de Industrias NORM empresa matriz, nace como una alternativa para el tratamiento integral de los neumáticos que se desechan en el Estado de Puebla, México, iniciativa de la planta armadora alemana Volkswagen, instalada en el estado, quien lanza la inquietud de no querer destinar las llantas a un mercado negro de refacciones por el costo ambiental y social que esto pudiera generar o bien tratar de disminuir los contaminantes atmosféricos que genera la quema clandestina de llantas.

**JEL:** M:11, M:21, O:14, Q:55.

**PALABRAS CLAVE:** Costo de oportunidad ambiental, desperdicio, contaminación,

## IDENTIFICATION OF NEW OPPORTUNITY COSTS OF ENVIRONMENTAL DAMAGE AUTOMOTIVE WASTE

### ABSTRACT

*In this research examines the role of new waste opportunity costs of environmental damage specifically automotive tire recycling within the automotive industry through the Puebla Tire Chip company, having as main technological innovation and business competitiveness of which generate a new corporate culture in terms of environmental costs. Chip Tire Company is an entity engaged primarily young tire recycling. Currently Industries Norm financially dependent parent company, was created as an alternative to the comprehensive treatment of discarded tires in the state of Puebla, the initiative of the German Volkswagen assembly plant who launched the concern of not wanting to spend the tires to a black market spare parts for the environmental and social costs that could generate either illegal burning of tires.*

**CONTRIBUTION COGNITIVE:** Identification of new environmental opportunity costs of automotive waste based on technological innovation and business competitiveness

**JEL:** M:11, M:21, O:14, Q:55

**KEYWORDS:** Environmental Opportunity cost, waste, pollution, technological innovation, competitiveness

## INTRODUCCIÓN

Los contaminantes son elementos químicos, biológicos, sonoros y visuales que afectan al ser humano y al medio ambiente, la Organización de las Naciones Unidas identifica al tráfico rodado como uno de los principales contaminantes del planeta, tan solo las emisiones de gases de efecto invernadero, en el ámbito urbano, se derivan en un 38% del sector transporte Rebossio, Alejandro (2012), cifra que ha superado los estándares permitidos por la Organización mundial de la salud. Una de las principales causas de la combustión de los hidrocarburos es la que emite la quema clandestina de los neumáticos, su quema produce bióxido y monóxido de carbono, metano, óxido de nitrógeno, y otros gases de menor densidad catalogados como peligrosos, SEMARNAT (2012) para la salud y medio ambiente, observar Tabla No. 1. Composición de Neumáticos

Tabla No. 1: Composición de Neumáticos

<b>70% Azufre, Cadmio, Plomo,</b>
Mercurio, Dioxin, Furanos.
Carbono, Hidrogeno (H) , Azufre (S) ,
Cloro (Cl), Fierro (Fe), Oxido de Zinc (ZnO),
Dióxido de Silicio, (SiO <sub>2</sub> ) 5, Cromo (Cr) ,
Níquel (Ni), Plomo (Pb), Cadmio, Talio, entre otros.

*Fuente: Datos Tire Chip. Nota: Los porcentajes de composición pueden variar según el tipo de neumático y el país de fabricación. Cuando se busca conocer el origen de la mala calidad del aire en una zona urbana, se hace un inventario de contaminantes criterio, que puede incluir monóxido de carbono (CO), óxidos de nitrógeno (NOx), óxidos de azufre (SOx), partículas (menores a 10 micrómetros -PM10- y menores a 2.5 micrómetros -PM2.5-), compuestos orgánicos volátiles (COV), hidrocarburos (HC), y plomo (Pb). Si lo que se quiere es conocer el origen de las emisiones que causan el cambio climático global, se hace un inventario de gases de efecto invernadero (GEI), que puede incluir el bióxido de carbono (CO<sub>2</sub>), el metano (CH<sub>4</sub>), óxido nitroso (N<sub>2</sub>O), entre otros.*

El constante crecimiento de la población y la demanda de automóviles anuales y de neumáticos (En México, la flota en circulación es alrededor de 23,000 000 vehículos y cada año se añaden más de un millón de nuevos vehículos ligeros, un millón de vehículos usados y 40,000 vehículos pesados), incurren en un aumento de contaminantes por desperdicio de industria automotriz incluyendo a los neumáticos conocidos comúnmente como llantas. De ahí nace la imperiosa necesidad de buscar alternativas económicas y ambientales para la reutilización de neumáticos dentro de la industria automotriz.

## REVISION LITERARIA

En la actualidad dado los grandes cambios vertiginosos que se presenta en la economía mundial generan nuevos conceptos económicos-administrativos producto del propio desarrollo empresarial, la macroeconomía y la microeconomía se unen en un nuevo concepto aplicado a la administración empresarial: los costos de oportunidad ambientales entendidos como parte de una estrategia empresarial y porque no social orientada hacia procesos productivos, productos y servicios que ayuden a fortalecer la competitividad empresarial mediante innovaciones tecnológicas, reducción de costos, y disminución de riesgos en aspectos de seguridad, salud humana y medio ambiente, en si la pregunta de investigación de la presente ponencia es *¿existen costos de oportunidad ambiental en base al reciclado e innovación en neumáticos dentro de la industria automotriz, que sean rentables en términos económicos, teniendo como referencia empresarial a Tire Chip?*

El presente trabajo de investigación tiene como objetivo general analizar si es aplicable el costo de oportunidad ambiental para la industria automotriz en base al reciclado, reutilización e innovación de nuevos productos en base al desperdicio de neumáticos. Mientras que los objetivos particulares tienden a identificar la generación de nuevos productos derivados del reciclado de llantas y la identificación de oportunidades comerciales para la industria automotriz.

Los referentes teóricos del presente reporte de investigación son la teoría de la economía social : *Theorie der gesellschaftlichen Wirtschaft*, (costo de oportunidad), publicada en el año 1914, publicada por Friedrich von Wieser, Teoría de la Innovación tecnológica, Joseph A. Shumpeter y la teoría de las tres dimensiones del desarrollo sostenible, mientras que el marco legal se basa en la política ambiental en México dentro del Plan Nacional de Desarrollo, Ley Federal de Protección al Ambiente, Ley General del Equilibrio Ecológico y la Protección al Ambiente así como la normalización ISO para la reducción de contaminantes.

## MARCO METODOLÓGICO

**Tipo de Investigación:** La presente investigación es de tipo descriptiva ya que pretende establecer si los costos de oportunidad ambiental tienen una alternativa social de negocios en base a la innovación tecnológica. **Método de Investigación:** El método que se utilizara para llevar a cabo esta investigación es el Método deductivo-descriptivo ya que se buscan conclusiones particulares a partir de conceptos generales, se aplicó una encuesta a los miembros de la agrupación empresarial Tire Chip. **Tipo de Estudio:** Como se indicó el estudio es descriptivo, ya que no se intenta cambiar ningún fenómeno, solamente es estudiarlo, analizarlo y explicarlo. **Alcances de la Investigación:** Aplicación del concepto costo de oportunidad ambiental en base a la innovación tecnológica como alternativa de negocios para los productos de desecho y re uso de la industria automotriz como una de las tantas opciones para mejorar las condiciones económicas empresariales y de vida para el conjunto de la sociedad. **Límites de la Investigación:** La investigación se concretara a describir y determinar los beneficios del costo de oportunidad ambiental en base a la evaluación de las características de los productos y sub productos del desecho de caucho y llantas automotrices que concuerden con los principios y requisitos de los estándares internacionales de calidad ambiental de la industria automotriz.

**Técnicas e instrumentos para recopilar la información:** Las técnicas de recolección de datos que fueron utilizadas en la presente investigación son la revisión documental, la observación directa y la encuesta. Para recoger datos e información relevantes, se utilizó como instrumentos de recolección de datos: **Aplicación de entrevista.** El cuestionario fue diseñado cuidadosamente para una máxima efectividad, previamente a este se aplicó una prueba piloto para determinar evaluar su efectividad. El cuestionario contiene preguntas cerradas y cuenta con un espacio abierto a comentarios y sugerencias, bajo la conceptualización teórica de empresa socialmente responsable.

## RESULTADOS

El término costo de oportunidad ambiental es aplicado a aspectos multidisciplinarios y multisectoriales sin dejar de ser un concepto eminentemente social y de innovación tecnológica, para colaborar lo antes expuesto nos basamos en el estudio de campo de la empresa Tire Chip ubicada en el corredor industrial 5 de mayo del Estado de Puebla, (Pertenece al grupo Industrias NORM. Fundada el 2 de Junio 2011. Tire Chip México S.A. de C.V., ubicada en Río Papaloapan No. 21 Col. Sanctorum, Corredor Empresarial Cuautlancingo, en Puebla, México). Figura No. 1. Publicidad Tire Chip. La empresa es una entidad joven, nace como una alternativa para el tratamiento integral de los neumáticos que se desechan dentro del sector automotriz, en el Estado

de Puebla, México. Tire Chip actualmente depende financieramente de Industrias NORM que es su empresa matriz y de la toma de decisiones ambientales de la armadora alemana Volkswagen quien lanza la inquietud de no querer destinar las llantas que deshecha a la quema o a un mercado negro de refacciones por el costo ambiental y social que esto pudiera generar, esto se une a las normativas ambientales que también son retomadas y reforzadas por la empresa armadora próxima a instalarse en Puebla AUDI. La función de Tire Chip comienza por promover en primera instancia la reutilización, luego la renovación, el reciclaje y en última instancia la cogeneración de los desechos provenientes de neumáticos, en base al concepto costo de oportunidad ambiental tan solo la industria del reciclado de llantas genera en promedio oportunidades económicas por 1.5 millones de dólares, esto sin dejar de lado la innovación de nuevos productos derivado del reciclado de neumáticos, Neohábitat y Recyhul (2008) En el mercado verde se reciclan llantas usadas y obtienen a cambio bonos verdes; la primera tuvo ventas por 1.5 m.d.d en 2007; la segunda recicla un millón de llantas anuales

Figura No. 1: Publicidad Tire Chip



Actualmente el desperdicio de llantas desechadas en México está estimado en unos 30 millones de unidades anuales, materia prima para la industria del reciclado que es suministrada a bajos costo o en el caso de Tire Chip a precio cero, Francisco Martha, (2012), señala que cada año en nuestro país se desechan 25 millones de llantas viejas (además de los que "entran" de EU clandestinamente) de las cuales, nueve de cada 10 son enviadas a tiraderos a cielo abierto o depósitos clandestinos, convirtiéndose en un grave problema de salud y una amenaza para el medio ambiente. Al realizar la investigación y aplicar las entrevistas se detecta que la Administración Gerencial de la empresa tiene identificado el siguiente mercado potencial en base a la innovación de sus procesos productivos y costo de oportunidad ambiental, en menos de tres años (Tabla No. 2 “*Mercados atractivos de Tire Chip para colocar el reciclado de llanta en base a la innovación y costo de oportunidad ambiental.*” y Tabla No. 3 “*Estrategias de Gestión empresarial Tire Chip*”

Tabla No. 2: Mercados Atractivos de Tire Chip Para Colocar el Reciclado de Llanta en Base a la Innovación y Costo de Oportunidad Ambiental

<ol style="list-style-type: none"> <li>1. <b>Llancreto: Es un nuevo concreto que sustituye la arena por el chip-producto base de la llanta- ayudando con esto a no mermar los recursos naturales (bancos de arena) y mitigar las emisiones de carbono del planeta. Actualmente se puede usar el .025% en la concentración del concreto pero esto puede subir hasta el 20%.</b></li> <li>2. Impermeabilizantes, actualmente se usa el polvo que sale del limado de llantas para producirlo. Tire chip, provee este polvo de las empresas que se encargan de revestir las llantas.</li> <li>3. Como medida de amortiguación de impactos, usado en puertos marítimos.</li> <li>4. Distintos usos ornamentales como tapetes caseros, tapetes de mouse, pisos para jardín, etc.</li> </ol>
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Fuente: Tire Chip, enero 2013.

Tabla No. 3: Estrategias de Gestión Empresarial Tire Chip

**Estrategias de Gestión**

4 ejes:

1. Reutilización
2. Renovado
3. Reciclar----chip--- crear mercado
4. Coogeneración (incineración) Aprovechar potencial energético.

Fuente: Tire Chip., enero 2013.

**Proceso de Producción de Tire Chip**

El proceso comienza con el acopio de las llantas de diversa índole las cuales son previamente clasificadas, las llantas con las que actualmente trabaja la empresa proceden una parte del desecho generado por la empresa Volkswagen de México, así como de un programa que trabajado conjuntamente con la Secretaría del Medio Ambiente, con el cual se promueve entre la población que las personas y empresa llevan las llantas que no utilizan para ser recicladas, evitar así disminuir contaminantes. Actualmente sólo las compra de la armadora alemana y las acopia de cualquier persona física o moral que quiera dar un buen destino a este residuo, en base a la cultura de cuidado ambiental. Hasta hace unos meses como una política de disminución de costos se decidió ya no pagar por el reciclado, es decir que se efectuara la donación voluntaria. Dado el tamaño de la maquinaria con la que cuenta no se reciben llantas de medidas grandes. La segunda fase implica la separación y clasificación de las llantas que se reciben para delimitar cuáles se podrán ocupar para el proceso productivo y cuales se destinan a otro confinamiento. *Ver Figura No. 2 selección neumáticos.* En esta etapa se separa la cara lateral de los contornos de las llantas llamados pisos, de modo tal que se pueden apilar y reducir el espacio utilizado para su almacenamiento. Cabe mencionar que los pisos son los materiales a los que actualmente se enfocan, dentro del proceso de producción, la separación de las caras y el piso se hace mediante maquinaria especializada que por medio de fuerza y fricción separa ambos componentes, para reducir costos. Tal como se observa en *la Figura No.3 separador de capas neumáticos.*

Figura No.2: Selección Neumáticos

Figura No 3: Separador de Capas



Fuente Tire Chip, 2012. Fuente Tire Chip, 2013.

Una vez separadas las caras de los pisos se apilan dentro de contenedores que facilitan su movilidad, la razón por la que se apilan en porque se aprovecha mucho mejor el espacio y se reducen inventarios, ver figura No. 4 selección de capas por grosor y Figura No. 5 selección de capas por tamaño.

Figura No. 4: Selección de Capas Por Grosor y Figura No. 5: Selección de Capas Por Tamaño



Fuente: Tire Chip 2012. Fuente: Tire Chip 2013.

Figura No. 6: Maquinaria de Trituración



Fuente: Tire Chip, 2013

Los pequeños cortes son vertidos en dos grandes bandas que los transportan a las trituradoras. Figura No. 7. Una vez en la trituradora el material es procesado y por succión de aire es encaminado a la segunda trituradora. Con cada paso por las maquinas las partículas se van haciendo más pequeñas favoreciendo la formación del chip, Figura No. 9

Figura No. 7: Banda de Trituración

Figura No. 8: Seleccionador de Partículas



Fuente: Tire Chip 2012.Fuente: Tire Chip 2012.

Cuando el material ha sido procesado por ambas trituradoras se vierte en un contenedor para separar la pelusa (que también se vende) que trae del resto del chip y finalmente se envasa en bolsas individuales para su venta al público. Figura No. 9: Conos de empaque y Figura No. 10: Fibra de llanta. Realmente los costos son de mano de obra, electricidad ya que comparten costos fijos con plantas automotrices instaladas en el corredor industrial 5 de mayo disminuyendo así sus costos de producción, aplicando el concepto económico de economías de escala.

Figura No.9: Conos de Empaque y Figura No. 10: Fibra de Llanta



Fuente: Tire Chip 2012.Fuente: Tire Chip 2012.

La segunda parte de la investigación se detectó los siguientes mercados potenciales del reciclado de llantas opcionales a la administración de Tire Chip, reforzando la aplicación del costo de oportunidad ambiental en base a la innovación tecnológica: 1.- Proveeduría para fabricar pasto sintético y otros materiales para canchas deportivas, por ejemplo, para una cancha de fútbol de 8,000 m<sup>2</sup>, se requieren unos 20,000 neumático de tamaño estándar, 2.- Impermeabilizantes o recubrimientos hechos de material reciclado, 3.-Bola de caucho de un milímetro que se mezclan con concreto, 4.-Recubrimientos para pisos (usados en hospitales y gimnasios, entre otros usos más). Polvo para fabricar balatas, 5.- Otros usos: Láminas de suela para calzado rudo, bolsos con cámaras de llanta, macetas, mangueras, juegos infantiles, lonas que sirven para proteger el alimento de los animales, caucho de las llantas puede convertirse en loseta para pisos con una apariencia muy agradable y de gran durabilidad, bloques que se pueden superponer para formar muros de contención en proyectos de construcción, construcción de muros sólidos, uniéndolos con varilla, puede ser aprovechado para la pavimentación de avenidas y carreteras, ya que la arena plástica obtenida de la trituración de la llanta mezclada con pavimentos, da como resultados

concretos de alta resistencia, para formar bordes en las carreteras, funciona como aislamiento acústico anti vibratorio y antisísmico La empresa se ubica en un estado de la República mexicana con alto poder adquisitivo a nivel local, está inmersa en nuevos mercados emergentes, en el continente americano, tiene opción a aplicar nuevos avances tecnológicos. Dentro de los planes de la empresa, en el mediano plazo, en base a los costos de oportunidad ambiental e innovación tecnológica se encuentran: a.-Encontrar y apertura de nuevos mercados para su chip, b.- Establecer alianzas estratégicas con productoras de llantas que a cambio de publicidad puedan avalar que tienen proyectos colaterales con un proceso verde, c.-Encontrar la forma de separar el acero y la pelusa que resulta del proceso para poder comercializarlos por separado, d.-Generar independencia financiera que les permita subsistir con medios propios.

### Comprobación de Hipótesis

Entre los factores económicos administrativos determinantes que contribuyen al crecimiento de las empresas tenemos los gastos de inversión, es decir los desembolsos en compra de bienes de capital y de todos aquellos insumos o factores que una empresa requiere para su operación. Sin embargo dentro de los costos de oportunidad ambiental la inversión en materia prima es en base al reciclado el cual se basa en gastos mínimos, la decisión de los inversionistas ambientalistas de realizar una serie de gastos para la producción de bienes y servicios con el objetivo de obtener una rentabilidad, será en base a la innovación de productos reciclados y no en la materia prima, para el proceso de producción. Para las empresas ambientalistas como Tire Chip existen una serie de elementos que inciden en el comportamiento de la inversión, por ejemplo el beneficio esperado en el corto y mediano plazo ya que es costoso tener elevados inventarios, en neumáticos no tratados. Lo cual va a depender del comportamiento del ingreso que tenga la economía del reciclado y de la demanda efectiva de los consumidores ambientalistas, la empresa ofrece todo aquel que le confina sus neumáticos un certificado que avala que ha depositado los desechos en un lugar de tratamiento adecuado, avalando que se trata de un proceso verde por ser amigable con el medio ambiente. En cuanto al nivel de gasto público para estas empresas los gobiernos están trabajando una serie de incentivos fiscales a través de los bonos verde, por lo cual el gobierno es un promotor y un fuerte estímulo para la asignación de capitales privados en proyectos de inversión ambientalista, generando así políticas incentivas para la actividad empresarial así como un marco legal, social y de derechos que garantice la confianza de sus ciudadanos y consumidores a través de las políticas ambientalistas, como lo promueve la ley de protección ambiental. El tamaño y poder de compra del mercado ambientalista, en base a los costos de oportunidad va a determinar en un futuro próximo los proyectos de inversión empresarial independientemente de su estatus social.

### **CONCLUSIÓN GENERAL Y RECOMENDACIONES**

Podemos observar que el concepto de costo de oportunidad ambiental, con aplicación multidisciplinaria y multisectorial esta encadenado a procesos transnacionales globales (industria automotriz transnacional), con aplicación local en pymes, (Tare Chip), con amplio mercado en crecimiento constante pero limitado por la demanda verde, sin embargo las empresas ambientalistas como Tare Chip tendrán que trabajar ejes temáticos como la administración ambiental vinculada a métodos estadísticos, mejoras continuas dentro de una administración integral para los residuos con daño ambiental, en aras de seguir promoviendo la producción ambiental. El reto de la aplicación de los costos de oportunidad ambiental está en las preferencias del consumidor por adquirir un producto derivado del reciclado e innovador en el mercado nacional.

## FUENTES DE CONSULTA

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# PSICOLOGÍA DEL INTRAEMPENDIMIENTO: UNA APROXIMACIÓN DESDE UN ESTUDIO DE CASO EN LA INDUSTRIA MAQUILADORA DE CD. JUÁREZ, MÉXICO

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## RESUMEN

El Emprendimiento va más allá de la creación de una empresa. El reconocimiento de oportunidades, la asunción de riesgos y la tenacidad para poner en práctica ideas innovadoras a pesar de los obstáculos, son características de la conducta empresarial que se está volviendo cada vez más importante en las organizaciones (Krauss, Frese, Friedrich, y Unger, 2005, Morris y Kuratko, 2002). El objetivo de esta investigación fue determinar cómo se ha llevado el proceso del emprendimiento interno en una planta maquiladora bajo la amenaza de cierre de sus operaciones por la sede central de la empresa, con el fin de aprovechar las oportunidades para renovar y revitalizar dicha planta. Se realizaron entrevistas con empleados de diferente nivel jerárquico. Los resultados muestran que el comportamiento individual de intraemprendimiento basado en un fuerte locus de control interno puede influir y cambiar la actitud de los miembros de una organización, construir un equipo y enfrentar con éxito no solo los retos de la dinámica de reestructura financiera y administrativa con el fin de evitar su cierre, sino convertir a la planta en un modelo de operaciones para toda la corporación.

**PALABRAS CLAVE:** Intraemprendimiento, psicología del emprendedor interno, industria maquiladora.

## ABSTRACT

*Entrepreneurship goes beyond the creation of a company. The recognition of opportunities, risk taking and tenacity to implement innovative ideas despite the obstacles, are characteristic of entrepreneurial behavior that is becoming increasingly important in organizations (Krauss, Frese, Friedrich, and Unger, 2005; Morris and Kuratko, 2002). The objective of this research was to determine how the intrapreneurship process in a maquiladora plant was taken under the threats of closure of its operations by the corporate headquarters, in order to seize opportunities to renew and revitalize it. Interviews were conducted with employees of different hierarchical level. The results show that individual intrapreneurship behavior based on a strong internal locus of control can influence and change the attitude in members of an organization, build a team and face the challenges of financial and administrative restructure dynamics in order not only to prevent its closure, but turn in it the plant in an operations model for the whole corporation.*

**KEY WORDS:** Intrapreneurship, Psychology of The Intrapreneur, Maquiladora Industry.

## INTRODUCCIÓN

Mientras que el término intraemprendimiento (intrapreneurship) o emprendimiento interno tiene ya más de 3 décadas, iniciando con conceptos como emprendimiento corporativo interno (internal corporate entrepreneurship, Schollhammer, 1982) y finalizando con Kuratko et al. (1990) quien acuñó dicho término haciendo referencia a diferentes aspectos del emprendimiento corporativo, los estudios de caso en la literatura se sugiere son escasos, incluyendo aquellos realizados en Latinoamérica (Una búsqueda en el buscador científico EBSCOHOST (15 de junio 2013) bajo las palabras “intrapreneurship case study” arrojó sólo 3 estudios de caso, mientras que “intraemprendimiento” e “intraemprendedor” no tuvieron. En la base de datos Redalyc bajo “Intraemprendimiento”, sólo se encontraron 3 y todos referentes a Colombia. No se encontró alguno relacionado con la psicología del emprendedor interno.) Reconocer las dinámicas emprendedoras dentro de las organizaciones es muy relevante en la actualidad ya que la innovación es esencial en éstas para poder sobrevivir (Borza, y Maier, 2012).

## REVISIÓN DE LA LITERATURA

### Emprendimiento Interno

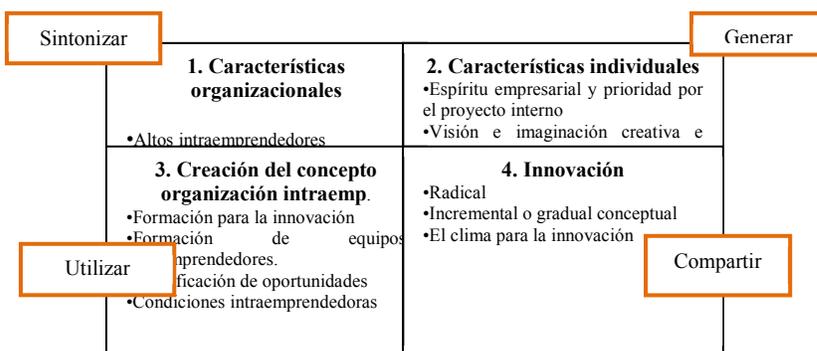
Pinchot (1985) menciona al Intraemprendimiento como la práctica de desarrollar una nueva empresa dentro de una organización existente para aprovechar una nueva oportunidad y crear así valor económico. Emprendimiento por el contrario, es el desarrollo de una nueva aventura fuera de una organización existente, y hay pruebas de que el intraemprendimiento ayuda a renovar y revitalizar a los administradores y sus negocios, innovando y mejorando el rendimiento (Kuratko et al. 1990).

Stevenson y Jarillo (1990) citado en Antoncic y Hisrich (2000), mencionan que el Intraemprendimiento puede ser abordado como el proceso por el cual los individuos al interior de las organizaciones persiguen oportunidades, y hacen cosas nuevas desviándose de lo habitual hacia la búsqueda de éstas (Vesper, 1990). El espíritu intraemprendedor se considera como una herramienta importante y valiosa para rejuvenecer y revitalizar las organizaciones (Dunlap-Hinkler, Kotabe, y Mudambi, 2010).

Romero, Fernández y Vázquez (2010), citado en Alipour, Idris, Arif, Anak y Karimi (2011) mencionan que las organizaciones han encontrado hoy en día el significado del intraemprendimiento como una estrategia corporativa y de desarrollo vitales para el funcionamiento de una organización, ya que para sobrevivir éstas necesitan adaptarse a los cambios y progreso. Garzón (2005) propone cuatro aristas (véase Figura 1) en un modelo teórico intraemprendedor: sintonizar, generar, utilizar y compartir.

El modelo teórico del intraemprendedor intenta predecir la incidencia de las variables independientes “características organizacionales”, “características individuales” y “creación del contexto organizacional intraemprendedor” sobre la variable dependiente “innovación en las organizaciones”. En el marco de la gestión del conocimiento, se concibe al modelo intraemprendedor para la variable “características organizacionales”, como el que permite sintonizar a la organización, en tanto que facilitando ésta es más fácil impulsar la innovación intraemprendedora. La segunda variable, “características individuales”, está orientada a generar actitudes en los intraemprendedores, la tercera variable busca utilizar los conocimientos para formar y conformar equipos e identificar oportunidades, y la cuarta variable que además es la dependiente, aborda la innovación radical, gradual, arquitectural y conceptual para compartir el conocimiento tácito, explícito y virtual (Garzón, 2005).

Figura 1. Modelo teórico del Intraemprendedor



Fuente: Garzón, 2005

Christensen (2005) citado en Trujillo y Guzmán (2008), sugiere que el comportamiento intraemprendedor puede ser fomentado por un sistema de incentivos basado en los resultados o relacionado con el desempeño de sus equipos, y en este sentido Hornsby et al. (2002) sostiene que para estimular la actividad emprendedora el sistema de incentivos debe ser claro y detallar los objetivos, los sistemas de retroalimentación, la responsabilidad individual y los resultados obtenidos.

Emprendimiento Interno e Innovación

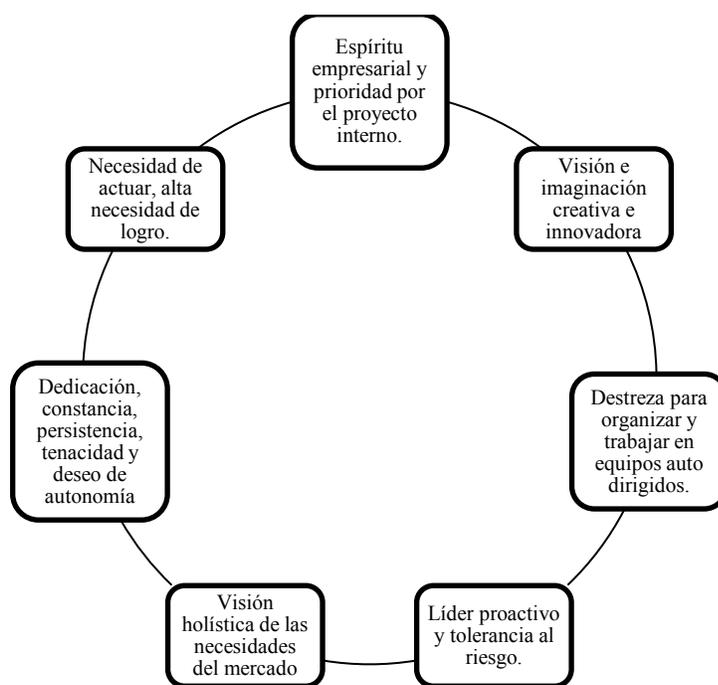
Seshadri y Tripathy (2006), señalan la importancia de la innovación como una de las estrategias para el éxito de la organización, así como la fuerte relación entre la innovación y los empleados que toman propiedad psicológica sobre el crecimiento de la organización y que manifiestan un comportamiento emprendedor, y en este sentido puede entenderse que el emprendimiento interno permite a los empleados participar en la generación de nuevas posibilidades para el crecimiento y mejoramiento de los negocios, y permitiría que las organizaciones movieran a sus empleados de una "perspectiva de empleado" a una "perspectiva intraemprendedora". La creatividad conduce a la innovación y el intraemprendedor lidera este proceso (Morris y Kuratko, 2002; citado en Moriano et al., 2009). Por lo tanto este puede realizar su trabajo de innovación con base en los recursos que tienen las organizaciones; como los económicos para el financiamiento de sus ideas (capital de riesgo), o la base tecnológica, ya que puede utilizar la planta instalada en su tiempo ocioso para producir un nuevo artículo o servicio (Pinchot, 1985). Para que el intraemprendedor surja se requiere que la organización genere una cultura organizacional que ofrezca a los empleados la posibilidad de encontrar las oportunidades de innovación, y a la vez satisfacer los deseos de sentirse propietarios de sus proyectos internos sin abandonar esta, transfiriendo el concepto a todas las personas de la organización (Drucker, 1992).

### Características del Intraemprendedor

Para conocer sobre la función del intraemprendedor (véase Figura 2) Garzón (2005) formula una lista de 35 características que después de un proceso de integración, unión y fusión se unificaron en siete, y que muestran la necesidad de su formación en las organizaciones y en los individuos para fortalecer este perfil y lograr impulsar la innovación en los individuos.

Los cambios estratégicos son liderados por los altos intraemprendedores, quienes crean y comparten con otros un nuevo modelo de éxito y desarrollan e implantan en la organización una visión a futuro, rastrean activamente el entorno para detectar señales tempranas de nuevas oportunidades y amenazas e intentan convertir éstas en oportunidades (Lombriser, 1994).

Figura 2. Características individuales del Intraemprendedor



Fuente: Garzón, 2005

A partir de lo planteado anteriormente, el foco o lugar de control interno (locus de control interno) permite encontrar la mejora de la organización a través de las aportaciones de sus empleados, generando en ellos otra forma de pensar, opinar y actuar, además influye en la búsqueda de información de su medio ambiente, mejorando así su condición de vida (Escovar, 1979). El locus de control interno y el comportamiento emprendedor tienen un lazo muy fuerte, pues el locus de control interno se relaciona con el estado de alerta, descubrimiento de oportunidades y confrontación de su entorno, encontrando la información necesaria que permita aprovechar sus oportunidades (Roig, Ribeiro, Torcal, De la Torre y Cerver, 2004), y mide la capacidad de control y autocontrol de nuestras conductas (Escovar, 1979).

Escovar (1979) y Kets (2005) señalan que las personas con un locus de control interno perciben que manejan su vida y son responsables de sus acciones. Además muestran una tendencia a ser proactivos, creativos e innovadores. En contraparte, las personas con un locus de control externo

suelen ser aquellos que se rinden fácilmente, sus acciones son influenciadas por otras personas, por lo que no confían en ellos y no son capaces de tomar sus propias decisiones.

Conforme a lo anterior el intraemprendedor surge cuando las personas poseen un locus de control interno, puesto que generan nuevas posibilidades de crecimiento y mejoramiento en los negocios o las empresas, ya que sus aportaciones, ideas, confianza en sí mismos, perseverancia y responsabilidad en sus actividades permiten el desarrollo del negocio (Escovar, 1979). Las personas que dirigen una empresa pueden marcar la pauta hacia un cambio organizacional, ya que si la empresa menciona Kets (2005), cuenta con un líder conservador y autocrítico, podría limitar el intraemprendimiento.

De acuerdo a Rotter y Mulry (1965), citado por Escovar (1979), el foco de control afecta la motivación, perseverancia y el autoestima del individuo. La confianza que deposita la organización en sus empleados permitirá un mejor desempeño laboral y personal, generando nuevos intraemprendedores. El objetivo central del presente estudio es determinar cuál fue el proceso del intraemprendimiento implementado por el gerente de planta y una aproximación de ello desde la psicología, con el fin de aprovechar las oportunidades para renovar y revitalizar a la misma.

## MÉTODO DE LA INVESTIGACION

La presente tiene un diseño no experimental, exploratorio, transaccional descriptiva. Utiliza la estrategia de investigación denominada estudio de caso. Yin (2003) menciona que el estudio de caso es sólo una de varias formas de hacer investigación de la ciencia social y es la estrategia preferida para preguntas de investigación del cómo o por qué, y cuando el investigador tiene poco control sobre los acontecimientos. La pregunta formulada es ¿Cómo fue el proceso de desarrollo de la conducta emprendedora interna en la planta maquiladora XY (nombre ficticio por acuerdos de confidencialidad) ubicada en Cd. Juárez?

La empresa participante del estudio de caso es productor líder de un amplio conjunto de accesorios para la industria automotriz y mobiliaria. Los productos incluyen: mecanismos de seguridad y controles, soportes para asientos de automóviles, bases de muebles y otros componentes para fabricantes de muebles de oficina. El corporativo cuenta con cerca de veinte plantas en 4 continentes. En Cd. Juárez la planta cuenta con aproximadamente 250 empleados, incluyendo personal administrativo y operativo. Se realizaron entrevistas semiestructuradas, siendo todos empleados que pertenecían a la empresa antes de que iniciara el proceso de intraemprendimiento.

## RESULTADOS

Se hicieron entrevistas a cuatro personas de la organización, el gerente de planta, el encargado del departamento de compras, la líder de una línea de producción y a un operador de producción. La Tabla 3 muestra los códigos teóricos concentrados en base a las entrevistas ya mencionadas.

Tabla 3. Códigos teóricos, Intraemprendimiento, Empresa XY

Códigos	(W)	(X)	(Y)	(Z)
<u>Intrapreneurship</u>				
Frecuencia en las entrevistas por participante (w, x, y, z)				

Falta de espíritu empresarial y prioridad por el proyecto interno (4,1,1,1)	“La administración que teníamos estaba orientada a los resultados personales más que en los resultados de la administración”.	“Antes no confiaba en nada, ni en proveedores ni en nosotros mismos”.	“Teníamos accidentes muy seguidos, acumulábamos material, la gente te daba carrilla por tener material acumulado, la empresa estaba muy fea, muy sucia”.	“Cuando yo entre, no teníamos casi personal administrativo y ahora ya, entonces sí ha cambiado mucho”.
Líder proactivo y tolerancia al riesgo (2,1,0,0)	“El corporativo estaba tomando la decisión de cerrar la compañía. Del 2008 para atrás, la planta estuvo en números rojos financieramente, a pesar de que se vendía lo suficiente, no alcanzaba para cubrir con los costos”.	“Había rumores de que se iba a cerrar la planta, realmente nunca lo hicieron oficial”.		
Dedicación, constancia, persistencia, tenacidad y deseo de autonomía (9,1,3,1)	“Hay gente muy capaz y es el principal recurso en la empresa, hay gente muy habilidosa, con mucha destreza, con mucho conocimiento y experiencia; quisimos tomar ese recurso, reforzarlo, entrenarlo en otras formas de trabajar y enfocarnos a ellos, les dimos básicamente la importancia de su trabajo”.	“Cuenta mucho la opinión de cada persona, así seas un operador, administrativo o gerente; toman mucho en cuenta la opinión de cada persona, y así hacen que cada persona se sienta comprometida y en confianza de comentar cualquier cosa que ellos ven mal”.	“Sobre todo que ponen atención en las sugerencias, si hay respuestas y estamos muy bien. En muchos aspectos hemos avanzado”.	“Pues sí, mi meta es ir mejorando más, ir aportando más ideas para así estar bien en mi trabajo”.
Visión holística de las necesidades del mercado (5,2,0,2)	“Es ver la visión de la empresa, hacia donde queremos ir, que queremos lograr de aquí a tres años; es cuando decimos: “Bueno en el 2013 queremos ser así” y debemos trabajar para lograr ese objetivo, entonces es ponerle la visión a la gente. La otra es fijar las metas correctas”.	“Pues empezamos a ver nuevos negocios, y esa fue una buena señal, en lo personal a mí me trajo tranquilidad al saber que tendría un trabajo estable, de cierta forma una economía también estable”.		“Sí, poco a poco si quisiera yo ir más arriba”.
Necesidad de actuar (3,0,1,1)	“Lo que hicimos aquí es “no escondas el problema”, si hay un problema en algún lugar, pues levántalo”.		“Operadores y líderes han dado muy buenas ideas y por medio de eso se han implementado las ideas y han dado resultados”.	“Antes en la línea se creaban demasiados scrap y se hicieron mejoras, y en un proyecto se pusieron unas regaderas que antes no teníamos y pudimos con eso, e inclusive fueron disminuyendo los gastos”.

Enfoque en los clientes (necesidad de logro) (5,0,0,1)	“Ahorita el personal de calidad va y visita a los clientes, si hay un problema es mejor conocer al cliente cara a cara y así es mucho más fácil resolver el problema, entonces por ello es muy importante siempre visitarlos”.	“Nos está llegando demasiado trabajo, nuestros clientes están satisfechos porque está muy bueno nuestro trabajo, está muy bien”.	“Y en otras áreas se crearon otros proyectos; y así ha venido mucha gente que uno ni conoce porque ha crecido mucho la planta”	
Proveedores Locales (visión holística de las necesidades del mercado) (2,1,0,0)	“Muchas empresas aquí en Cd. Juárez utilizan la misma tecnología que Canadá y Estados Unidos eso hace que como mexicanos y como juarenses que somos, generemos más empleo aquí en la ciudad”	“Tenemos planes a futuro de tener proveedores mexicanos, ayudar a la economía de la ciudad; desarrollamos proveedores mexicanos”.		
Destreza para organizar y trabajar en equipos autodirigidos (3,2,2,1)	“Les dimos la confianza, la oportunidad de que ellos hagan su trabajo sin necesidad de andar atrás de ellos. Lo que hicimos nosotros fue entrenar a la gente, a todos los niveles; los entrenamos en como tomar decisiones, como solucionar problemas, y eso hace que la gente se motive”.	“Hemos logrado ser un buen equipo de trabajo, la gente que trabaja aquí respeta mucho los espacios, cuidan cafetería, tratan de cuidar los baños y esto se da muy poco en las plantas maquiladoras”.	“Ahorita que estoy aquí en piso es algo totalmente diferente a cambiado mucho en cuanto a seguridad, materiales, limpieza, personal; en cuestión de medio ambiente muy bien, muy bueno”.	“Hay un trato muy bien, muy especial. Platicamos que ha cambiado mucho, porque nos facilitó mucho el trabajo a como estábamos antes, si estaba fácil el trabajo, pero no como ahorita”.
Visión e imaginación creativa e innovadora (1,0,2,2)	“El uso de herramientas como mejora continua han estado de moda en estos últimos años, y pues aquí lo implementamos”.		“En muchos aspectos hemos avanzado, porque antes trabajábamos a cincel y martillo y ahorita ya son muchas cosas modernas, mucha maquinaria más sofisticada y ayuda más al operador”.	“Una línea que se llamaba PFP antes tenía que perforar con taladro manualmente y ahorita tiene un tipo martillo pero de pistola de aire y así es más fácil que hacerlo manual; ahorita ya se hicieron muchas mejoras”.
Resultados Actuales (4,1,1,1)	“Empezamos a ser una planta de bajo costo, empezamos a mejorar la calidad de nuestros productos. En el 2011 ganamos 15 nuevos proyectos, y en lo que va del año llevamos ganado 3 proyectos. Ahora somos una planta que genera empleo, y eso es algo que buscamos siempre aquí en Juárez, y el resultado es “ganar, ganar”.	“Hemos crecido mucho, el negocio era muy diferente, empezamos a cambiar un poco el giro de la empresa”.	“Ahorita en producción nos llegó un jefe muy bueno, nos está enseñando muchas cosas y vamos para arriba, eso es lo bueno; nos está llegando mucho trabajo que es lo mejor de todo”.	“Ha cambiado todo desde que yo entre, ha cambiado mucho hasta ahorita. Pues yo la verdad me siento muy orgulloso de mi trabajo, porque si ha mejorado mucho”.

Resultados a futuro (2,1,0,1)	“Estamos proyectando que a principios del 2013 tenemos que ampliar la planta para poder caber con las nuevas líneas; en el 2011 cerramos con 140 empleados, ahorita somos 170 y planeamos cerrar el año con 210 empleados”.	“Buscar proveedores mexicanos, tenemos planes a futuro de tener proveedores mexicanos, ayudar a la economía de la ciudad”.	“Tener mucha comunicación con mis jefes y que ellos también me apoyen a mí en cuestión de mi trabajo”.
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## DISCUSIÓN

El gerente de la organización a través de las características individuales del intraemprendedor (Garzón, 2005), permitieron coadyuvar a rescatar la empresa. Dicho proceso inició desde que el individuo adquirió el espíritu empresarial y fomentó la motivación, visión, creatividad e identificación de oportunidades, perseverancia y destreza para trabajar, entre otras, las cuales fueron transmitidas al personal de la organización y en conjunto con su líder evitando el cierre de la misma.

Los intraemprendedores de la organización XY actuaron según lo comentado por Lombriser (1994), en el sentido de que el alto intraemprendedor (gerente) planificó la nueva estrategia, implicando al personal (intraemprendedores) directamente en la planificación de la estrategia, involucrando a todas las personas importante y con responsabilidad en la ejecución de ésta, desde administrativos hasta operativos, afirmando que la gente es lo más importante en cualquier organización.

Él, como eje central del movimiento intraemprendedor de XY, demostró tener aquellas características individuales del intraemprendedor según el modelo de Garzón (2005), y actuando acorde a Vesper (1990), desviándose de lo habitual hacia la búsqueda de oportunidades, liderando (Morris y Kuratko, 2002).

Respecto al modelo teórico del Intraemprendedor, los hallazgos mostraron que en XY fueron las características individuales las que iniciaron la dinámica, contrario a lo sugerido por Garzón en el sentido de que las características organizacionales son las que inician el proceso. Tomando en cuenta estas características propuestas por Garzón, la organización analizada sugiere que efectivamente el intraemprendedor es una persona con liderazgo, espíritu empresarial, con creatividad, con necesidad de actuar para enfrentar cualquier situación, alta necesidad de logro, posee destreza para organizar y dirigir equipos de trabajo, es proactivo y tolerante al riesgo. Gracias a estas cualidades que posee, fue capaz de implementar nuevas estrategias dentro de la organización y dirigirlas hasta lograr cambios significativos en todas las áreas. Este proceso de cambio fue muy importante para todos sus miembros, porque todas las estrategias implementadas mejoraron sus procesos y la forma de trabajar.

La dinámica intraemprendedora en la planta de XY en Cd. Juárez muestra una organización de aprendizaje, considerado ello como un privilegio importante en este mundo competitivo (Zare, Jajarmizadeh y Abbasi, 2010; citado en Harrim, 2008), porque las organizaciones necesitan aprender para esforzarse y así, superar las condiciones caóticas y de cambio (Borza y Maier, 2012). Aprendiendo, las organizaciones promueven la creatividad de la innovación y del empleado (Calantone, Cavusgil y Zhao, 2002; citado en Alipour, Idris, Arif, Anak y Karimi, 2011), y ello ayuda a mejorar el funcionamiento de una organización (Luo, Zhou, y Liu, 2005). Lo anterior se fundamenta en la planta de Cd. Juárez la cual, de estar a un paso de cerrar su

operación, hoy es una planta que ha ganado varios premios corporativos como la mejor planta en varios rubros.

El intraemprendimiento, como muestran los extractos de las entrevistas presentadas, puede también facilitar la distribución y la transferencia del conocimiento dentro de la organización (Jiang, 2008), lo cual es muy importante para el funcionamiento de ésta. XY ha encontrado hoy en día el significado del intraemprendimiento como una estrategia corporativa y de desarrollo vital para su funcionamiento (Romero, Fernández y Vázquez, 2010; citado en Alipour, Idris, Arif, Anak y Karimi, 2011).

Los hallazgos sugieren que el intraprendimiento en XY es de vital importancia para la perdurabilidad y el éxito organizacional así como para su desarrollo económico, y el involucramiento y cambios logrados en los trabajadores o empleados sin importar el nivel los alentó para transformarse en nuevos intraemprendedores de XY (efecto multiplicador), lo que a su vez se refleja en un incremento de utilidades y nuevas fuentes de trabajo, lo cual coadyuvó a evitar el cierre de la planta y fortalecer su viabilidad en el futuro.

El locus de control interno es un rasgo de la personalidad, el cual se presenta a través de los comportamientos que se tienen y ayuda a reafirmar la teoría de un enfoque basado en el comportamiento del emprendedor (Escovar, 1979). Los resultados obtenidos dentro de esta empresa se vieron reflejados en el momento en que la misma se dio cuenta de las acciones que podía ejecutar el emprendedor interno, mejorando la forma de trabajar y sus procesos, es decir, haciendo un énfasis a los comportamientos de los intraemprendedores.

Los hallazgos sugieren que el locus de control interno podría ser el catalizador detrás del modelo de características individuales del intraemprendedor planteado por Garzón (2005), y si la organización identifica estas características o elementos en sus empleados podrá desarrollar el intraemprendimiento en la misma.

## CONCLUSIONES

Se sugiere que las organizaciones deben de estar en continuo proceso de cambio, innovando su tecnología y procesos, entrenando y tomando continuamente en cuenta a sus empleados a fin de revitalizarse. Aquí es donde está la importancia de localizar, capacitar y dar seguimiento a aquellos candidatos a tomar el papel de intraemprendedores dentro de una organización.

Se sugiere en el futuro ahondar en un modelo de desarrollo y mantenimiento del locus de control interno enfocado a generar el modelo de las características individuales propuestas por Garzón en el capital humano de las organizaciones y hacia la elaboración de un análisis y construcción de un instrumento de medición del perfil psicológico del intraemprendedor.

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# RELATOS DE VIDA DE GERENTES DE PRODUCCIÓN EN LA INDUSTRIA MAQUILADORA DE CD. JUÁREZ, MÉXICO

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## RESUMEN

*La industria maquiladora, una de las principales fuentes de ingreso de la economía mexicana, ha recibido variadas críticas través de los años, que van por ejemplo, desde las condiciones de vida de sus trabajadores (Sánchez, 1990) hasta la participación de las mujeres en los procesos de dicha industria (De la O, 2006). En la presente investigación se aborda la trayectoria laboral y personal de 2 gerentes de producción de la industria maquiladora localizados en Ciudad Juárez, cuyo desarrollo profesional ha estado siempre ligado a esta industria, y bajo un relato de vida comparten sus experiencias en un amplio espectro que va, desde la importancia de una correcta gestión de los sistemas de producción y del personal que participa directamente en el, las limitantes al implementar éstos, obstáculos culturales, satisfacciones que han obtenido, los sacrificios que conlleva esta industria tan demandante hacia el círculo familiar, y que les depara el futuro en el plano profesional una vez que alcancen una edad en donde ellos prevén ya no serán tomados en cuenta por esta industria.*

**PALABRAS CLAVE:** Sistemas De Producción, Industria Maquiladora, Relato De Vida

## ABSTRACT

*The maquiladora industry, a major source of income for the Mexican economy, has received mixed reviews over the years, ranging from the lives of their workers (Sanchez, 1990) to the participation of women in processes of the industry (De la O, 2006). The present investigation deals with the personal and professional path of two production managers of the maquiladora industry located in Ciudad Juarez, whose professional development has always been linked to this industry. Under a life story they share their experiences in a broad spectrum, from the importance of proper management of production systems and personnel directly involved in, the limitations in implementing these systems, cultural obstacles, achievements that they have obtained, the sacrifices involved within this industry like family time consumption, and what does the future holds for them as professionals once they reach an age where they shall not be taken into account by this industry.*

**KEYWORDS:** Production Systems, Maquiladora Industry, Life Story.

## INTRODUCCIÓN

Ciudad Juárez es la primera ciudad en empleos y producción en el ramo de la industria maquiladora de exportación al ofrecer el 20% del empleo de la Industria Maquiladora a nivel nacional, por lo que ocupa el primer lugar en empleos industriales per cápita (INEGI, Estadísticas

economicas, 2010). Operan en la ciudad alrededor de 308 plantas con más de 239 mil trabajadores y provee tres cuartas partes del empleo maquilador del estado y una quinta parte del total nacional, y de ellos un 75% corresponde a obreros, 16% a técnicos y 9% a empleados administrativos (Terrazas, 2008).

La inserción de la industria manufacturera en la ciudad fue el factor desencadenante de transformaciones urbanas, impulsando procesos de urbanización e industrialización, no solo aumentando su tamaño sino una recomposición social, una reorganización y nueva fisonomía del espacio urbano, nuevas dinámicas de circulación y polarización de las estructuras social y espacial (Rodríguez, 2002).

La maquiladora usa los insumos suministrados por el cliente y regresa la producción casi siempre al mismo cliente, por lo que la palabra maquiladora se emplea para una planta o fábrica donde se realiza la actividad de ensamblaje de partes generales importadas para su exportación (Wilson, 1996). La maquiladora es también conocida como plantas gemelas (*twins plants*) o de producción compartida (*production sharing*) los cuales se les denomina de esa manera debido al trabajo conjunto que realiza una planta del lado americano con una de lado mexicano (Terrazas, 2008).

Desde entonces la industria maquiladora ha experimentado una gran presión para sobrevivir, originada por los cambios en las características de los requerimientos, la constante competencia de empresas extranjeras y nacionales, y la demanda de compradores y consumidores industriales en incrementar la alta calidad de los productos (Terrazas, 2008; Wilson, 1996).

Por su parte un sistema de producción (Riggs, 2010) podemos entenderlo como un proceso de diseño mediante el cual los elementos son transformados en productos, un proceso es un procedimiento organizado para lograr la conversión de insumos en productos. Dentro de los sistemas de producción es común que encontremos el denominador 5M, que son 5 principales factores que impactan directamente a éste (materiales, maquinas, mano de obra, métodos y medios), y en donde se debe focalizar los esfuerzos para reducir la probabilidad de defectos (Velasquez, 2008). Los sistemas de producción constituyen una de las tareas más difíciles (Britto y Mejía, 2007).

## METODOLOGÍA DE LA INVESTIGACIÓN

“La historia de vida es una técnica de investigación que ilustra la transformación epistemológica de la relación entre el sujeto y el objeto por la de autor-lector o actor-testigo” (García, 2006, pág. 44). Como investigación cualitativa, sus datos provienen de la vida cotidiana, del sentido común, de explicaciones y reconstrucciones que el individuo efectúa diariamente (Ruiz, 2012) cuyo objeto principal es el análisis y transcripción que el investigador realiza a raíz de los relatos de una persona sobre su vida o momentos concretos de la misma (Martín, 1995). “El investigador es sólo el inductor de la narración, su transcriptor y también el encargado de “retocar” el texto para ordenar la información del relato obtenido en las diferentes sesiones de entrevistas” (Perelló, 2009, pág.192).

Es importante remarcar una primera diferencia que distingue a lo que se denomina la ‘historia de vida’ del ‘relato de vida’. La última es una entrevista con el objetivo de conocer el hecho social a través del individuo. Se basa en la experiencia del individuo, no teniendo que ser este último una persona en particular ni especial, ya que sólo le basta con ser parte de la comunidad bajo estudio (Bertaux, 1988; Ferrarotti, 1988) y se centra en algún momento o contexto en particular de su vida. Permite una amplia libertad de exposición y expresión de los actores sociales emergiendo la

propia conceptualización y visión sobre su vida personal y laboral consecuencia de su transitar en la industria maquiladora.

## RESULTADOS

### Antecedentes Pedro Martínez (PM) y Juan Solano (JS)

PM (su nombre real ha sido cambiado para guardar el anonimato del entrevistado) es Ingeniero con maestría en Ingeniería Industrial. Tiene 21 años de experiencia en el sector maquilador de Ciudad Juárez, y ha llevado varios cursos y certificaciones en China, Rusia, Japón, Alemania, Francia e Italia. Ha implementado diversos sistemas de producción en plantas de la localidad. Reconoce que todos los sistemas de producción tienen una área de oportunidad (problema), y son las responsabilidades de la gente la clave del éxito, si alguna de estas personas no realiza su labor dentro de su área de trabajo, el sistema no saldrá adelante.

JS (su nombre real ha sido cambiado para guardar el anonimato del entrevistado) es Ingeniero Mecánico Industrial con una maestría en Negocios Industriales. Oriundo de la vecina ciudad de El Paso Texas, E.U.A, vive y actualmente trabaja en su ciudad natal. Con experiencia en la industria maquiladora desde 1995, en la mayoría de las plantas ha ocupado puestos a nivel gerencial, encargándose de la planeación de los sistemas o las líneas de producción, y por su dominio del idioma español se le ha facilitado tomar cargos en países como México. La mayor parte de su carrera ha sido en la industria automotriz, y ha viajado a Alemania, China, Guatemala, Honduras, y gran parte de los Estados Unidos y México.

PM se ha encargado básicamente de la parte práctica en cuanto a la implementación de sistemas de producción, mientras que JS se encuentra más en el área de planeación y desarrollo de dichos sistemas.

### Sistemas De Producción

Para PM los principales problemas que se tienen en las organizaciones es la disfunción organizacional y la resistencia al cambio, y señala que en todos los países en que él ha estado se dan estos 2 problemas y en cada uno de ellos siempre hay un "huevo" u oveja negra". Por su parte PM hace mucho énfasis en la disponibilidad de la gente para realizar su trabajo, si no existe ésta, muy difícilmente se puede realizar la producción eficientemente.

Ambos coinciden en que las personas son la base de cualquier sistema de producción, y en ciertos lugares la resistencia a los cambios suelen ser más notables. JS hace énfasis que si bien México es uno de los mejores países por la disponibilidad de las personas, hay ciertas aéreas geográficas que son un poco renuentes al cambio, y se distingue porque son personas del sur del país en donde están más arraigados a sus costumbres, sin embargo no es impedimento, ya que con el transcurso del tiempo tienden a adaptarse.

*"Somos una gente muy noble, digo somos porque vuelvo a repetir, mis padres que son de México. Por eso le digo que somos, es una gente muy noble, muy adaptable, y lo he notado más en la gente del norte, gente del sur si es poquito, todavía poquito más pasiva y más esté, cerrada".*

PM menciona que una de las estrategias que le han funcionado al implementar un sistema de producción es iniciar de la mano con las personas, enseñarles paso a paso lo que se debe realizar: *"el darle el ejemplo a la gente me ha funcionado a que se lleve a cabo las cosas, si yo les*

*demuestro que yo lo puedo hacer ellos también lo pueden hacer, ¡hasta los operadores, eh!*". Dentro del proceso de planeación JS no difiere en cuanto al poner el ejemplo sin embargo, algo muy importante que se debe considerar es la seguridad, ya que en todo sistema de producción es una herramienta importante, la seguridad no solo del personal sino de todos los procesos a utilizar: *"la seguridad es muy importante, te ayuda a que puedas obtener algo mejor en tu sistema, en tu plan, sea el ramo que sea"*.

Menciona que en ocasiones simplemente no espera a que el problema se agudice, si él tiene manera de realizar la actividad o darle seguimiento únicamente lo realiza. Por su parte PM comenta: *"Yo no soy niñera de nadie, no tengo que andarle... diciendo qué hacer... jalando la... las orejas a la gente, ese es el principal problema que tenemos en cualquier sistema de producción"*.

El éxito de cualquier sistema de producción es la revitalización afirma PM *"La revitalización del sistema está en función del mercado, si el mercado cambia nosotros cambiamos"*. El manual de calidad le exige evaluar constantemente el sistema de producción, sin embargo, no sería posible sin el apoyo de la gente. Señala que un aspecto muy importante para la implementación de un sistema de producción es detectar las áreas de mejora, estudiarlo, determinar las ventajas, y sobre todo cuantificar los beneficios, posterior a ello es aprender el proceso para que el sistema de producción funcione de acuerdo a lo esperado. Un plan de control es importante desde el punto de vista de JS, sin ello cualquier sistema de producción no podría ser mejorado, ya que en todo proceso se debe realizar un análisis de variación para encontrar los defectos de inicio en una línea de producción y de esta manera controlar y mejorar.

PM comenta que la implementación de un sistema de producción en una organización trae muchos beneficios, uno de ellos desde el punto de vista cuantificable es la reducción de personal (mano de obra), que si bien es un beneficio para la industria por otra parte es una desventaja, ya que implementar un sistema conlleva la reducción de personal. Recuerda que en su planta contaba aproximadamente con 1500 personas en las diferentes áreas de producción y 89 ingenieros, sin embargo, debido a lo anterior actualmente cuentan con solo 240 personas en las áreas de producción y 14 ingenieros. En dicha área señala que el personal realiza sus actividades de manera autónoma, pero a la vez se encuentran atentos a las fallas que el sistema pueda tener.

Tanto PM y JS coinciden en que un sistema de producción debe generarle ganancias a la empresa y pocas pérdidas, sin embargo no garantiza no tener estas últimas y al final son parte de las mejoras que ayudaran a la revitalización del mismo, al identificar puntos críticos, deficiencias, y trabajar en ellas e iniciar las mejoras.

Algo que aprendió JS es a saber que cuando se trata de ir a un país a implementar o aprender un sistema de producción, el tiempo siempre será mayor al estimado, por lo que una semana en ocasiones se convierte en un mes: *"hay mucha similitud entre un sistema de producción y cada uno tiene su característica que lo hace importante y puedo hacer una combinación de varios, a diferencia de alguno que nada más conoce algún tipo de sistema"*.

### Limitantes En Sus Funciones

PM comenta que la principal limitante que él se ha topado es la del dinero, es decir, si el gasto que se va realizar en la implementación de algún equipo o mejora es elevado es lo primero que se le cuestiona, a lo cual el argumenta que siempre que pasan esas situaciones él les demuestra la

ganancia que va a generarse y esa limitante deja de serlo, ya que desde su punto de vista siempre el dinero va a ser la determinante de la aprobación de algún cambio en el sistema de producción.

Otra limitante es al implementar un sistema con las formalidades normas o reglas que deben seguirse, ya que comenta que en ocasiones tiende a hacer un poco *atrabancado* por saltarse quizá los pasos e ir directamente al paso final, sin embargo comenta que la empresa le pide seguir el protocolo o las normas que requieran, ya que parte de una implementación es detectar a tiempo fallas o posibles errores: *“Soy un poco ¡atrabancado! O soy muy desesperado a seguir las a.....las normas, las reglas”*. Para él, ser atrabancado no es una limitante quizá una debilidad, inclusive se ha hecho muy conocido dentro de la empresa: *“Soy muy conocido aquí en la empresa por esa forma de pensar de que me... A ver yo así le voy a hacer, hay esta ya el producto terminado, pero ¿como le hiciste?, aquí esta, lo que importa siempre es el resultado siempre he dicho yo y pues creo que es un... debilidades es lo que necesito trabajar más para hacerme más sistemático”*.

En el aspecto de la planeación y estudios de los sistemas de producción JS coincide que el factor dinero es una limitante de gran escala, así como la resistencia al cambio de las personas, sin embargo una limitante quizá no la más importante pero si una de gran escala, es el analfabetismo o falta de preparación académica y esto es lo mismo en cualquier cultura: *“No podían leer, eh pues fue en los 90’s, fue cuando empezó un gran desarrollo”*. Si bien un sistema de producción no solo es mano de obra ni maquinaria, ya que esas son herramientas necesarias para que se pueda llevar a cabo, el factor mano de obra es la base primordial para realizar las tareas, el que las personas puedan leer y sobre todo entender lo que se les está enseñando es lo más importante, saber el porqué, como y para que se realiza la actividad ayuda a que el personal se comprometa y se responsabilice con la parte que le corresponde de la línea de producción. El entendimiento se puede dar no solo de manera escrita, sino visual, y que a su vez la información se transforme acorde al país o a la persona que se quiera dirigir. *‘En mi opinión y siempre si ves los libros de liderazgo o de, o de mover el cambio, es de saber escuchar, saber escuchar, saber analizar observar y este, y adaptarse’*.

Para toda empresa menciona PM que los resultados son los que importan debido a que el producto se convertirá en dinero para la empresa, y señala que las decisiones que toma se deriva de la naturaleza del producto, si la empresa elaborara productos médicos se tendría que apegar más a los protocolos o reglas que se deriven para el desarrollo de los mismos: *“tengo que ser un poquito más precavido, a lo mejor si hiciéramos un producto medico pues no, no podría hacerlo así”*.

Ambos mencionan que otra de las limitantes es el tiempo, para que un buen sistema de producción funcione como debe ser lleva meses en lo que se realiza el piloto, ver las ventajas y posibles mejoras, ya que es imposible implementar un sistema de producción de la noche a la mañana. PM también se ha topado y enfrentado a las costumbres o creencias de las personas, ya que nos comenta que cuando se llega a necesitar que laboren en sábado o domingo la gente se niega porque tienen muy arraigadas sus creencias religiosas y no les es permitido laborar en estos días, por su religión o sus creencias culturales en este punto a la gente en ocasiones no les importa cuánto les pagues: *“si tú no tienes a la gente, no puedes hacer nada”*.

Entre los métodos de operaciones de PM está el entrenar a las personas de manera que sean multifuncionales y de esta manera tener la seguridad de que se tiene el personal necesario para laborar. *“Ser multifuncional requiere un alto grado de organización. Otro aspecto interesante es saber calcular el tiempo que nos toma completar cada tarea. Mucha gente piensa que para ser*

multifuncional se necesita algún don especial o nacer así”. Otra opción es la de realizar el trabajo de manera automática, para que esto no llegue a ser un impedimento a la hora de desarrollar éste.

### Experiencias Laborales

PM cuenta con una vasta experiencia en el ramo de la industria maquiladora, las experiencias que ha adquirido se debe al trato día a día que tiene con distintos tipo de personas, culturas, costumbres, si bien la experiencia de trabajar con personas es una de las tareas más difíciles ya que un sistema al final de cuentas es creado por un hombre, señala que una persona es infinitamente independiente una de otra, lo cual un buen sistema de producción no funcionaría sin la persona correcta para llevar a cabo la tarea asignada.

Una de sus mejores experiencias ha sido el ver un proyecto plasmado en un papel y después verlo reflejado físicamente: *“es un orgullo personal, una satisfacción personal pararse ahí en el Titanic, así le llamamos a una escalera que acabamos de poner, y todo lo que veas, todo lo que veas, es producto del trabajo de todos nosotros”*. *“Tan sencillo, un viernes te vas, se va la gente y regresa el lunes y aquí nos estamos los viernes, sábados y domingos hasta que terminamos los cambios, nos hemos ido de aquí a las seis de la mañana, salimos un rato y regresamos y regresa la gente y ¡a canijo! ¿Qué paso?, eso es, ese es el sentimiento que te da que se haya logrado”*.

Otro de los logros fue hacer un sistema semiautomático para un producto que era 100% artesanal y de esta manera sustituir a la gente y no depender de ellos, debido a que el costo para el entrenamiento era elevado ya que por lo crítico del proceso las personas permanecían por mucho tiempo, lo cual originaba la rotación constante de personal incluyendo los entrenamientos, con este proceso se evitó depender de personas, así como del costo de entrenamiento generando un ahorro para la empresa.

Su gran experiencia y compromiso hacia la empresa, así como factores externos como recortes de personal y costos, lo ha llevado a adquirir diversos conocimientos que le han permitido dirigir algunos departamentos dentro del sector industrial, actualmente tiene a su cargo 3 departamentos.

Por otra parte también ha ayudado a la empresa en un ahorro del 33% del costo de luz, con un curso que tomo en la CFE, todo esto le ayuda al momento de negociar con la empresa, ya que cada curso que él ha tomado le da más fuerza: *“Vender una idea es en cuestiones de dinero, necesito tanto, recuperas en tanto, inviertes tanto y ganas tanto”*.

Para JS la planeación para poder iniciar operaciones es sumamente relevante, ya que antes de abrir una planta visitan el lugar y hacen un listado de todo lo que el lugar tiene en cuanto a infraestructura, transporte, si cuenta con la mano de obra de acuerdo al perfil que se requiere, posterior a ello realiza el estudio para determinar los recursos económicos que se necesitarían y determinar si es costable o no abrir una planta en dicho sitio, ya que de nada serviría abrirla en donde por ejemplo no existe medio de transporte y las utilidades se tengan que emplear en medio de transportes más caros, ya que se busca siempre tener la mejor calidad, mejores utilidades, pero a un menor costo: *“Entonces ya teniendo todos esos pasos del rompecabezas, entonces ahora sí, ok”*.

### Propiedad Intelectual

PM reflexiona sobre patentar cada una de sus aportaciones: *“En nuestro contrato sí hay un cláusula que, que dice que, que todo lo, como es en horas de trabajo y recibimos un sueldo, estamos con la obligación de reportar y al eeh... Cualquier diseño o patente que se llegase a utilizar sería de la empresa”*. Sin embargo, asegura que si la empresa no tuviera esa cláusula en el contrato el patentaría todas las mejoras o inclusive los productos que se han generado con el paso del tiempo sumando a esto un mejor retiro llegado el momento. JS coincidió con PM, ya que menciona que todo lo que se crea con recursos de la organización por ende le pertenece y en los contratos existe una cláusula que impide poder patentar algún artículo que haya beneficiado a la empresa o se haya creado.

## **BARRERAS CULTURALES**

Sobre el porqué la necesidad de ir a otros países a aprender mejores técnicas y sistemas de producción y no obtener esos mismos recursos aquí en México, respondió que el principal problema es la educación ya que como hijos o padres lo hacemos y vemos como una obligación y no como lo que es, un beneficio para ambos, hoy en día la mayoría de los estudiantes *“solo estudian para pasar y no para aprender”*.

Si bien ha aprendido de los diferentes sistemas de producción en varios países, declara que Alemania es el país del cual más aprendió y ha admirado: *“Son muy organizados, son muy estruc... son muy buenos planeadores, yo creo que del 100% de un proyecto, se avientan como el 40% planeando y el no sé 20% ejecutando, 20% desarrollando, y cuanto llevo... 80% y 20% validando, y el rango más grande es la planeación, son muy buenos para planear, eeh son muy limpios para trabajar, tienen sistemas, yo creo que ellos mismos hasta me imagino que los inventan pero son excelentes para trabajar con los fierros, muy buenos planeadores y muy organizados”*. Ambos entrevistados coinciden que Alemania es uno de los países con el que mejor puedes trabajar, debido a su entrega, a su pasión, a buscar siempre tener calidad en cuanto sus productos y en general a todo lo que los Alemanes realizan: *“Son muy inteligentes, son muy sistemáticos y todo es basado en el análisis y, y este y cuestión de datos”*.

Sin embargo para JS como México no hay dos: *“El país que se me hace que es el que más ofrece, este... en cuestión de cultura y el factor laboral de la gente, la gente aquí en México es muy trabajadora, muy trabajadora, digo he andado en Centro América, en Canadá, Estados Unidos y fui brevemente a este.. a China, pero aquí lo que le aplicamos mucho es la cultura, la cultura y nuestras raíces que le ponemos sabor a todo lo que hacemos que yo por eso para mí mis respetos para México, creo que es un país que ofrece muchísimo”*. La gente es muy adaptable, sin embargo en el mismo país compara JS el norte con el sur, con las personas del norte expresa no hay problema puesto que son más abiertos a cambios, a trabajo sobre objetivos, la gente del sur por su parte son más arraigados a sus costumbres y se adaptan con el paso del tiempo: *“Ah más resistente al cambio, este lo que siempre yo dije la gente de Aguascalientes para acá siempre fueron más nobles, no sé si tenga algo que ver con la región, el clima, cultura no se verdad, pero siempre eran más accesibles, mas este dedicadas al trabajo y receptivos para aceptar opiniones, mente abierta”*.

### Aspecto Familiar

PM tiene una familia que consta de su esposa y un hijo, y al estar viajando para aprender sistemas en diferentes países ya mencionados ha tenido que sacrificar tiempo que podría estar con su familia, razón por la cual ha tenido reclamos con su esposa, lo cual el argumenta que está consciente, sin embargo cree que ese “sacrificio” lo compensa con el aspecto económico.

Siempre ha estado consciente del sacrificio que ha hecho con su familia, llegando inclusive a trabajar 36 horas seguidas por lo cual el ambiente familiar se pone tenso ya que a menudo escucha reclamos: *“Mi mujer dice que soy adicto al trabajo, que se la pasa uno trabajando y como te repito me gusta lo que hago, no se siente... yo no lo siento, de repente volteo y veo la hora y digo ¡ay hijo! ¡Hay que ir a comer!... y ella si lo siente”*.

Pese a la jornada normal de trabajo lleva casado 19 años, y considera que en el papel como padre quizá no ha dedicado el tiempo suficiente a su hijo, pero ha tratado de que no le falte nada, en este punto se le cuestionó si por parte de su hijo ha habido algún reclamo e indica que él considera que su hijo ha creado un modelo a seguir ya que está determinado a estudiar ingeniería en telecomunicaciones: *“Fijate que creo que hicimos un buen trabajo, irlo educando y bueno un muchacho como cualquiera, le gustan sus salidas poquito estricto, pero dicen que uno compensa de otra manera eso, tiene todo, no le falta nada y económicamente muy bien esta y pues no le falta nada, y de esa manera he compensado lo que no he estado verdad, yo sé que estoy mal pero para que trabaja uno”*.

Continuando con el aspecto familiar, reflexiona si realmente los sacrificios que ha hecho en su vida personal, familiar han valido la pena: *“Claro que sí... Este, yo digo que sí, a lo mejor mi mujer va decir que no verdad... este.... porque lo peor ya pasó que era ver crecer al muchacho y ahora hay que asegurarme el futuro, y es a lo que estoy ahorita, yo siento que tenemos como una, los que trabajamos como empleado una ¡rampa de crecimiento! Ahorita me siento que estoy acá (señala arriba) y pues hay que mantenerse porque entre más pasa el tiempo más viejo nos hacemos y empezamos a bajar, y entonces tengo que asegurarme el ultimo cacho de mi vida, a partir de los 40 a los 50 tenemos que trabajar para asegurar lo que vayamos a consumir de los 60 a los 70”*.

En muchos puntos coincide JS por ejemplo, dedicar más tiempo al trabajo que a su familia es uno de los sacrificios que no solo en esta carrera se hace, sino en cualquiera que tenga un grado de responsabilidad, el trabajar 14 horas o más los 7 días de la semana se hace una rutina de la cual no se da cuenta hasta que probablemente se tengan consecuencias, sin embargo este no es el caso, con 3 hijos señala que ha sabido equilibrar el trabajo con su vida personal, para él es importante dedicar el tiempo necesario a cada cosa que realiza y únicamente dedicarle el momento, en gran parte su equilibrio se debe a que su esposa es comprensiva y siempre cuenta con su apoyo: *“Algo se tiene que sacrificar y es donde en veces entra el balance de lo que se sacrifica, seas un atleta, seas un cantante, seas un gerente, director, vicepresidente o doctor, todos quieren su dedicación y entre más quieres alcanzar pos más vas a ir perdiendo en veces la otra parte de la moneda”*.

### Expectativas a Futuro

En algún momento de su vida PM ha pensado en la opción de asesorar a las empresas y esto lo realizaría en la última etapa de su vida laboral gracias a su experiencia de 20 años y a su capacitación expresa puede hacerlo, piensa que es allí donde él tiene mucha área de oportunidad, ya que como comentó la última parte de su vida por su vejez es muy probable que no tenga trabajo, sin embargo cree que en las asesorías está su futuro: *“Yo si he pensado en asesoría, a veces platicando con mis amigos, en lo que soy débil este, trato de incrementar, apuntalar mis habilidades. Me junto con otros compañeros y nuestras platicas mas es, son de que vamos a hacer ahora que vamos a brincarle a los 50, cómo vamos a mejorar nuestros últimos diez años de experiencia, como la ven si hacemos esto, una compañía de asesorías, si lo hemos platicado, yo creo lo más seguro es que terminemos así”*.

Comenta que cada cosa llegara en el momento adecuado, sin embargo, debemos forjar el camino para que las cosas que nos propongamos se realicen: *“No sé qué tanto, pero uno propone y Dios dispone, no sé qué vaya pasar, yo voy por algo más grande verdad, y espero que si me llega aquí pues mejor y si no pues en otra parte, pero..., creo que tenemos la capacidad para, para hacer un buen negocio”*.

JS por otro lado ha dedicado su vida en realizar las dos actividades, es decir ha trabajado para empresas y a su vez se ha dedicado a asesorías o se le ha requerido para llevar a cabo estudios e implementaciones de sistemas de producción. Para JS un sistema de producción conlleva muchas cosas, desde investigación, planeación, desarrollo e implementación, gracias a la experiencia que ha desarrollado se considera una persona con todas las capacidades para trabajar en una empresa o realizar sus actividades por cuenta propia.

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# METAMORFOSIS: RELATOS DE VIDA DE TRES DOCTORES

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## RESUMEN

*Las personas que terminan los estudios de doctorado adquieren un grado de preparación importante durante la construcción de sus trabajos de investigación, siempre bajo la guía y coordinación de varios tutores. La presente investigación muestra las experiencias de un grupo de doctores durante su proceso de estudio de dicho grado académico, algo escaso en la literatura, compartiendo su manera de ver las cosas después de haberlo terminado, qué experiencias les ha dejado, qué ha cambiado en sus vidas y en las de sus seres cercanos, tanto familiares como compañeros de trabajo, su apreciación de la educación, y entre otras cosas, su versión acerca de la formación recibida por parte de sus tutores.*

## METODOLOGÍA DE LA INVESTIGACIÓN

“La historia de vida es una técnica de investigación que ilustra la transformación epistemológica de la relación entre el sujeto y el objeto por la de autor-lector o actor-testigo” (García, 2006, pág. 44). Como investigación cualitativa, sus datos provienen de la vida cotidiana, del sentido común, de explicaciones y reconstrucciones que el individuo efectúa diariamente (Ruiz, 2012) cuyo objeto principal es el análisis y transcripción que el investigador realiza a raíz de los relatos de una persona sobre su vida o momentos concretos de la misma (Martín, 1995). “El investigador es sólo el inductor de la narración, su transcriptor y también el encargado de “retocar” el texto para ordenar la información del relato obtenido en las diferentes sesiones de entrevistas” (Perelló, 2009, pág.192).

Es importante remarcar una primera diferencia que distingue a lo que se denomina la ‘historia de vida’ del ‘relato de vida’. La última es una entrevista con el objetivo de conocer el hecho social a través del individuo (véase Tabla 1). Se basa en la experiencia del individuo, no teniendo que ser este último una persona en particular ni especial, ya que sólo le basta con ser parte de la comunidad bajo estudio (Bertaux, 1988; Ferrarotti, 1988) y se centra en algún momento o contexto en particular de su vida. Permite una amplia libertad de exposición y expresión de los actores sociales emergiendo la propia conceptualización y visión sobre su vida personal y laboral.

Tabla 1: Relato de Vida MRA, AJZ y MBX

<i>Asunto</i>	<i>MRA</i>	<i>AJZ</i>	<i>MBX</i>
<b>Principal motivo por el cual eligió hacer un doctorado</b>	Mmm... Bueno, en realidad fueron... fueron varias: La primera opción era el desarrollarme académicamente, eh... pues obviamente siempre me gustó la escuela y yo comencé a estudiar en una... En la primaria entré a los 4 años, entonces siempre me gustó mi escuela... La escuela, dice mi madre "que siempre me gustó tanto que sigo en ella", yo sigo metido en las escuelas. Entonces, para mí era importante, o sea, continuar creciendo y desarrollándome. Eh... aprender a investigar. Entonces, fue otra de las razones por las que también, eh... decidí tomar el doctorado.	Creo que fue motivos personales principalmente, pero es el gusto, la afición que tengo por los retos... ¡fue un reto personal!	Bueno, yo creo que el principal motivo es primero por desarrollo personal, ¿sí?, eh... creo que primero como ser humano siempre está la intención de seguir aprendiendo, ¿no?, eh... segundo, cuando tu entras a cualquier organización yo creo que todos debemos de tener la misma visión de crecimiento y desarrollo dentro de la misma, ¿no? Y una de las formas de desarrollarte dentro de una institución de educación superior pues es precisamente preparándote y obteniendo mayores niveles, este... de educación, ¿cómo en este caso los posgrados, ¿no?
<b>Las mayores dificultades al realizar su doctorado</b>	La primera, bueno fueron varias, la primera el desarrollar las habilidades de investigación porque es un proceso, no es tan fácil; crear un investigador lleva muchos años, hay quienes dicen que lleva una década ¡mínimo! Entonces este... esa fue una de ellas. La segunda el combinar mis actividades cotidianas-laborales, principalmente con la investigación. Esa fue otra y la tercera la distribución de tu tiempo entre tu trabajo, tu familia y el dedicar el tiempo a la investigación.	La mayor dificultad fue a veces estar en la misma sintonía con la que estaban mis tutores; dado que se trabaja con seres humanos. Entonces, este... no siempre estamos todos en el mismo canal.	¡Ay, yo creo que el tiempo! Primero que nada te enfrentas al tiempo, ¿no?, porque creo que para hacer un posgrado necesitas ser un muy buen administrador de tiempo y muchas veces esa falta de disciplina en ese aspecto es lo que nos cuesta mucho más trabajo, ¿no?, porque tienes que dejar de lado para ese tiempo aplicarlo en... en tu posgrado.
<b>Relación con sus compañeros durante su estancia en el doctorado</b>	Ah... muy buena, fue una relación muy cordial de... de equipo, de... de camaradería, de apoyo. ¡En general fue muy buena!	Fue bastante cordial, incluso hubo mucha solidaridad -creo yo-, entre todos los estudiantes, no nada más de esta institución. Habíamos doctorantes de varias instituciones a nivel nacional; cuando nos encontrábamos en los coloquios, por lo general siempre hubo bastante cordialidad.	Fijate que con los de mi generación fue muy buena, los que estaban antes que nosotros fueron mucho apoyo la verdad... mmm... ¡mucho, mucho apoyo!, este... tengo una vecina ahí de cubículo, que también ella me apoyaba mucho para la cuestión de eh... metodología. Ella iba poco más arriba que... que nosotros, ella era una generación anterior, entonces; como que siempre estarle preguntando y así a los que iban más arriba era con los que les preguntábamos, ¿no?; respecto a cómo manejarnos administrativamente ante la institución, cómo manejar la cuestión de... este... de cosas que van surgiendo, ¿no?

<p><b>Enseñanzas que le dejó el haber realizado el doctorado</b></p>	<p>Ah... pues, eh... fueron varias, la primera que... que todo se puede, todo se puede, este... de repente cuando algunos de... de mis alumnos dicen “¡no, es que trabajo y estudio!”, pues les contesto que “¡yo también trabajé y estudié!”, ¡verdad!; en la licenciatura, maestría y ahora el doctorado...</p>	<p>Me dejó una enseñanza muy importante, de que ¡todo se puede! A uno se le mete una idea en la cabeza, uno se propone hacerlo y todo es posible, hay que tener disciplina nada más.</p>	<p>Bueno, primero que nada el mismo doctorado pues te deja eh... te deja una gran enseñanza, ¿no?, de... mmm... aprendes a valorar muchas cosas...mmm... Yo aprendí a valorar más el tiempo que pasaba con mi familia, porque entonces, el poquito tiempo que me quedaba cuando estaba en el doctorado pues era más tiempo de calidad, porque cantidad de tiempo era difícil, ¿no? mmm... Sacrificas muchas cosas en el inter que vas caminando sobre el doctorado porque... pues tienes que dejar amigos, tienes que dejar familia, inclusive, muchas veces pareja... mmm... o sea, y no es que los descuides, sino que te absorbe tanto el tiempo que... para el doctorado que, pues bueno, eso se va quedando ahí, ¿no? Entonces, aprendes a valorar más a las personas, a la familia, al tiempo.</p>
<p><b>Material que revisó durante su doctorado</b></p>	<p>Pues otra vez, o sea, realmente el contenido es lo que tú desarrollas... mmm... Lo que tu desarrollas, lo que tu tutor te vaya dirigiendo, ¿eso es básicamente, ¿no? pues era necesario saber el protocolo, la candidatura y la defensa de grado.</p>	<p>Creo yo que sí fue necesario, pero, no todo el material apareció en la tesis al final de cuentas, mucho de este material, eh... ya no se incluyó porque posiblemente la temática ya se estaba abriendo un poco, de más, entonces fue necesario acotarlo.</p>	<p>Mmm... Yo creo que a lo mejor necesario para plasmarlo en la tesis, no... mmm... pero... yo creo que sí fue necesario para tu experiencia dentro del doctorado, porque aprendiste a hacer una selección de lo que sí servía y lo que no servía... mmm... pero lo que me dejaba a mi cada vez más claro era, ¿cuál era mi enfoque, ¿no?, entonces no tenía que perder la dirección, ¿no? Entonces te encuentras cosas muy interesantes en el camino, pero finalmente sabes que tienes que ubicarte hacia un objetivo y no te tienes que salir de ahí.</p>
<p><b>Opinión de sus familiares y amigos con respecto a la realización del doctorado</b></p>	<p>Pues hubo varias, desde... admiración por estarlo haciendo; respeto por la gente que ya... ya sabía lo que es un doctorado y... y verlo; eh... los compañeros de trabajo, pues obviamente algunos de aliento, otros de, pues así como que ¡no sabes en la que te estás metiendo! Eh... pero en general pues fueron buenas, ¿no?, o sea, ¡hubo de todo!</p>	<p>Bueno, yo creo que siempre fue una... una apreciación de... de apoyo, de... ánimo, nunca encontré... al menos en mi familia conflictos a pesar de que sí... afecta, sé que afecta sobre todo las relaciones, este... de pareja, pero al menos yo siempre tuve... siempre tuve apoyo.</p>	<p>Pues mira, son diferentes opiniones, o sea, lógicamente que quien nunca ha realizado un doctorado, ni tampoco tiene dentro de su plan de vida hacer un doctorado, tiene una opinión de que hacer un doctorado es lo... lo máximo... ¡es lo máximo, que la persona es súper dotada casi, ¿no? para poder realizarlo... mmm... pero no es cierto, cuando estás estudiando el doctorado, en lo personal, en mi opinión, yo siento que es exactamente lo mismo que cuando entras a una carrera de licenciatura... mmm... porque es algo que no viste, ¿sí?, que no sabes, estás aprendiendo algo nuevo, es normal, es un proceso de aprendizaje, la cuestión es que el esquema que... que se tiene en este doctorado pues es casi de autodidacta, ¿no?...mmm...y 100% investigación...investigación... porque en el caso, por ejemplo, volviendo a tu pregunta, en el caso de mis compañeros, obviamente todos estábamos sobre lo mismo, ¿no?</p>

<p><b>Sacrificios tuvo que hacer para realizar este doctorado</b></p>	<p>Son muchos, o sea, cuando estás en un doctorado y estás trabajando, este... siempre hay sacrificio, ¿no?; de tu tiempo libre, de tus aspiraciones personales. Desde el descanso, desde el relajamiento, desde el hacer cosas más placenteras que el llegar a las 10 de la noche y tener que abrir la computadora para empezar a investigar, porque esa era la única hora en que tenías más o menos tranquilo y no había ningún compromiso para poder hacerlo, ese es uno de ellos. La familia también, que de repente pues había que hacer algunas actividades. Entonces sí, sí hubo varios... varios sacrificios. El trabajo también, de repente pues, no estás al 100% porque estás metido en otra... en una investigación.</p>	<p>Si hubo bastantes sacrificios, entre ellos, principalmente personales, económicos a veces, incluso, este... hubo un sacrificio muy interesante de mi propia luna de miel, la tuve que sacrificar para ir a un coloquio en la ciudad de México, claro que a mi esposa no le gustó mucho la idea obviamente... nada más, este... se la... la retrasamos o la postergamos para poder atender ese pendiente.</p>	<p>Pues yo no lo vería como sacrificio... mmm... ¿yo más bien diría costo-beneficio, ¿no?... mmm... eh... yo creo que los costos que se pagan, este... llega un momento en que pueden... pueden ser altos, pero los beneficios... ajá... ¿también son buenos, ¿no?... ¡y son muy buenos! Entonces, el beneficio en el mediano plazo, en el largo plazo, pues es... eh... te paga todo el costo que pudiste haber absorbido durante el proceso del doctorado, ¿no?</p>
<p><b>Experiencias buenas al haber terminado el doctorado</b></p>	<p>¡No, pues muchas, muchas!, desde... la... vuelvo a repetir, la camaradería de... de los compañeros, el compartir la... la aventura juntos, no... mmm... El ir viendo como los que iban adelante lo iban logrando, el echarle ánimo a los que venían, se iban rezagando contigo y “¡órrole échale ganas y mira!” mostrarles con el ejemplo que sí se podía, que a pesar del trabajo, a pesar de las circunstancias se iba desarrollando. Este... el... el... el descubrir el secreto de la investigación en el sentido de... de lo bonito que se convierte en crear conocimiento, en generar un conocimiento nuevo, el sentirte hacedor de un nuevo enfoque, una nueva teoría, un nuevo modelo, una nueva... el delineamiento, una nueva disciplina, eso es muy satisfactorio. ¿Y obviamente el terminarlo, ¿no?, el... así es... el decir “con, sin y a pesar de, se logró el objetivo, ¡y se terminó!”. Son cosas muy satisfactorias.</p>	<p>Pues muchas, es difícil numerarlas, pero, más que nada... una experiencia que me ha dejado muy buena es que tener la humildad, uno tiene que aceptar que uno nunca... ¡nunca termina de aprender!... exactamente... nunca termina de aprender porque bien puede uno tener uno muchos posgrados, pero entre más nos vamos metiendo en los estudios, más cuenta nos vamos dando de que sabemos menos.</p>	<p>Pues yo creo que la buena experiencia más bien fue eso... mmm... el estudiar el doctorado, ¿no?... mmm... para mí de principio a fin fue la mejor experiencia, ¿no? mmm... Aparte porque tienes la oportunidad de viajar mucho, de... no solo dentro del país, sino fuera del país, a presentar tus avances de investigación. Entonces, eh... lo interesante de aquí es que empiezas a comparar cómo se comportan las personas, los investigadores dentro de México y cómo se comportan este... en otros países ¿no?... mmm... y ves como las actitudes de las personas donde tú estás presentando tus avances son completamente diferentes, ¿no?</p>

<p><b>Malas experiencias durante el proceso del doctorado</b></p>	<p>Bueno, que me hayan marcado no, pero si hay, ¿si hay experiencias este... amargas, ¿no?, desde... este, que no tienes tiempo o falta de colaboración de alguna gente que tu creías que sí te iba a apoyar con una entrevista, con facilitación de alguna información, eh... a veces, un poco incomprensión de la gente que está en tu entorno, ¡sí, si las hay obviamente, pero, una que me haya marcado, no!</p>	<p>Hubo, así como hubo buenas ¡abundaron las buenas experiencias!, también hubo malas experiencias ¡claro que sí!, hubo... diferencias que hubo con mis tutores, también este... hubo diferencias fuertes con algunos colegas de otras universidades.</p>	<p>Mala experiencia, yo creo que no es mala... mmm... pero, si fueron experiencias dolorosas... mmm... cuando presentaba los avances de investigación, sobre todo aquí dentro de México. Mmm... Yo creo que somos un poquito... bueno, ¡muy críticos!, pero con mucha falta de tacto para decirle a la persona eh... ¿cómo mejorar el trabajo, ¿no? Entonces, esas fueron experiencias dolorosas, pero sin embargo, que las agradeces mucho, porque independientemente de la forma en que te lo digan, pero, sabes que tienen razón. Entonces eso te permite mejorar el trabajo. Entonces, esa experiencia dolorosa finalmente se transportaba... se transformaba en una buena experiencia.</p>
<p><b>Principales obstáculos para que una persona estudie un doctorado</b></p>	<p>Mmm... Yo creo que la primera y la más fundamental es que... que se comprometa, o sea, parece sencillo, pero decir “¿bueno, te comprometes con estudiar un doctorado?” “no, pues que sí”, porque a partir de ahí pues ya, eh... van a desarrollarse todas las actividades. Segundo que... que tengas tiempo, o sea, que tengas tiempo realmente para dedicarle al doctorado, si no, va a ser muy complicado y te puedes meter en el infierno. Tercero que tengas, eh... la habilidad de... o al menos que te guste, ¡si tienes la habilidad qué bueno!, si no la tienes bueno, tienes que desarrollarla, aprenderla, ¡que te guste investigar, que disfrutes investigar!, y cuarto, que seas una persona sumamente eh... eh... constante, ¡hasta rallar en la... eh... testarudez si es necesario, ¿no?, por... por buscar lograr el objetivo. Y este... y obviamente sí, ¿pues qué lo quieras hacer, ¿no?... mmm... fundamentalmente.</p>	<p>Yo creo que lo primero es tiempo, hay que tener tiempo ¡bastante tiempo para... para ese proyecto!, y claro que también hay que tener recursos económicos, a pesar de que existen becas este... si se requiere tener ciertos ingresos fijos.</p>	<p>Fijate que yo creo que ninguno... mmm... ninguno...</p>

<p><b>Limitaciones de los programas u opciones de doctorado</b></p>	<p>Yo creo que sí, sí hay limitantes porque... este, ¿se podrían hacer algunos esquemas diferentes, ¿no?, ah... por ejemplo; este... este esquema el de la..., es un esquema donde ahí dependes completamente del individuo, ¿no?, o sea, ahorita ya lo mencioné anteriormente... mmm... y a lo mejor podría haber esquemas donde quizás hubiera un término medio, ¿no?, entre lo que hace... eh... la universidad, que te da ciertos cursos, avanza ciertas zonas, te asesora un poco, ¡no sé!. Yo creo que sí, si debe haber más diversidad, más diversidad que... que... porque es sumamente flexible el proyecto, pero, dependes completamente del individuo, y vuelvo a repetir, no toda la gente tiene disciplina para poder cumplirlo, entonces sí sería interesante que hubiera otros esquemas.</p>	<p>Sí, creo que... poco a poco se están abriendo más doctorados y con más variedad, pero también porque cada vez existimos mas profesionistas y existen más docentes que requieren especializarse</p>	<p>Yo me voy a ir así como que a la ley del mercado imperfecto, ¿no?, ¿el que se rige por la oferta y la demanda, ¿no?... mmm... el mercado es imperfecto desde el momento en que se rige por eso. Entonces, si no hay quien quiera estudiarlo, pues para qué lo... para qué lo ofertan, ¿no? mmm... Entonces, yo creo que primero ¿cómo me decías ahorita, ¿no?, hay que cambiar la cultura y hay que hacer una cultura de, de superación, de desarrollo, de la importancia de tener un posgrado, entonces, ya cuando la gente, eh... entienda la necesidad o entienda lo importante de tener un posgrado, no sé, pues... mmm... entonces hay que generarlo, ¿no?.</p>
<p><b>Actitud que debe tomar una persona que está realizando el doctorado</b></p>	<p>Una actitud de... de madurez, de madurez porque... eh... al, al ser creador de conocimiento tienes que entender, eh... que muchas veces es algo nuevo, que alguien va a criticar, que alguien quizás o algunos puedan no entender; porque es tan nuevo que no lo alcanzan a entender y a lo mejor se va a entender muchos años después o... o simplemente a veces tienen razón y... y la crítica es válida. Entonces, tienes que tener madurez para entender que cuando te hacen algún comentario respecto a tu investigación, no necesariamente es algo personal o están hablando de que... eh... te restan capacidades, habilidades o inteligencia, sino que tu trabajo a lo mejor no, no está siendo, eh... útil... mmm... o... el enfoque no es propio, o simplemente alguien piensa diferente a ti, ¿no? Entonces yo creo que es, es de madurez...</p>	<p>Es una cuestión, una actitud de humildad, de aprendizaje, este... insisto en esto, lo peor que uno puede hacer es no asumir que uno no sabe todo, los tutores están ahí para enseñarnos, para enseñarnos y este... hay que tener una... una actitud bastante abnegada en ocasiones y también bueno, también de humildad en el aprendizaje...</p>	<p>Yo creo que primeramente tienes que ser ah... ah... tienes que ser bien tolerante... mmm... y tienes que... ah, dejar que... que te dirijan, ¿sí?... mmm... porque cuando tienes, cuando comienzas un doctorado crees que, empiezas creyendo que lo vas a aprender todo, ¡que lo sabes todo, sí! Entonces, te empiezan a dirigir tus tutores y a veces te resulta difícil que te cambien lo que tú quieres estudiar, ¿no?, pero sí... si no te dejas dirigir nunca vas a salir del doctorado, o sea, tus tutores nunca van a decir, “estás listo, ya preséntate al examen”, o lo que sea ¿no? Entonces, primero que nada tienes que saberte... ¡tienes que dejarte dirigir!... así es... tienes que ser humilde también para saber aceptar las críticas, tienes que ser tolerante y no entrar en conflicto porque eso se da mucho, mucho, mucho.</p>

<p><b>Percepción en sí mismo al tener un doctorado</b></p>	<p>Percepción de mí mismo... así es... bueno, este... yo creo que no cambia, no cambia la percepción que ya tenía anteriormente de mí mismo, porque por ejemplo aquí en... en... en la última fase... Bueno, en la primera fase del doctorado yo estaba trabajando en una planta maquiladora, dirigía la planta, eh... daba clases aquí en la universidad y arranqué el doctorado. Entonces, era complicado pero al mismo tiempo, pues busqué, lo que había comentado anteriormente para poder hacerlo, eh... cuando dejo la planta, entonces tuve más tiempo para avanzarle al doctorado. Pero de repente me piden que me haga cargo del programa de administración... mmm... entonces volvió a complicarse nuevamente el asunto, porque era eh... este, dar clases, dirigir un... un programa de... de... una licenciatura y a su vez continuar con el doctorado.</p>	<p>Pues yo creo que yo sigo percibiéndome a mí mismo como... como lo que era antes sin doctorado, este... nada más que ahora me percibo. Bueno, lo único que varió fue esto de... darme cuenta de que sabía menos, entre más me fui adentrando, era, el... el universo... El abismo al conocimiento era aún más grande.</p>	<p>¿Qué percepción tengo de mí misma?, pues, yo creo que soy más crítica, más analítica, en ese aspecto, pero yo creo que... no me considero que haya despegado los pies del... del suelo, ¿no?. No soy una persona que se moleste porque no le digan “doctora” ¿sí me explico? No soy una persona que se moleste porque le digan “maestra” en lugar de “doctora”, como nos encontramos muchas personas por ahí ¿no?, que si no le dices “doctor”... mmm... ¡olvídate no!, o sea, se ponen colorados. Fíjate que es más bien eso, ¿no?, el nivel de análisis es diferente. Mmm... Eso es lo que yo puedo considero que es el cambio más grande, claro, conociste más acerca de algo, pero pues no lo puedes saber todo tampoco, ¿no? El hecho de que estudies un doctorado no te hace este... no te hace sabio ¿para comenzar, ¿no?...</p>
<p><b>Percepción hacia usted por parte de la gente al saber que tiene un doctorado</b></p>	<p>No tengo idea, no tengo idea.</p>	<p>Yo quiero pensar que la gran mayoría gente que me rodea... ya sea... otros colegas de la universidad, familia, amigos, vecinos y demás, quiero pensar que tienen una sensación agradable de que haya terminado yo mi doctorado... ¡Quiero pensarlo!...</p>	<p>Fíjate que no... No me he detenido a pensar jamás en la percepción que tengan hacia mí, pero... pero pues tampoco me... ¿no sé, será que no me... no es algo que me preocupe!, ¿sí me explico?... mmm... y no, no sé, realmente no sé qué percepción tengan.</p>
<p><b>Influencia del doctorado en su trayectoria profesional</b></p>	<p>Positivamente, porque aquí en la universidad económicamente cuando accedes al doctorado hay una re-categorización inmediata. Además, eh... el hecho de desarrollar investigaciones... eso es cuando te gusta, vuelvo a repetirlo, es satisfactorio, es bonito ver que vas creando algo. Entonces este... eh... ¡sí, yo creo que han sido... han sido buenas consecuencias, en el sentido profesional, en el sentido académico, en el sentido económico, han sido buenas!</p>	<p>En mi vida personal todo sigue exactamente igual, este... en mi vida familiar ¡y... bueno, todo bien!, en mi vida social ha sido exactamente igual, posiblemente en mi cuestión laborales hay un poco de reconocimiento, sobre todo porque estoy trabajando en la universidad o en universidades.</p>	<p>¿Cómo ha influido?, ¿no, pues, la ha impactado de manera muy, muy, muy positiva!, te comentaba ahorita de la razón costo-beneficio de estar en el doctorado, yo creo que los beneficios se... se ven de muchas formas ¿no? mmm... primero inmediatamente, pues se empiezan a ver económicamente, ¿no?... mmm... ahí tiene un impacto inmediato, ¿no? Pero los beneficios en cuanto a acceder a otro tipo de... eh... ¡vaya, de situaciones que son... que te dejan una satisfacción!, ¿sí me explico?... mmm... entonces, entras a otra dinámica muy diferente, ¿no?</p>
<p><b>Sentimiento hacia sus tutores</b></p>	<p>Bueno, hubo, eh... diferentes reacciones, eh... hubo una, mi tutora principal; muy comprometida, muy exigente, muy demandante, muy... ah... ¡demandante es la palabra!, eh... quería mucha precisión, eh... buscaba que el documento se mejorara bastante. Otro de los tutores, este... eh... involucraba distancia, respetando siempre la guía del tutor principal., y el otro pues aceptando la directriz de los otros tutores sin involucrarse al 100%. Entonces para los tres este... mi agradecimiento, ¿no? Porque los tres aportaron, eh... incluso el que</p>	<p>Bien, en términos generales me sentí bien, con la gran mayoría de mis tutores tuve una... una buena amistad... mmm... tuve diferencias y dificultades a veces con alguno de ellos, pero, nada que... que sea grave, este... logré amistad con bastantes de mis tutores, incluso uno de ellos pues lamentablemente falleció, que fue mi tutor principal, pero de mis demás tutores, pues fue una relación muy cordial.</p>	<p>Pues, yo creo que ah... pasamos como que... por etapas, ¿sí? Yo creo que en el principio te sientes un poco incomprendido... mmm... por lo que te comentaba ahorita, que entras con la idea de que “¡yo quiero esto, yo quiero estudiar esto, esto y esto!”, y empiezas a platicar con tus tutores y ellos que tienen una visión más amplia de las cosas porque, por la experiencia ¿no?, empiezan a ver tu... problema de investigación de una manera global y le ven cuáles van a ser las limitantes. O pueden ver cuál es la forma en que se puede mejorar, en mi caso fue para mejorar</p>

	no aportó tanto, aportó en dejar que los otros eh... externaran toda la dirección pues, o sea, mantenerse un poco no tan demandante. Entonces, ¡no, de agradecimiento es la actitud hacia ellos!		muchísimo el problema de investigación, o sea, me dejaron el mismo tema, pero el enfoque que le dieron fue muy diferente. Entonces te cuesta trabajo al principio dejarte dirigir, entonces te sientes un poco incomprendido, pero a medida como te digo, que tienes que ser humilde, tienes saber tomar la crítica de manera constructiva, tienes que dejarte dirigir, entonces, a medida que lo vas entendiendo vas con una excelente relación.
<b>Sentimiento al ser ahora tutor y doctor</b>	Bueno, comprendo al... al... tutorado, eh... porque entiendo que... que a veces no es fácil entender a dónde quieres llevar al tutorado, o sea, el tutorado no alcanza a entender a donde quiere el tutor llevarlo y trato obviamente de... de lo que yo sentí cuando de repente había cierta ah... eh... persistencia, terquedad de alguno de los tutores; entenderlo y... y tratar de no, no hacer sentir al tutorado de esa misma manera, ¿no?; yo creo que eso es bueno, es bueno es este... es positivo.	Bueno, ahorita todavía no me han asignado un alumno tutorial... mmm... ¿verdad?, este... pero... me siento igual en el sentido físico, me siento igual que cuando era licenciado, me siento igual que cuando era maestro, un poco más gordito nada más.	Pues mira, yo creo que... pasar por las experiencias que ya pasaste como estudiante te permite entender más a los... a las personas que estás asesorando, ¿no? porque de cierta manera te ves reflejado... mmm... tratas de explicar de la mejor manera posible, eh... ¡vaya!, la asesoría que les estás dando para que no lo sientan... ¿A lo mejor en mi caso, no?, como en el momento yo me sentía algo incomprendida, tratas de explicarle por qué a veces tiene que hacer cambios, por qué a veces la crítica es dolorosa, ¿pero, también les dices cuáles son los beneficios, ¿no?
<b>Remuneración del doctorado</b>	Si lo es.	La remuneración es tan relativo como la riqueza y la pobreza, este... si no tenemos un punto de comparación entonces no vamos a saber si está bien remunerado o no. Sí hay un incremento, sí hay un incremento, este... en lo que son las percepciones de una persona trabajando como académico, porque si usted trabaja en una empresa en la que no le requieren un grado de doctorado, pues, muy probable se le haga un aumento...	Yo considero que sí y no solamente en cuestión económica... mmm... sí, yo creo que la satisfacción que te deja el mismo grado obtenido, pues ya, ya es bastante.
<b>Motivación a sus hijos para que estudien un doctorado</b>	Solo si les gusta investigar. La verdad no, ¡yo no me atrevería a decir, a exigirles!, motivarlos, eh... solamente si yo veo en ellos las características de investigadores, sí.	¡Sí, claro que sí... claro que sí!, creo que este... la educación continua no es algo que... que deban hacer nada más un programa en las universidades. La educación continua uno la debe de... de expresar también hacia su familia definitivamente.	Primeramente a mis hijos... mmm... sí, a ellos, a mi familia no ¡pero sí, a mis hijos sí! ¡Claro que sí!

<b>Campo para ejercer el Doctorado</b>	Solamente académicamente, laboralmente no... No, no se demanda, las empresas no demandan doctores.	¡Sí, claro que sí!.. Las ciencias administrativas por lo general son muy amplias entonces; este... este doctorado tiene muchas áreas en donde se puede desempeñar el egresado.	Fíjate que es un doctorado relativamente nuevo, ¿sí?... mmm... que como te comentaba, tenemos que crear también la necesidad para que... mmm... para que sea cotizado, en las instituciones de educación superior. Definitivamente sí, si te vas al ámbito organizacional, a las empresas en particular es, pues, yo considero que no mucho todavía y menos con la situación de crisis que ahorita se está viviendo, lo que quieren las empresas es pagar los sueldos más bajos y pues ellos lo que quisieran es tomar a los estudiantes cuando recién salen, para tener los sueldos más bajos, para formarlos de acuerdo a la filosofía de la empresa, ¿no?... que son los que más fácil se dejan dirigir. Entonces si tú agarras un doctor y lo llevas a una empresa, para empezar le vas a tener que pagar un sueldo muchísimo más alto que el de un estudiante recién salido de licenciatura, eh... y después para que lo hagas que se amolde a la empresa, pues va a ser poquito más difícil.
<b>Repetición de los mismos esquemas a los que fue sujeto durante su doctorado</b>	No, la idea es la mejora continua ¿no?, y lo que se alcanzó a percibir que no era adecuado, bueno, se... se modificaría.	¿En el entendido de que si yo fuera tutor... ajá... haría lo que mis tutores hicieron?... Yo creo que sí, sí, básicamente este, algunos tutores eh... fueron un poco más enérgicos en materia de la... forma de la redacción, de la sintaxis; otros, por lo general se enfocaron más hacia lo que... fue la metodología cualitativa o cuantitativa, pero básicamente me gustó el formato como trabajaron, y ¡creo que sí, yo me convertiría en un repetidor de lo que ellos hicieron!	Te decía que sí, yo creo que sí, pero... pero con esas variantes, ¿no? De que no, las cosas que yo sufrí no me gustaría que los tutorados las sufrieran...mmm... ¡para nada!
<b>Clave para tener éxito en el doctorado</b>	La constancia, la persistencia y encontrarle gusto a la investigación.	Constancia... constancia... constancia y disciplina.	Yo creo que fue la constancia y saber administrar el tiempo, eh... ser perseverante, siempre estar enfocada en el objetivo, ¿no?... mmm... para que en ningún momento, ¡en ningún momento yo pensara en desertar!, sí, yo creo que más bien fue eso.
<b>¿Volvería a hacer un doctorado?</b>	Ah... no creo, una estancia posdoctoral sí, otro doctorado no creo.	¡Claro que sí!, ¡sí, si lo volvería a hacer!, este... Dejaría que pasara un tiempo porque la verdad es de que (hice el doctorado, bueno...) hice mi licenciatura, ¡terminé!; empecé casi de inmediato la maestría, descansé muy poco tiempo; y luego empecé el doctorado.	Por el momento no, no... En este momento no, yo creo que como te decía se sacrificó tiempo, familia, se sacrificaron muchas cosas, por el momento no lo haría, tal vez una estancia posdoctoral, algo así sí, pero meterme a un doctorado, doctorado en este momento, no.

<p><b>Mensaje a los alumnos para motivarlos a realizar un doctorado</b></p>	<p>El mensaje que doy a todos mis alumnos “¡no permitan que nadie les robe sus sueños... y si su sueño es obtener un doctorado, háganlo!”; ese será el mensaje.</p>	<p>Un doctorado, una maestría, cualquier licenciatura, así como el trabajo que ustedes van a hacer; tienen que dedicarse a hacer lo que más les apasiona, piensen lo siguiente: ¿Cuál es su hobby? Bueno, ese hobby es el que pensaron, imaginen que se van ustedes a dedicar a estudiarlo, a analizarlo o a ejercerlo de por vida.</p>	<p>Pues, básicamente que el... ser humano es curioso por naturaleza y yo creo que siempre deberíamos de estar en... en constante desarrollo ¿no?, en constante superación y... un doctorado te deja cosas muy valiosas, ¿sí?, el conocimiento, una experiencia de vida, entonces; yo lo que sí les diría es que siempre, siempre se sigan preparando, se sigan superando porque eh... antes cuando tu solicitabas un empleo verdad, tener una licenciatura era lo máximo, ¿no?, entonces, dentro de las personas que lo solicitaban era aquél que tenía la licenciatura, o ¡vaya, estudios de educación superior!, ¿era el candidato ideal, ¿no?... mmm... ahorita ya vemos que ni siquiera con maestría es suficiente... mmm... yo creo que el mercado laboral está muy competido y en la medida que te vayas preparando más, ya sea con un posgrado, con idiomas, con herramientas de tecnología de información, o sea, en el manejo de tecnología de investigación, pues, vas a ser mejor cotizado.</p>
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# EL COMPORTAMIENTO DEL CONSUMIDOR DE SERVICIOS CULTURALES OFRECIDOS POR LAS ENTIDADES PARAESTATALES EN LA CIUDAD DE TIJUANA, B.C.

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## RESUMEN

*Afirmar que las instituciones que brindan servicios culturales dirigen sus esfuerzos hacia un mercado en específico es un tanto complicado, no es muy común encontrar datos que permitan tanto la identificación del cliente como los hábitos que generalmente posee al hacer uso de las actividades que realiza en las mismas. En el presente artículo se busca caracterizar el perfil sociodemográfico del consumidor, y a su vez relacionarlo con su comportamiento actual y nivel de satisfacción con respecto a los servicios culturales que son ofrecidos por las entidades paraestatales en la ciudad de Tijuana; partiendo de la raíz del problema el cual precisa la inexistencia de información sobre la cual los organismos encargados de impulsar y promover la actividad cultural se puedan apoyar para la toma de decisiones estratégicas.*

**PALABRAS CLAVE.** Comportamiento del consumidor, hábitos de consumo, nivel de satisfacción, perfil sociodemográfico.

## CONSUMER BEHAVIOR OF CULTURAL SERVICES OFFERED BY AGENCIES IN TIJUANA, BC

### ABSTRACT

*Affirm that institution providing cultural services focus their efforts towards a specific market is kind of difficult, it is unusual to find data such as customer identification as habits that usually has to make use of the activities of the thereof. This article seeks to outline the sociodemographic profile of the consumer, and in turn relate current behavior and its level of satisfaction with cultural services that are offered by the agencies in the city of Tijuana, starting from the root of the problem wich states the inexistence of information about agencies that are in charge of promote cultural activity able to support strategic making decisions*

**JEL:** L1

**KEYWORDS.** Consumer behavior, consume habits, satisfaction level, socio-demographic profile.

### INTRODUCCIÓN

Al crear un perfil del consumidor actual de las personas que asisten a las actividades que se realizan en las entidades paraestatales enfocadas al arte y cultura, los datos generados por la presente serán de utilidad tanto para el diseño de planes estratégicos por parte de promotores turísticos y

culturales en la ciudad de Tijuana, Baja California, como para las empresas de iniciativa privada enfocadas al mismo sector y las actividades realizadas por iniciativa de los habitantes tijuanaenses.

La organización del presente artículo se encuentra distribuida de la siguiente manera: en la revisión de la literatura se define el concepto de servicios culturales, abordando la clasificación de los mismos; se define también que es una entidad paraestatal y se hace mención de las existentes en la ciudad de Tijuana; y finalmente se aborda el tema del comportamiento del consumidor, dentro del cual se derivan los hábitos de consumo y el nivel de satisfacción. En el apartado de metodología se precisan los criterios para definir la población y se muestra la ficha técnica de investigación. Por último, se hace hincapié en el estado actual de la presente investigación, la cual será concluida en diciembre de 2013.

## REVISIÓN DE LITERATURA

### Los Servicios Culturales

Definir el concepto de servicios culturales como tal, se torna un tanto complejo debido a la insuficiente bibliografía y las escasas que han sido las investigaciones en este ámbito; sin embargo, para Cuadrado y Berenguer (2002) un servicio cultural, es una actividad que únicamente es consumida al momento de su exhibición, por lo que conllevan una asistencia por parte del espectador o visitante a un recinto escénico o área de exhibición, espacios que generalmente no tienen fines lucrativos. Ambos autores clasifican la naturaleza de las artes en actividades culturales de la siguiente manera:

Figura 1 Clasificación de los Servicios Culturales



Fuente: elaboración propia a partir de Cuadrado y Berenguer (2002)

### Las Entidades Paraestatales en México

Uno de los criterios para la clasificación de las empresas es el origen del capital, y a su vez se dividen en públicas o privadas; las primeras mencionadas se rigen bajo la Ley Federal de las Entidades Paraestatales (2012), dentro de la cual, en el artículo 11 se establece que las entidades paraestatales poseen autonomía de gestión para cumplir los objetivos señalados en sus programas. Asimismo, una entidad paraestatal surge de la necesidad de dar solución a problemas sociales con una coparticipación del estado y los particulares para producir bienes y servicios, conforme el artículo 14 de la presente Ley, los organismos descentralizados tienen por objeto la realización de actividades correspondientes a las áreas estratégicas.

En la ciudad de Tijuana los espacios que reúnen las características descritas con anterioridad son: en el ámbito federal, de acuerdo al Marco Jurídico de Actuación (2006-2012) el Centro Cultural Tijuana (CECUT). Conforme al artículo 1 de la Ley del Instituto de Cultura de Baja California (ICBC) en el cual se declara que es un “organismo público descentralizado, con personalidad jurídica y patrimonio propio” (2003), el Centro Estatal de las Artes (CEART) de reciente creación es apoyado por el gobierno estatal. Finalmente, en el artículo 1 del Reglamento Interior del Instituto Municipal de Arte y Cultura (IMAC), declara que es un organismo descentralizado de la Administración Pública Municipal, con personalidad jurídica, administrativa y patrimonios propios, organismo del cual se derivan tres Casas de la Cultura (Tijuana, Playas y Pípila) y el Antiguo Palacio de Gobierno

### El Comportamiento del Consumidor

Es definido por Rivera, Arellano, y Molero (2009) como el “proceso de decisión y actividad física que los individuos realizan cuando buscan, evalúan, adquieren y usan o consumen bienes, servicios o ideas para satisfacer sus necesidades (p.36). Para comprender el comportamiento del consumidor, es necesario hacer hincapié en los actos que lo componen, estos consisten en la mayoría de las ocasiones en que la persona busca satisfacer una necesidad, seguida de la comparación entre algunas alternativas identificando riesgos y beneficios del producto deseado, buscar consejos u opiniones de personas conocidas sobre el mismo y finalmente obtener su propia opinión por medio de la experiencia adquirida con la compra. Por lo tanto el comportamiento del consumidor, se compone de tres conjuntos de factores relacionados de acuerdo con Fischer (2011), los cuales son “Actividades: actos, procesos y relaciones sociales. Personas: individuos y organizaciones. Experiencias: obtención, uso y conciencia.” (p.69).

Los hábitos de consumo, de acuerdo con Herrero (2007) son “determinados modos de proceder de los consumidores al realizar sus compras, hábitos adquiridos por la repetición de actos iguales o semejantes originados por costumbres, usos y tendencias instintivas” (p.32-33). El conocer el perfil del consumidor e identificar cuáles son sus perspectivas con respecto a los productos o servicios que ofrece una organización, trae consigo grandes beneficios para la misma; Alonso y Grande (2010) afirman que “el estudio de esta disciplina se traduce en un mejor conocimiento de las necesidades de los consumidores y de oportunidades de mercado” (p.36).

El nivel de satisfacción del cliente es analizado por Lane y Kotler (2009) quienes afirman que es una “sensación de placer o de decepción que resulta de comparar la experiencia del producto (o los resultados) con las expectativas de beneficios previas” (p. 144). Por lo tanto si la oferta es menor a las expectativas del cliente el resultado será bajo, si la organización ofrece justo lo que el consumidor espera éste quedará satisfecho, en cambio si la empresa supera lo que el cliente espera encontrar, el nivel de satisfacción será superado. Los clientes se forman expectativas en relación a una empresa, producto o servicio por varias razones, entre ellas es posible encontrar: compras anteriores o consumos previos, recomendaciones de terceros, publicidad misma de la empresa, etc.

### **METODOLOGÍA**

La metodología utilizada en el mencionado estudio, consistió en el diseño y aplicación de cuestionarios durante el segundo y tercer trimestre del año 2013, por lo cual el enfoque de acuerdo con Hernández, Fernández y Baptista (2006) es cualitativo puesto que se basa en recolectar datos y comprobar hipótesis por medio del análisis estadístico. Asimismo tiene un alcance correlacional al asociar las variables sociales y demográficas con los hábitos de consumo

y nivel de satisfacción, no experimental de corte trasversal al recolectar datos no manipulables en un solo periodo de tiempo.

Se establecieron los siguientes criterios a) Residir en la ciudad de Tijuana. b) Encontrarse haciendo uso de algún servicio cultural dentro de las entidades paraestatales sujetos de estudio. c) No asistir en grupos guiados (paseos escolares o *tours*). d) Mayores de 12 años. La ficha técnica de la investigación se muestra en la Tabla 1.

Tabla 1. Ficha técnica de la Investigación

Universo	Consumidores de servicios culturales en las instituciones culturales
Población	Personas mayores de 12 años, que residan en la ciudad de Tijuana y se encuentren haciendo uso de un servicio cultural
Tamaño Muestral	Finita por definir
Margen de Error	Nivel de confiabilidad del 95%
Método	Muestreo Estratificado entre las entidades paraestatales
Periodo del Trabajo de Campo	Julio-Octubre 2013
Instrumento	Cuestionario con opciones de respuesta abiertas y cerradas

Fuente: Elaboración propia

Tamaño de la muestra para población finita y conocida

$$n = \frac{Z_{\alpha}^2 \cdot N \cdot p \cdot q}{i^2 (N - 1) + Z_{\alpha}^2 \cdot p \cdot q}$$

## RESULTADOS Y CONCLUSIONES

En el desarrollo del estudio de campo que abarca el segundo y tercer trimestre del 2013, se ha detectado una gran área de oportunidad sobre la cual diseñar una estrategia que permita incentivar y mantener el consumo de este tipo de servicios. Aun cuando no se tienen resultados preliminares de la población objeto de estudio – puesto que la investigación aún se encuentra en la fase de recolección de información–, se considera que el comportamiento del consumidor apunta a una demanda sostenida de los servicios culturales ofrecidos por las entidades paraestatales en la ciudad de Tijuana, con un alto grado de satisfacción en los mismos y una tendencia homogénea con inclinación al incremento en la medida en que se diversifique la oferta. Se estima que para el momento en el cual se lleve a cabo el evento, se tendrán los resultados cualitativos y cuantitativos que permitan respaldar tales aseveraciones

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# **DEFINICIÓN DE UN MODELO DE GESTIÓN DE CALIDAD PARA PROMOVER EL DESARROLLO ACADÉMICO Y LA EVALUACIÓN DEL DESEMPEÑO DE LOS PROFESORES DE LA UNIVERSIDAD CATÓLICA DE COLOMBIA**

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Jorge Enrique Celis Giraldo

## **RESUMEN**

*Este artículo presenta el diseño de un modelo de gestión de calidad en conformidad con las dimensiones teóricas y la práctica efectiva del Sistema de gestión para el desarrollo académico y evaluación del desempeño de los profesores definido por la Universidad Católica de Colombia. A partir de la evaluación de la propuesta conceptual de la universidad sobre dicho sistema, y el cotejo de la información obtenida con las experiencias sobre diversos modelos de gestión existentes que se han diseñado con el fin de promover el mejoramiento continuo de las organizaciones, se presenta a través del modelo de gestión diseñado una adaptación teórico-práctica para el desarrollo académico y la evaluación docente. Además, este modelo se construye a partir de un análisis comparativo en el que se involucraron los sistemas encontrados junto con las normativas y lineamientos exigidos, a los cuales debe adecuarse para su posterior aplicación en la Universidad Católica de Colombia. En el artículo se define el modelo de gestión de calidad y se describen los principios y conceptos básicos, los objetivos y principios que direccionan su aplicación, los resultados esperados, el proceso evaluativo y los requerimientos generales que son necesarios para ponerlo en funcionamiento.*

**PALABRAS CLAVE:** Gestión de la calidad, desempeño docente, gestión universitaria, acreditación.

## **DEFINITION OF A QUALITY MANAGEMENT MODEL TO PROMOTE ACADEMIC DEVELOPMENT AND PERFORMANCE EVALUATION OF TEACHERS OF THE CATHOLIC UNIVERSITY OF COLOMBIA**

### **ABSTRACT**

*This paper presents the design of a quality management model in accordance with the theoretical dimensions and effective practice of the management system to promote academic development and performance evaluation of teachers at the Catholic University of Colombia. From the evaluation of the conceptual proposal of the university on the system, and the comparison of the information obtained with the experiences of various existing management models that have been designed in order to promote continuous improvement of organizations, through the management model designed a theoretical and practical adaptation is present for the academic development and teachers evaluation. In addition, this model is constructed from a comparative analysis that*

*encompassed the systems found with required regulations and guidelines, which should be appropriate to the management model designed and its subsequent application in the Catholic University of Colombia. The article defines the quality management model and describes the principles, basic concepts and objectives that address its application, as well as the expected results, the evaluation process and the general requirements that are necessary to operate it.*

**JEL:** I21, I29, M420, M10, M11

**KEYWORDS:** Quality management, teacher performance, university management, accreditation.

## INTRODUCCION

La Universidad Católica de Colombia, con el fin de buscar y mejorar los estándares de calidad y de una manera responsable con los compromisos implícitos adquiridos con la sociedad y el Estado, se ha preocupado por diseñar e implementar mecanismos que faciliten el funcionamiento de un sistema que promueva la educación de alta calidad. En este sentido, el diseño de programas y modelos está encaminado a mejorar la experiencia educativa de aprendizaje y de enseñanza al adoptar sistemas de desarrollo académico y de evaluación para el cuerpo docente, los cuales fomenten la participación de la comunidad académica y contribuyan al proyecto de vida de sus estudiantes y profesores. Las metodologías y estrategias propuestas van de la mano con el sistema de promoción y evaluación de los profesores diseñado por la Decanatura Académica de la Universidad Católica de Colombia, el cual debe estar en conformidad con los lineamientos establecidos en el Plan de Desarrollo Institucional (Universidad Católica de Colombia, 2012). Además, este sistema debe incluir la definición y formalización de un modelo para administrar un sistema de gestión de calidad que involucre los objetivos y metas propuestos por la universidad, así como las expectativas y concepciones que se formulan sobre el tema a nivel nacional e internacional.

El sistema de promoción y evaluación de los profesores, es una apuesta por mejorar la educación desde la experiencia docente, ya que se reconoce que el profesorado es la base para afianzar la enseñanza de los estudiantes y lograr los estándares de calidad exigidos por el Estado. A partir de los resultados obtenidos en los procesos de evaluación de la institución y los docentes, es imprescindible establecer mecanismos de retroalimentación que fomenten la integración de la comunidad académica con el propósito de superar las dificultades, los obstáculos y las falencias encontradas. Para que esto se cumpla, el proceso debe sustentarse y complementarse con un nuevo modelo de gestión de calidad que permita garantizar la objetividad e imparcialidad de los resultados y promueva una mejor calidad en cada docente y en la institución en general; de igual forma, generar procesos que inicien en lo micro para que incidan en lo macro, fomentar relaciones y compromisos en todo el cuerpo docente y establecer mecanismos que generen sentido de pertenencia hacia la institución.

Por consiguiente, la investigación realizada es un ejercicio que aporta soluciones concretas y efectivas a la falta de un modelo con capacidad fáctica y ejecutable, lo cual le permitirá a la institución trascender de las propuestas conceptuales y teóricas hacia las prácticas y operativas. Para que el modelo diseñado contribuya a entrar en los procesos de certificación y acreditación y superarlos, de acuerdo con los lineamientos y exigencias de los estándares establecidos a nivel nacional e internacional, debe apoyarse y articularse con las propuestas vigentes y en estado de ejecución dentro de la institución. Los resultados obtenidos en el desarrollo de la propuesta para el diseño del modelo del sistema de gestión de calidad permiten establecer mejoras y ajustes a las

prácticas internas de enseñanza y evaluación docente, así como entrar en procesos de articulación con las exigencias internacionales y los estándares de calidad. Esto en consideración al interés que existe por ser competentes con las ofertas educativas a nivel nacional y con aquellas que se realizan fuera del país.

## REVISIÓN LITERARIA

Durante la investigación se analizaron una serie de modelos que brindan las bases para diseñar y poner en marcha una propuesta organizada para el establecimiento y desarrollo de un Modelo de Gestión de Calidad. De igual forma se revisó la literatura de algunos de los modelos de calidad, de excelencia de calidad y de acreditación más reconocidos a nivel mundial –incluyendo implícitamente el enfoque a la gestión por procesos–, como referencias útiles para ser tenidas en cuenta en el desarrollo de la propuesta.

Para todos los efectos relacionados con términos y definiciones se utilizarán las provistas en el documento de Celis y Duque (2011) Consideraciones para el diseño de un sistema de desarrollo académico y evaluación del desempeño de profesores de la Universidad Católica de Colombia; y en la Norma ISO 9000:2005 Sistemas de gestión de la calidad. Fundamentos y vocabulario (Instituto Colombiano de Normalización y Certificación, 2006, p. 36).

## METODOLOGIA

Para realizar este trabajo se empezó con una evaluación de la propuesta conceptual de la universidad sobre el Sistema de desarrollo académico y de evaluación del desempeño docente elaborado por la Decanatura Académica, con el fin de conocer los aportes hechos, las necesidades y falencias encontradas, las metodologías propuestas y establecer su capacidad operativa. La información obtenida se cruzó con las experiencias sobre diversos modelos de gestión existentes que se han diseñado con el fin de promover el mejoramiento continuo de las organizaciones, buscando una adaptación teórico - práctica para el desarrollo académico y la evaluación docente.

La metodología implementada durante el proceso de definición del modelo para el sistema de gestión de calidad estuvo dividida en ocho fases, cada una de las cuales se construyó siguiendo y acoplado modelos investigativos con resultados de aplicaciones prácticas. Las principales actividades desarrolladas fueron: la consolidación del marco conceptual; la realización de un estado del arte sobre el tema mediante la indagación por modelos de gestión implementados en diversas organizaciones (no solo a nivel de instituciones educativas); el análisis comparativo de la información recogida y sistematizada; la definición del modelo de gestión que se formuló incorporando las normas estatales, los lineamientos internacionales y el plan de desarrollo institucional, incluyendo los principios y valores de la institución; y, por último, el diseño de un esquema de las actividades y procesos requeridos para su implementación.

Posteriormente se presentó el modelo frente a la Decanatura Académica y dos profesionales de reconocida trayectoria en el ámbito, con el fin de recibir aportes y elementos valiosos para su aprobación y validación. A partir de esto se concluyó la documentación del modelo requerida y, finalmente, se hizo un ejercicio de proyección y preparación para su posterior implementación, en el cual se incluyeron las actividades de socialización y capacitación que serán requeridas para la formación de auditores internos y evaluadores. Los resultados obtenidos permitieron finalizar el

diseño del modelo de gestión de calidad en conformidad con las normas y requerimientos necesarios para impulsar, contribuir y acompañar los procesos emprendidos por la Universidad Católica de Colombia. El modelo se encuentra complementado por los insumos necesarios y concernientes para llevar a cabo su implementación, los cuales son: los lineamientos para la elaboración del manual del sistema de gestión, los procedimientos asociados, los instructivos y formatos necesarios para su aplicación y los requisitos para capacitar al personal encargado de implantar el sistema y a los usuarios del mismo.

## RESULTADOS

El modelo que se propone se asume desde la perspectiva del enfoque de gestión por procesos, proveído por los modelos estudiados. Dichos modelos demuestran una clara necesidad de integración de las metodologías funcionales dentro de los procesos, con la necesidad de una revisión de la estructura jerárquica de la universidad. El modelo se basa en este enfoque ya que suministra las herramientas de administración eficiente para lograr el resultado esperado, además de la mejora de la competitividad, la satisfacción de los clientes y del marco conceptual que propone la institución. De esta forma se define un modelo de gestión de calidad que 1. Identifique adecuadamente los procesos que se deben consolidar para llevar a la práctica de manera eficiente el Sistema de Gestión para el Desarrollo y la Evaluación del desempeño de los profesores; 2. Asuma adecuadamente una metodología sistemática para la gestión y que garantice el logro del desarrollo profesional de los docentes, entendiéndolo como todas las actividades que adelanta la Universidad en todos los niveles con el fin de apoyar a los profesores, de forma que estos logren los desempeños esperados de manera sobresaliente en sus diferentes roles de enseñanza, investigación, servicio y gestión, entre otros, a lo largo de su carrera académica (Celis y Duque, 2011, p.

9), 3. Permita desarrollar y hacer seguimiento efectivo a todas las dimensiones del desarrollo académico: de descubrimiento, de integración, de aplicación y de enseñanza, así como gestionar el control de los indicadores relacionados, los cuales garanticen el logro de los objetivos establecidos en el modelo conceptual; y 4. Le ofrezca a la Universidad Católica de Colombia la posibilidad de consolidarse como una organización educativa que requiere de profesores con unos perfiles claramente definidos, con el propósito de cubrir de esta manera el rango de actividades establecidas para su desarrollo de acuerdo con las dimensiones mencionadas. Como consecuencia de la investigación previa resulta fundamental el objetivo expuesto en la propuesta conceptual de Celis y Duque (Celis y Duque, 2011), en torno a los modelos de calidad, de excelencia de calidad y de acreditación que han tenido un mayor reconocimiento a nivel mundial. Aspectos Generales del Modelo Propuesto El modelo provee una adecuada participación de la alta dirección de la Universidad Católica y de las partes interesadas, propiciando canales de comunicación entre el proyecto, el proceso, la gerencia y los stakeholders, de manera que se han definido los roles y las responsabilidades para cada etapa.

### Objetivo del Modelo

El sistema tiene como objetivo central proponer una metodología sistemática, certificable y/o acreditable que le permita a la Universidad Católica de Colombia contar con herramientas para contribuir al desarrollo del proyecto de vida de los profesores, asegurando el desarrollo continuo de su desempeño en torno a sus actividades académicas en el marco de la filosofía, las políticas institucionales y la viabilidad financiera, y así consolidar una comunidad académica con altos niveles de desempeño que contribuya al bien social y al perfeccionamiento personal y académico de todos sus miembros.

### Beneficios del Modelo

Los beneficios del modelo son 1. Provee una definición clara de su propia razón de ser, su funcionamiento y su aplicación. Se establece con un inicio planificado, sistemático y debidamente organizado, asegurando que exista una clara convicción frente a sus ventajas de aplicación, y asegurando de antemano que todas las personas y los recursos necesarios se encuentren disponibles; 2. Permite una implementación organizada y controlada, asegurando que su eficacia se mantenga a lo largo de cada una de las etapas, así como que el trabajo realizado sea controlado y evaluado durante toda su operación; 3. Garantiza el logro de los objetivos presupuestados de manera efectiva, de tal manera que la tendencia natural que se deriva en la etapa operativa del proceso sea debidamente controlada. Para esto, cuenta con revisiones periódicas de los progresos, con flexibilidad en las decisiones, con control gerencial en caso de desviación del plan original y, por último, con una adecuada comunicación entre el proyecto, el proceso, la dirección y el resto de la organización.

### Principios del Modelo de Gestión

*Liderazgo Rectoral:* Según Celis y Duque (2011) el liderazgo rectoral provee los principios del sistema que alinean a toda la comunidad hacia el logro de los resultados esperados. Define los objetivos y los métodos necesarios de aplicar para su consecución, propiciando una cultura de cooperación y exploración de metas comunes.

*Enfoque al logro de los objetivos:* El camino hacia la excelencia está marcado por las necesidades del cliente y sus usuarios. Deben establecerse metas que sean apropiadas a las necesidades y expectativas de los stakeholders y medir su logro frente al cumplimiento de lo que ha sido planificado.

*Mejora continua:* El enfoque hacia la mejora continua requiere de la búsqueda permanente del desarrollo del personal docente, el establecimiento de métodos y planes de desarrollo y evaluación de sus resultados, en donde se propicien formas novedosas de trabajo que los impacten. La mejora debe constituirse en parte del trabajo diario del docente universitario y de todas las personas de las diferentes áreas de universidad que están directamente relacionadas con dicha función, buscando prevenir y corregir los problemas que afecten el desempeño y la calidad del trabajo, identificando las oportunidades para mejorarlo.

*Autoevaluación:* La revisión permanente de lo realizado en relación a lo que ha sido presupuestado debe ser continua. La institución debe implementar mecanismos que le permitan asegurar el mejor desempeño y el logro de los resultados, y debe ser capaz de tomar decisiones flexibles a tiempo, de manera que corrijan el rumbo en caso de que el proceso se desvíe.

### Criterios Generales del Modelo

*Funcionalidad:* Este criterio representa el conjunto de características que hacen que el modelo sea práctico y utilitario. Es la capacidad que debe tener el modelo de gestión de calidad para proporcionar las funciones que satisfagan las necesidades específicas ya mencionadas en el documento conceptual que se han tomado como referente.

*Fiabilidad:* Representa la confianza en el buen funcionamiento del modelo de calidad y su capacidad para mantener el nivel de desempeño esperado sin afectar los desempeños y funciones cotidianas de la universidad.

*Eficiencia:* Representa la capacidad del modelo de gestión de calidad para proporcionar a la institución herramientas para el logro de los objetivos sin afectar el uso de sus recursos.

*Eficacia:* Representa la capacidad del Modelo de gestión de calidad para garantizar la satisfacción de las necesidades de los clientes y de los usuarios.

*Mantenibilidad:* Representa la capacidad que posee el Modelo de Gestión de Calidad para ser flexible según las necesidades que se presenten y los cambios que se deben dar para mejorar continuamente. Esta evolución debe incluir el análisis de las acciones tomadas para la corrección de fallos en su implementación y aplicación, mejoras, adaptación del modelo causado por cambios en el entorno institucional, transformaciones en las prácticas y en los requisitos legales o reglamentarios.

*Aplicación:* El modelo propuesto puede ser aplicable en cualquier institución de educación, sin importar el nivel de educación al que se dedique. Puede ser usado con fines de certificación y/o acreditación, bajo otros modelos o normas certificables y/o acreditables. A la vez, puede ser implementado en otras áreas o niveles dentro de la institución.

*Mejora continua:* La propuesta posee en su configuración el proceso de mejoramiento continuo, el cual está basado en el enfoque de procesos y manejo de proyectos.

*Complejidad de las Instituciones:* Capacidad del Modelo de Gestión de Calidad que le permite administrar las necesidades de las personas que lo conforman, para interactuar con la dinámica requerida para el logro de las metas, objetivos y fines.

#### Requisitos del Modelo de Gestión y sus Directrices de Aplicación

*Enfoque, objeto y campo de aplicación:* Este modelo establece los requisitos para que la universidad pueda desarrollar de manera sistemática los procesos relacionados con el desarrollo académico y la evaluación de desempeño de los profesores, logrando como resultado la certificación de estos frente a requisitos específicos, y atendiendo a los principios establecidos y fundamentados en los pilares del sistema de desarrollo académico y de evaluación de desempeño de los docentes.

*Directriz 1:* Debe entenderse el modelo como punto de partida para que la universidad institucionalice las actividades propias del desarrollo y evaluación docente como un conjunto de preceptos orientados a mejorar la excelencia. Para tal efecto se asumen los principios del sistema concebidos en la investigación Definición de un modelo de gestión de calidad para promover el desarrollo académico y la evaluación del desempeño de los profesores de la Universidad Católica de Colombia.

*Directriz dos:* La universidad establece el perfil del profesor con el que desea contar, describiendo de manera detallada cada uno de los aspectos que son considerados relevantes para que una persona interesada pueda optar por dicho reconocimiento. El perfil de ingreso se asume como el conjunto de aquellos atributos mínimos que debe tener un profesional interesado en ingresar a la carrera docente en una universidad: formación, experiencia y producción en

investigación, experiencia en gestión curricular, experiencia en gestión de la calidad y experiencia profesional diferente a la universitaria (Celis y Duque, p.43).

*Directriz tres:* Las quejas, reclamos y apelaciones deben ser usados como fuentes de información para el manejo de posibles inconformidades del sistema y la toma de decisiones flexibles. La utilización de las herramientas definidas para garantizar el desarrollo continuo del sistema y su eficiencia son necesarias para aplicar acciones correctivas, de mejoramiento y de mitigación, minimizando los errores y sus consecuencias.

*Directriz cuatro:* Los procesos relacionados con la promoción docente y las compensaciones deben incluir una metodología sistemática que permita acceder a los interesados a los programas de promoción, ajustada a las políticas de compensación de la Universidad. Para tal efecto la metodología debe incluir como mínimo el reconocimiento y la compensación (reconocimiento de los logros); y la promoción que reconoce el compromiso no solo en el presente, sino también en el futuro del académico.

*Directriz cinco:* Los procesos relacionados con la vinculación y desvinculación de los profesores de la universidad deben estar enmarcados en metodologías claras, bajo responsabilidades debidamente definidas que correspondan a las necesidades de la institución, garantizando transparencia y objetividad, e incluyendo la definición de tiempos de prueba y la evaluación de continuidad. Al momento de surgir la necesidad de vincular un nuevo profesor o reemplazar uno que se retira, debe establecerse le metodología que permita la conformación del comité ad-hoc, el cual estará encargado de estudiar los candidatos, presentarlos al decano y dar una recomendación. La responsabilidad final de contratación del docente es exclusiva del decano de la facultad. De acuerdo con las políticas institucionales, la contratación debe estar debidamente sustentada en el plan de desarrollo de la facultad y en el perfil de profesor.

*Sistema de Calidad:* La universidad debe establecer y documentar un sistema de gestión que cubra todos los requisitos de este modelo, así como debe asegurarse de la aplicación de los requisitos aquí incluidos; es decir, el sistema debe ser debidamente implementado en las áreas interesadas. En este sentido, la universidad debe establecer un procedimiento que le permita el adecuado control de los documentos y de los registros generados.

*Directriz seis:* Debe existir un procedimiento para la revisión de las actividades de autoevaluación, el cual debe incluir: 1. Frecuencia de realización, 2. Desempeño de las actividades desarrolladas, 3. Gestión de indicadores 4. Acciones de mejoramiento tomadas y puntos de decisión flexibles, 5. Propuesta de mejoramiento.

*Directriz siete:* En las auditorías internas, deben considerarse como mínimo los siguientes aspectos:

*Objetivo de la auditoria:* El auditor no es un evaluador o calificador de lo hecho: no pretende implementar la auditoria como un ejercicio cuya intención es otorgar reconocimientos adicionales a la empresa. Por el contrario, busca ser un punto de referencia que le permita a la universidad reflexionar sobre su manera de pensar, y así generar conocimiento sobre la manera de aplicar dichas reflexiones en su interior en torno a la adaptabilidad y al manejo de su organización.

Los principios básicos del sistema son a) las organizaciones debe ser entendidas como seres vivos, como un todo, y no como la suma de partes independientes; b) las organizaciones deben ser entendidas como una serie/conjunto de redes dispuestas para la administración de la

información y la conectividad; c) las organizaciones deben ser entendidas como una fuente permanente de innovación; d) Las organizaciones deben ser entendidas como un conjunto de miembros/personas que manifiestan una gran diversidad de ideas y pensamientos; e) las organizaciones deben ser entendidas como un conjunto de sistemas complejos o instrumentos generadores de conocimiento y transformación permanente; y f) las organizaciones deben ser entendidas como un sistema autoorganizado que trabaja por la adaptabilidad al cambio y la sostenibilidad.

*Aspectos de competencia de los auditores:* Para que sea posible trabajar una auditoría fundamentada en la nueva realidad de las empresas, los auditores deben contar con una serie de conocimientos previos que faciliten su actuación y que a la vez sean los dinamizadores del valor agregado que deben dar a las organizaciones. El nuevo enfoque de auditoría exige que se trabaje desde la no linealidad de las organizaciones, apartando su cometido de la corriente de pensamiento con el que en la actualidad se gestionan las empresas, donde predomina el pensamiento lineal “considerado como un conjunto de ideas, en donde toda causa tiene un efecto, en donde el efecto permite predecir el fenómeno y en donde el fenómeno tiene un mismo sentido” (Palmas, 2005).

*Conocimientos del auditor:* Los tres ejes sobre los cuales deberá fundamentarse el saber y la experiencia de los auditores, entendiendo que las empresas se comportan según Maldonado (2005) como Sistemas Adaptativos Complejos, son a) el auditor debe ser capaz de entender la complejidad de las organizaciones en medio de su entorno (debe conocer la realidad de la universidad, su entorno local, los sucesos que puedan afectarla a nivel global, y la manera como se adaptan a las nuevas realidades); b) debe ser capaz de comprender cómo actúan las organizaciones en medio de su complejidad, en torno a lo que genera conocimiento, y la articulación del mismo a través de la comunicación y del adecuado manejo de la información; c) debe analizar el dominio de la complejidad de las organizaciones: la implementación de las nuevas maneras y formas de operar y de adaptarse al cambio, el manejo de problemas y la confiabilidad que dichos ajustes proveen a la organización.

*El criterio fundamental de la auditoría:* La razón fundamental de la organización es el cliente y su satisfacción. Sin clientes no hay organizaciones, razón por cual la auditoría debe fijarse especialmente en el siguiente criterio: cómo logra la universidad garantizar la satisfacción de los clientes y cómo se aplica desde allí su sostenibilidad. Es importante resaltar –para todos los efectos prácticos–, que los clientes de la universidad en la aplicación del presente modelo son los profesores. Los objetivos de la institución deben ser evaluados en el corto plazo; la implementación del nuevo conocimiento debe ser ágil, dinámica y eficaz, y el auditor debe generar una reflexión en torno a la manera en que se desarrolla este proceso. Su función no se basa en evaluar la manera en que se planifican los resultados, pues no se trata de valorar cifras cuantificadas de cumplimiento, sino de analizar la adaptación y la sostenibilidad, verificando el cumplimiento de los requisitos legales.

*Cómo se hace la auditoría:* A partir del nuevo enfoque mencionado, la auditoría se basa en la realización de un ejercicio práctico de reflexión sobre el nuevo conocimiento, las redes de manejo de información, la cohesión de todos los miembros de la organización y la adecuación de los recursos y de los esfuerzos realizados frente a la adaptación. Para el desarrollo de esta nueva auditoría no se establecerán tiempos fijos, pues se contará con el mínimo requerido dependiendo de las necesidades de la universidad. Adicionalmente, no se adelantará el ejercicio de auditoría con fines de certificación o atestiguamiento por parte de terceros, independientes o no. El auditor planteará una conversación abierta, sin restricciones o condicionamientos entre los

miembros/sujetos de la comunidad, en la cual se reflexionará sin categorizar importancias o predefinir orden en los temas.

La conversación girará en torno a a) manejo de la incertidumbre, de las variaciones internas y de la multiplicidad de ideas y conocimientos y sobre la manera de la organización para adaptarse a estas variables; b) el mantenimiento de la satisfacción de sus clientes y sobre las maneras de la organización para tratar la evolución de sus necesidades. Esta abstracción deberá concluir en un ejercicio de autoanálisis organizacional que propenda por nuevas y mejores formas de evolución para hacer las cosas; c) el análisis del auditor deberá estar centrado en la consideración de las redes de conectividad para el flujo de la información y sobre la participación de cada uno de los miembros del colectivo; d) lo que sucede en el entorno sobre los cambios reales y de tendencia que muestra el mercado local y global (como conclusión se deberán lograr propuestas de mejoramiento frente a la adaptación que requiere la empresa para no sucumbir ante el cambio); e) se pensará reflexivamente sobre la frecuencia de los cambios y el efecto de los mismos al interior de la universidad; f) se contará con la participación de otras partes interesadas: comunidad, clientes y proveedores (cuando sea requerido, también los representantes de los entes de vigilancia y de control, con el ánimo de comunicar los cambios que se presentan en las necesidades colectivas de la universidad.

Conclusión de la auditoría. En términos generales, el nuevo enfoque desde el cual se consolida la auditoría debe ser capaz de a) proponer aproximaciones interdisciplinarias al interior de la universidad, mejorando las redes de información que buscan incorporar la integración de todos los miembros de la comunidad organizacional, las actividades y los conocimientos tanto de la comunidad receptora, como de la comunidad productora; b) analizar la organización como un elemento constitutivo de un sistema complejo, promoviendo su integración con la comunidad y con la sociedad, con base en su sostenibilidad dentro del mercado; c) promover el mejoramiento real de la organización y su capacidad para administrar los problemas, constituyéndose como un agente dinamizador en las decisiones de cambio y adaptabilidad, de frente a las nuevas tendencias de la sociedad; y d) promover la cultura de la innovación para lograr la adaptación al medio y a sus necesidades en permanente evolución.

*Directriz ocho:* El conjunto de actividades requerido para la autoevaluación y la auditoría interna debe ser capaz de reconocer que las actividades propias de la universidad constituyen un sistema adaptativo complejo, compuesto por redes de comunicación para el mejoramiento. La retroalimentación surge como agente que garantiza la conectividad y la capacidad de generar circuitos de manejo de información, comunicación y conexión entre profesores, clientes, proveedores, competidores y el entorno social.

*Subcontratación:* Cuando la universidad decida subcontratar algún trabajo relacionado con la evaluación del desarrollo y desempeño de sus docentes, se debe establecer un acuerdo formalmente documentado que incluya los temas pactados y la confidencialidad necesaria. Además, debe prevenir la aparición de conflictos de intereses. Debe así mismo existir un procedimiento documentado que le permita a la universidad asegurar la efectividad de las compras y la subcontratación, garantizando el adecuado control de las actividades subcontratadas y la adecuación de los productos comprados que son requeridos para la gestión del sistema. Debe así mismo evaluar permanentemente el desempeño de los proveedores de productos y servicios, tomando las acciones necesarias para garantizar su continuidad como proveedores.

*Procedimientos e instructivos:* La universidad debe establecer los procesos propios para desarrollar las actividades que conduzcan a garantizar el desarrollo y la evaluación de los

profesores. En este contexto, deben existir como mínimo: 1. Un manual de calidad en el que la empresa represente las políticas, objetivos, procesos y compromisos con la calidad que adquiere para llevar a cabo de manera sistemática los procesos relacionados con el desarrollo y evaluación docente; y 2. La identificación de los procesos propios del sistema, en donde se incluyan los indicadores de implementación y verificación de a) el proceso de liderazgo de la Rectoría; b) El proceso de desarrollo de los profesores; c) Modelo de desarrollo profesional, incluyendo la promoción y compensaciones, categorías de profesores, evaluación de la enseñanza y productos e indicadores según dimensión de desempeño; c) procedimientos y registros requeridos; d) métodos para la evaluación de la efectividad, indicadores de gestión, metas y frecuencias de medición; e) mejoramiento continuo, acción correctiva/preventiva; d) revisión por la Rectoría y auditorías Internas; y e) definición de perfiles de competencia de las personas que operan el sistema de gestión basados en educación, formación y experiencia.

## CONCLUSIONES

El modelo que se ha propuesto tiene repercusiones positivas en los estándares de calidad de la Universidad Católica de Colombia, ya que los diversos factores y procesos que hacen parte de la vinculación y de la labor docente se encuentran controlados por un sistema, a través de mecanismos de retroalimentación que fomentan la integración y la participación de la comunidad académica, con la intención de superar las dificultades, los obstáculos y los problemas encontradas. En efecto, el modelo de gestión de calidad, a partir del continuo seguimiento y la evaluación en torno a las actividades desarrolladas por la institución, permite referenciar a tiempo los problemas y las equivocaciones, para así solucionarlas y lograr el mejor desempeño posible, cumpliendo en los plazos establecidos los objetivos que fueron trazados. Otro de los aspectos relevantes del modelo de gestión de calidad que se ha propuesto, es garantizar la objetividad e imparcialidad de los resultados, evitando que los procesos se encuentren sesgados por intereses personales, de manera que se promueva la transparencia en la gestión basada en la ética y en los valores. De esta forma, a partir del modelo es posible lograr una mayor calidad en cada docente, lo cual se verá reflejado en un crecimiento en la calidad académica de la institución en general. Además, a través de dicha integración se promueve la aplicación de estrategias y soluciones conjuntas para solucionar los problemas y desarrollar acciones que tiendan a mejorar la situación académica y formativa de la universidad.

Como se ha establecido en el desarrollo del presente estudio, el modelo de gestión de calidad que se ha proyectado para la Universidad Católica de Colombia está diseñado para mejorar el rendimiento y el desarrollo de la institución en dos sentidos. En primer lugar, frente a los retos que impone el Estado para la certificación y acreditación académica de la institución y sus planes curriculares, por lo que resulta imprescindible evaluar el desempeño docente y la capacidad de aprendizaje de los estudiantes durante su paso por la universidad. En segundo lugar, para satisfacer las exigencias de una sociedad sujeta a continuas transformaciones, que cada vez demanda más la necesidad de profesionales preparados para asumir no solo los retos concernientes a sus carreras y a su desempeño laboral, sino también a la construcción de una sociedad mejor para todos, más justa y equitativa.

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## IMPACTO SOCIOECONOMICO DE LOS NEGOCIOS INTERNACIONALES

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### RESUMEN

*El trabajo plantea conocer las acciones utilizadas por las empresas ubicadas en la ciudad de Mexicali, México que operan en mercados internacionales mediante actividades de exportación, importación, operación en mercados o plazas de geografía internacional. Permitiendo fortalecer el programa de estudio de Lic. En Negocios Internacionales de la Universidad Autónoma de Baja California primero atendiendo a la necesidad permanente de evaluar el programa de estudio, haciéndolo cada vez más pertinente a las necesidades del mercado de trabajo, sea este de carácter local, regional, nacional o internacional, garantizándole al mercado laboral un recurso humano altamente calificado que pueda coadyuvar de manera interdisciplinaria a resolver los retos que cada vez con mayor incertidumbre se vienen planteando a las empresas y gobiernos con economías abiertas. El reto es complejo ya que actualmente ha tomado un impulso muy notorio la necesidad de que las empresas e instituciones se constituyan en organismos Socialmente Responsables por lo que deben de dar respuesta rápida y oportuna para detener el deterioro de los ecosistemas de las plazas donde llevan a cabo sus actividades, así como ser más empáticos e impulsores de soluciones de las necesidades de la población, sean de seguridad, salud, educación, recreación y cultura. La presente investigación está en proceso.*

## THE SOCIO-ECONOMIC IMPACT OF INTERNATIONAL BUSINESS

### ABSTRACT

*This work aimed at ascertaining the actions used by companies located in the city of Mexicali, Mexico operating in international markets through export activities, import, market operation and international geography spaces. Allowing strengthen the curriculum of Bachelor in International Business from the University of Baja California first response to the continuing need to evaluate the program of study, making it increasingly relevant to labor market needs, be it at the local regional, national or international labor market guaranteeing highly qualified human resource that can assist in an interdisciplinary way to solve the challenges increasingly been raising uncertainty for companies and governments with open economies. The challenge is complex because it has now taken a very noticeable boost the need for companies and institutions are formed in Socially Responsible bodies so must give prompt and timely response to stop the deterioration of the ecosystems of the places where they carry operate, and how to be more empathetic and drivers of solutions to the needs of the population, are security, health, education, recreation and culture. The present investigation is ongoing*

**PALABRAS CLAVE:** Globalización del Conocimiento, Procesos Productivos, Relaciones Sociales, Mercados Laborales, Estudio de Empleadores.

**KEY WORDS:** Globalization of Knowledge, Production Processes, Social Relations, Labor Markets, Employers Study

## INTRODUCCION

El trabajo plantea conocer las acciones utilizadas por las empresas ubicadas en la ciudad de Mexicali, México que operan en mercados internacionales mediante actividades de exportación, importación, operación en mercados o plazas de geografía internacional. Permitiendo fortalecer el programa de estudio de Lic. En Negocios Internacionales de la Universidad Autónoma de Baja California primero atendiendo a la necesidad permanente de evaluar el programa de estudio, haciéndolo cada vez más pertinente a las necesidades del mercado de trabajo, sea este de carácter local, regional, nacional o internacional, garantizándole al mercado laboral un recurso humano altamente calificado que pueda coadyuvar de manera interdisciplinaria a resolver los retos que cada vez con mayor incertidumbre se vienen planteando a las empresas y gobiernos con economías abiertas. El reto es complejo ya que actualmente ha tomado un impulso muy notorio la necesidad de que las empresas e instituciones se constituyan en organismos Socialmente Responsables por lo que deben de dar respuesta rápida y oportuna para detener el deterioro de los ecosistemas de las plazas donde llevan a cabo sus actividades, así cómo ser más empáticos e impulsores de soluciones de las necesidades de la población, sean de seguridad, salud, educación, recreación y cultura.

La globalización, de los procesos productivos y de las relaciones humanas en todas sus manifestaciones que van desde lo económico, cultural, político y artístico entre otras formas en que se manifiestan las relaciones sociales del ser humano en la actualidad han generado una sociedad del conocimiento y de la información, y de cambios científico-tecnológicos acelerados que han modificado sustancialmente la vida del hombre y por supuesto el ámbito laboral y académico. Estas dos últimos conceptos son el motivo del presente trabajo. En estos tiempos la creación de riqueza depende de la aplicación en el trabajo de un conocimiento de alta especialidad, por lo que las instituciones de educación tienen el reto de modificar su vida académica, es decir sus estructuras y procesos de tal manera que atiendan de manera eficiente las necesidades que se derivan de ese nuevo ordenamiento de la producción laboral y de las relaciones entre los pueblos del mundo. Lo anterior plantea la necesidad de nuevas políticas públicas para que las IES y los egresados puedan responder de manera dialéctica a lo que el mundo productivo, tecnológico y científico está demandando. El presente trabajo es de orden exploratorio y aproximativo al interior de las empresas que contratan licenciados en Negocios Internacionales egresados de la Facultad de Ciencias Administrativas de la Universidad Autónoma de Baja California. El carácter exploratorio y aproximativo se debe al objetivo de la investigación ya que por recomendaciones de CACECA que es el Consejo de Acreditación en la Enseñanza de la Contaduría y Administración hemos pretendido apartarnos de los tradicionales estudios de egresados y de empleadores para abocarnos si al estudio de estos pero ahora adentrándonos un poco más a lo que sucede al interior de las empresas al momento de tomar las decisiones que repercutirán en la economía de la misma.

La presente investigación está en proceso. La educación mexicana se enfrenta a una demanda creciente de egresados altamente especializados que satisfagan los requerimientos que hacen tanto el sector productivo como la sociedad. La información sobre estas demandas pretendemos conocerlas a través de lo que se denomina estudio de egresados y estudio de empleadores, ya que

son estos últimos los que pueden generar la información pertinente que permita retroalimentar a las IES en lo referente al planteamiento y contenido de los planes de estudio de las carreras que imparten, aunque en el caso que nos ocupa solamente se hace el estudio para los egresados y empleadores de Lic. En Negocios Internacionales.

A través de la opinión de los egresados y empleadores es posible detectar las necesidades en cuanto a conocimientos, habilidades, actitudes y valores que ellos requieren de los egresados pero más aún se puede conocer el grado de aplicabilidad de los conocimientos adquiridos en el aula y el impacto económico y productivo que estos tienen para la empresa, siendo esto último el eje toral de la presente investigación y no precisamente como lo plantea el título de la presente ponencia, en realidad no se pretende conocer lo ya conocido y que es el impacto o nivel de importancia que tienen los negocios internacionales y en específico las empresas multinacionales en la actividad económica internacional está ampliamente documentado en lo referente al volumen de producción, ventas, utilidades, empleo y otros efectos colaterales que traen consigo sus operaciones, pero valga decir que si se hace mención de lo anterior en la presente investigación. Por lo anterior queda establecido que se toma al mercado de trabajo como fuente primaria de información. La presente investigación que se realiza en la Facultad de Ciencias Administrativas de la Universidad Autónoma de Baja California también pretende dar respuesta a variables que los diversos organismos acreditadores de las IES como son el Consejo para la Acreditación de la Educación Superior (COPAES) y en especial de CACECA mencionado anteriormente han planteado para la carrera de Lic. En negocios Internacionales.

#### Justificación

Los cambios económicos, sociales, científicos, tecnológicos plantean a la exigencia de formar al egresado en un ámbito que le permita adquirir nuevas competencias, conocimientos, habilidades y actitudes, más amplias y globales, para integrarse y mantenerse en los actuales y futuros mercados laborales. Por lo anterior se reconoce la necesidad de realizar una investigación sobre la opinión que los empleadores tienen acerca de sus colaboradores formados académicamente en la Facultad de Ciencias Administrativas de la UABC y espera que los resultados de la investigación contribuyan a dar respuestas a algunas de las interrogantes institucionales, como son: ¿Hacia dónde se dirige la construcción del conocimiento de las carreras objeto de este estudio?, ¿Cuáles son las tendencias y perspectivas futuras de las carreras que se ofertan en la FCA, desde el punto de vista del mercado laboral? y ¿Cómo construir e incorporar un currículo pertinente a las carreras de la FCA? .

Con la dinámica tan cambiante de la sociedad, se obliga a las Instituciones de Educación Superior (IES) a estar en permanente observancia y alerta de la pertinencia en la calidad de la educación que imparten, así como de las carreras que ofertan para no verse desfasadas por los nuevos requerimientos de los sectores productivos y sociales, de su región, de su país y del ámbito externo el cual cada vez juega un papel más importante en la construcción de las diferentes políticas públicas de las naciones. Es por ello que estudios como el que nos ocupa deben constituirse en programas de investigación institucionales por parte de las IES, así como ya lo es de la UABC y de la FCA. Este tipo de estudios se constituyen arrojan información para la mejora y actualización permanente de los planes y programas de estudio, para la definición de políticas de desarrollo institucional en los niveles estatal, regional y nacional, para la ampliación de la oferta educativa, para conocer el desempeño de sus egresados y tener así una vía de aproximación a la realidad de los campos profesionales, para realizar ejercicios de reflexión y autoevaluación con la finalidad de redefinir el rumbo y visión institucional y, finalmente, lograr con esto una mayor vinculación y pertinencia social.

### Objetivo Principal

El objetivo principal es evaluar la correlación del perfil profesional del egresado de la carrera de Negocios Internacionales de la FCA de acuerdo a su opinión y a la opinión de los empleadores respecto a variables como las funciones, actividades y tareas que el ejercicio profesional les exige a los LNI de la FCA, así como también las habilidades y actitudes que poseen. Objetivos Particulares:

1. Caracterizar las competencias profesionales del egresado de la FCA en función de la opinión de los empleadores;
2. Medir la satisfacción de los empleadores respecto al cumplimiento del desempeño profesional del egresado de la FCA;
3. Determinar la pertinencia del currículo con las necesidades de los empleadores e;
4. Conocer las materias de mayor aplicabilidad en el campo laboral según los egresados.
5. Conocer el grado de participación en la resolución de problemas y de la planeación que realiza la empresa para llevar a cabo sus planes de negocio, y
6. Conocer el grado de satisfacción laboral del egresado de LNI de la FCA.

Los objetivos específicos del estudio son:

1. Apoyar el diseño y revisión de planes y programas de estudio de la carrera de LNI
2. Conocer el desempeño profesional del egresado
3. Consolidar una diferente línea de investigación de egresados y empleadores.
4. Conocer las exigencias formativas que el empleador exige del egresado de LNI de la FCA.
5. Conocer la opinión de los empleadores sobre los criterios y valoraciones que utilizan en el proceso de selección y contratación de los egresados de LNI.

### **METODOLOGÍA**

Dado que la investigación es de carácter exploratorio y de aproximación para en estudios posteriores adentrarnos en la operatividad misma de las empresas, por esta ocasión no se plantean hipótesis y tan solo se circunscribe a un estudio descriptivo

Se entrevistarán a 50 empleadores de empresas de Mexicali que sus empresas realizan negocios internacionales, los cuales serán seleccionados aleatoriamente partir de los directorios empresariales de la ciudad de Mexicali.

Directorio de CANACINTRA, y  
Directorio de la Industria de la Maquiladora.

Por lo que respecta al estudio de egresados de LNI se aplicó un muestreo probabilístico a 734 egresados que tiene la carrera hasta el año 2013-1. La aplicación de los instrumentos será vía electrónica y en caso de tener poca respuesta entonces se procederá a aplicar la encuesta en los propios lugares de trabajo.

En el caso de los egresados de LNI se utilizó la fórmula para muestreo de William G. Cochran con los siguientes valores:

$$Z = 90 \%$$

$$P = 5 \%$$

$$Q = 5 \%$$

$E = 5 \%$

Los anteriores valores una vez aplicado el factor de corrección finito arrojo una muestra de 198 egresados a encuestar.

## MÉTODOS Y TÉCNICAS

La metodología empleada en el presente estudio incluyó el cuestionario “Opinión de Empleadores” el cuál fue diseñado por la ANUIES y la UABC, lo único que se hizo fue ajustarlo a las necesidades de la FCA. El cuestionario a Empleadores consta de 25 preguntas en su mayoría de opción múltiple.

Los apartados que contiene esta encuesta son: Datos Generales de la Empresa; Opinión sobre el Egresado de LNI y Datos laborales de la Empresa. El cuestionario de egresados contiene 29 preguntas en su mayoría de opción múltiple. Los apartados que contiene el cuestionario son: Datos Generales de la Empresa; Funciones Laborales del Egresado; desempeño Laboral de la Empresa y Datos Generales del Egresado. Pasos a seguir en la presente investigación:

2.1 Integración del directorio de CANACINTRA Y EL DE MAQUILADORAS

2.2 Identificación de la población de Egresados de LNI.

2.3 Diseño de los cuestionarios.

2.4 Elaboración de la muestra para egresados.

2.5 Aplicación del cuestionario

2.6 Diseño de sistema de base de datos (spss)

2.7 Captura de datos

2.8 Interpretación y presentación de resultados en gráficas.

### Discusion: Actividades de las Multinacionales

Buena parte del mundo marcha al ritmo que imponen las empresas que realizan negocios internacionales y como ya se mencionó esto tiene que ver con ámbitos productivos, tecnológicos, científicos, culturales etc. Así pues, la sociedad tiene nuevas demandas y oportunidades de ampliar su horizonte mejorando su calidad de vida o de estancarse viendo como su esperanza de vida se ve acotada por falta de acceso a bienes y servicios necesarios para ampliar su visión de la vida. La aseveración anterior se debe al papel que desempeñan las multinacionales y como trastocan la vida social del mundo y de los países donde realizan sus negocios. Según Rafael Ortiz “Los negocios internacionales son el estudio de las transacciones que tienen lugar en el extranjero para satisfacer las necesidades de los individuos y organizaciones. Estas actividades económicas son operaciones comerciales, como en el caso de exportar o importar bienes, la inversión directa de fondos en compañías internacionales. [Además en los negocios internacionales] cerca del 80% de la inversión directa la realizan las 500 empresas más grandes del mundo, representan más de la mitad del comercio internacional...

Estas organizaciones representan la mayor parte de la inversión y el comercio a escala mundial.” P1 (Ortiz; octubre 2001) Aunque el dato es de hace 12 años en la actualidad con mayor razón los negocios que realizan las multinacionales afectan toda esfera de la vida humana pasando desde los patrones de consumo que nos imponen a través de la publicidad, hasta la aspiración educacional que deseamos para nuestros hijos y para nuestro país. Por eso la necesidad de que las IES se adentren en la planeación estratégica haciendo cada vez más pertinente el modelo educativo, el ejemplo nos lo dan las propias empresas para ellas “el tema de la dirección estratégica - acciones gerenciales que incluyen formulación, instrumentación, evaluación y

control de estrategias- abarca una amplia gama de actividades, entre ellas el análisis ambiental de las condiciones internas y externas y la evaluación de las fuerzas y debilidades de la organización. (Ortiz; 2001; P4) De igual manera las políticas públicas y las IES deben tener en presente que el fin último de su política es la de mejorar la vida económica, política y social de la población a través de una educación de calidad y estímulo empresarial y acorde a las necesidades de los diferentes sectores. Es decir, debemos estar a la par de los países emergentes como China , India Vietnam entre otros que aprovechan sus ventajas comparativas como es el valor de su mano de obra cada vez más calificada lo cual les está permitiendo tener crecientes participaciones de mercado en la producción de ensamblajes, industria liviana y otras industrias intensivas en mano de obra. Para darnos una idea del tipo de recurso humano que deben estar formando las IES y en particular las carreras de LNI veamos lo que dice María del Refugio Mendoza Quiñonez en su trabajo “Los Factores del Medio Ambiente Global y su influencia en el Comercio Internacional” Ella menciona que las empresas participan en el comercio internacional con la finalidad de:

- Expandir las ventas: interés, disposición y capacidad adquisitiva del consumidor.
- Adquirir recursos: Capital, tecnología, e información.
- Minimizar el riesgo: Búsqueda de mercados extranjeros para sortear los ciclos económicos.
- (Mendoza Quiñonez: P1)

La misma autora dice que las empresas multinacionales toman en cuenta “las medidas del impacto social [las cuales] pueden incluir las políticas de gestión laboral de la empresa y el enfoque de la igualdad de oportunidades y los derechos humanos, así como el impacto directo que sus actividades tienen en la comunidad local.” (Mendoza Quinonez;P2) [y continua mencionando que] “los gerentes pueden usar 5 estrategias políticas básicas para afrontar la turbulencia en sus ambientes de negociación, cabildeo , alianza representación y socialización. (Mendoza Quiñonez;P7) México esta consiente de los retos que plantea el nuevo modelo económico de economía abierta y en donde las grandes empresas impulsan los cambios que a ellas les parecen pertinentes es por eso que desde el primero de Enero de 1989 entro en vigor el acuerdo comercial entre México, Estados Unidos de Norteamérica y el Canadá con la finalidad de intercambiar bienes y servicios aprovechando sus ventajas comparativas y donde una de las principales variables seria la eliminación progresiva de los aranceles al comercio. De entonces a la fecha “México ha trabajado arduamente por fortalecer sus relaciones comerciales con otros países.

Esto se ve reflejado en los once tratados de libre comercio firmados con 32 países, superando incluso a países como Estados Unidos y Brasil, convirtiéndose en un país de gran apertura comercial. México sabia de la enorme importancia que tenía el integrarse al TLCAN para poder convertirse en un país emergente y esto se lograría por medio de la exportación de productos, especialmente a un país que poseía un gran potencial de mercado para las empresas mexicanas.” (Herrera y otros; 2012; p8) Cuales han sido algunos de los resultados a 10 años de haber entrado en vigor el TLCAN según el estudio de Herrera y otros, ellos mencionan entre otras cosas que “la teoría plantea que la inversión extranjera ayuda, a los países receptores, al fomento del desarrollo económico, por medio del empleo y el comercio exterior, además de la difusión de nueva tecnología que ayuda a incrementar la productividad. Sin lugar a dudas, la inversión extranjera ha crecido de manera fulminante en los tres países. En nuestro país, dicha inversión, al igual que el comercio internacional, se ha incrementado exponencialmente. En 1994, se invirtió en el país, un total de 10,972 millones de dólares, después de 10 años de la implementación del tratado, entró al país inversión de origen estadounidense y canadiense con un promedio anual de 9 mil millones de dólares. En años más recientes, la inversión extranjera sigue en aumento, el año

con mayor penetración internacional fue el 2007 con un total de 31,313.40 millones de dólares, y el año con menos inversión se registró en el 2009 con solo 15,959.00 mdd. (Herrera y otros;2012;p9).

Pero también mencionan que “las empresas locales se han visto afectas debido a la competencia que surge a raíz de la IED, y esto se debe a que gran porcentaje del flujo de inversión proveniente del extranjero se concentra en las grandes empresas internacionales instaladas en el país, que se dedican principalmente a la exportación de bienes, esto conlleva a que el capital insertado no cause el impacto esperado en la económica nacional. Se tenía la idea que con la gran actividad provocada con la IED en el país, se obtendría un impacto positivo en la productividad interna y por consecuencia, en la generación de empleos. No obstante, esta inversión se ha basado principalmente en la compra de activos financieros, y no en la instalación de nuevas empresas como se esperaba. P9 Con la apertura comercial en América del norte solo se maximizaron las ganancias para Estados Unidos y las empresas trasnacionales (ETN) y no se favoreció el desarrollo nacional, ya que cerca de dos tercios de las exportaciones mexicanas son de empresas trasnacionales. (Herrera y otros;2012;P10).

Lo anterior explica como algunos de los estudios mar recientes en materia de empleo mencionan que para el caso de México las empresas multinacionales con una gran actividad de importación solo generan 20 empleos por cada millón de dólares que obtienen por concepto de ventas, es decir cada empleado les representa \$ 50,000 dólares de venta anuales a la empresa multinacional. (Félix Heriberto; La Jornada 2009; p:28) En otro orden de ideas el manejo actual que llevan a cabo las multinacionales dentro de sus actividades de producción, administración, ventas, mercadotecnia, logística, cabildeos, análisis de ambientes tanto internos como externos etc. Obligan a repensar tanto los conocimientos como habilidades, actitudes y aptitudes que deben de tener cada elemento (recurso humano) que labora en ese tipo de empresas y aun en la de menor tamaño las Mipymes aunque realicen o no actividades de negocios internacionales ya que algo incontrovertible es que ambos grupos de empresas se enfrentan a una fuerte competencia dentro de sus mercados y que para poder sobrevivir y crecer es fundamental un recurso humano altamente capacitado y adaptable a cualquier tipo de cambio que exija el mercado o exijan los ambientes superestructurales como lo son cambios en la leyes laborales o no, en la política en la cultura en los ecosistemas etc. Por lo anterior el egresado de la carrera de LNI debe ser formado además de una visión integral u holística en los ambientes de negocios, con las habilidades y aptitudes que le permita ir reaprendiendo los conocimientos, técnicas y métodos requeridos en cada fase del desarrollo de las fuerzas productivas emanadas del mercado de trabajo, para de esta manera resolver las situaciones rutinarias y las contingenciales a las que se enfrenta la empresa en su esfuerzo por crecer y mantenerse en el mercado. Por ello es necesario que tanto IES, Empresas y Estado encuentren los equilibrios entre lo humano deseable y lo empresarialmente rentable.

Una de las maneras para que se logre lo anterior es necesario que fluyan expeditamente en calidad y cantidad convenios de colaboración entre empresas e IES que permitan la transferencia de conocimientos de última generación tanto en los procesos administrativos de planeación y toma de decisiones, así como de transferencia tecnológica y en casos pertinentes financiera. La empresa no puede quedarse en su papel primigenio de expoliadora de capital constante, variable y de capital físico (recursos naturales), debe asumir como ya lo han venido haciendo un buen número de empresas una conducta Socialmente Responsable primeramente con el país y comunidad en la que se encuentra enclavada realizando sus actividades de producción y de comercialización de sus productos y servicios y en segundo lugar asumir su corresponsabilidad social ante el entorno global. Mientras tanto las IES y el Estado Mexicano deben de orientar su

voluntad al cambio respecto a políticas tanto presupuestales como a la implementación de estructuras evaluativas que garanticen equidad y justicia en pro de la calidad formativa.

## CONCLUSION

Como se dijo, el presente estudio no trata específicamente del impacto económico y social de las empresas que realizan negocios internacionales aunque bien es cierto que se hace uso de algunos datos cuantitativos y cualitativos sobre esta temática. Lo principal que va a destacar esta investigación es la aportación que a partir de su formación realiza el egresado de LNI al ámbito económico y de toma de decisiones de la empresa, así como, el nivel de aptitud de parte de la empresa en lo que se refiere a su participación para resolver asuntos sociales y/o ambientales de la comunidad en que se ubica y de la visión que tiene la empresa sobre su recurso humano de LNI. En el presente estudio subyacen conceptos muy relevantes para caracterizar la simbiosis educación-empresa, conceptos tales como ética y los negocios donde la primera es primordial y sustantiva para la segunda. Otros conceptos son pensamiento y actitud responsable tanto de los sistemas educativos, egresados y empresas como una fórmula importante para que la sociedad obtenga los beneficios que busca cada uno de sus integrantes; la empresa rentabilidad financiera y reconocimiento ante la sociedad, el recurso humano una mejor calidad de vida que le permita ser cada vez más feliz en su entorno.

Dentro del concepto de responsabilidad se encuentra el de empresa de responsabilidad social la cual genera innovación y conlleva una buena imagen de la empresa. La educación debe contribuir de manera significativa a generar tolerancia, igualdad, justicia, democracia, inclusión social, responsabilidad ambiental y respuestas acertadas al cambio. Es evidente que el logro de lo anterior no es tarea de unos cuantos grupos de la sociedad sino de la mayoría de los grupos que la conforman y la definen, en lo que concierne a este asunto hoy solo tratamos acercarnos de primera instancia a lo que se puede hacer a través de la formación de los LNI y de las empresas en que ellos laboran.

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# COMPETITIVIDAD Y SUPPLY CHAIN MANAGEMENT EN LA INDUSTRIA EXPORTADORA DE AGUACATES EN MÉXICO

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## RESUMEN

*La presente investigación tiene la finalidad de mostrar como se encuentra el Supply Chain Management (SCM) en las empresas exportadoras de la industria aguacatera ubicadas en el Estado de Michoacán, México y de que manera incide en la Competitividad del sector de tal manera que permita a dichas empresas lograr transformarse en empresas competitivas en el mercado de los Estados Unidos. El objeto de esta investigación se basa en las empresas dedicadas a la exportación de aguacates ubicadas en el estado de Michoacán especialmente al mercado de los Estados Unidos, se aplico un cuestionario de 137 preguntas en donde se analizan factores como la administración de las relaciones con los clientes y proveedores, la administración del retorno y aspectos como la administración de la demanda, el cumplimiento de los pedidos, la administración del flujo de fabricación, la administración de inventarios, la comercialización, y administración del transporte. Los resultados obtenidos dan cuenta de la situación que guardan las empresas exportadoras de aguacates ubicadas en el estado de Michoacán, ubicándose éstas en la escala tipo Likert en un rango de Regular Competitividad en la Administración de la Cadena de Suministro con 446.0 unidades, lo que representa que las empresas analizadas en su conjunto solamente alcanzaron el 69 por ciento de los niveles de competitividad esperados.*

**PALABRAS CLAVE:** Competitividad, Administración de la Cadena de Suministro, Industria Exportadora

# COMPETITIVENESS AND SUPPLY CHAIN MANAGEMENT EXPORT INDUSTRY AGUACATES IN MEXICO

## ABSTRACT

*This research aims to show how to find the Supply Chain Management (SCM) in the exporting companies avocado industry located in the State of Michoacan, Mexico and how affect the competitiveness of the sector in a way that allows these companies achieve business become competitive in the U.S. market. The purpose of this research is based on companies engaged in export of avocados located in the state of Michoacan especially to the U.S. market, was applied a questionnaire of 137 questions which analyzes factors such as relationship management with customers and suppliers, and return management aspects such as demand management, compliance orders, manufacturing flow management, inventory management, merchandising, and transportation management. The results obtained show the situation that avocados exporting companies located in the state of Michoacan, placing them on the Likert scale in a range of Regular Competitiveness Management Supply Chain with 446.0 units, representing the companies analyzed as a whole reached only 69 percent of expected levels of competitiveness.*

**JEL:** M10; Q13: Q17

**KEYWORDS:** Competitiveness, Supply Chain Management, exporting industry

## INTRODUCCIÓN

Hoy en día las organizaciones centran su atención en mejorar los niveles de competitividad, en donde les permita superar o mantener su distancia en relación a sus competidores. Esto entendido en el marco de la globalización e inmersos en el duro clima económico, se hace evidente la necesidad de afrontar nuevos retos, donde los mercados en crecimiento son pocos y éstos están muy alejados unos de otros, aunado a esto cada día surgen nuevos competidores locales que hacen más difícil esta búsqueda; es por esto que los empresarios de México y el mundo necesitan más herramientas que permitan incrementar la competitividad en el sector en el que se encuentran. Una de estas herramientas que han tomado mayor énfasis en el ámbito empresarial, es la denominada Supply Chain Management (SCM), ya que como afirma Ballou (2004), está es una de las áreas que se ha observado que absorbe entre un 60 por ciento y un 80 por ciento de cada dólar que vende una empresa, es por ello que se convierte en parte esencial en la estrategia competitiva, en la generación de ingresos y por consecuencia trae mejoras en los niveles de competitividad a nivel empresarial. El SCM es un asunto de interés y de importancia entre los gerentes e investigadores ya que es considerada como fuente de ventaja competitiva (Christopher, 1998), (Giménez & Ventura, 2003) (Giménez, 2005) y además esta es una de las áreas del conocimiento que ha recibido una enorme atención en las revistas de investigación internacional.( Journal of Supply Chain Management, International Journal of Physical Distribution & Logistics Management, Journal Operations Management, International Journal of Logistics Management, Journal of Business Logistics, International Journal of Operations and Production management, Industrial Marketing Management, Management Science, Decision Sciences) así como en la industria y en empresas dedicadas a la consultoría (Christopher, 1998), (Lambert & Cooper, 2000), (Sandberg, 2006).

La cadena de suministro ha tomado gran importancia en diferentes sectores e industrias tanto a nivel nacional como internacional, el estudio del SCM también se da en los productos agrícolas, y uno de ellos es el aguacate, el cual tiene una alta participación en los mercados internacionales, especialmente en los Estados Unidos, es por ello que se pretende investigar cómo se encuentra este sector. Según estimaciones de la Food and Agriculture Organization (FAO), la producción mundial de aguacate ha crecido fuertemente, para el año 2005 superó las 3 millones de toneladas. Y las principales regiones productoras son América Latina y el Caribe, no obstante, en los últimos años se ha acelerado la producción en Asia, principalmente en Singapur y China (INFOCIR, 2006). México es el principal productor, exportador y consumidor de aguacate en el mundo, con una producción de más de un millón de toneladas al año, produce el 42 por ciento del aguacate que se cultiva a nivel mundial (Agropecuaria, 2008). Las exportaciones de aguacate para los años de 2006, 2007, 2008, 2009, 2010 fueron las siguientes 208,346; 310,260; 326,670; 398,153; 277,442; 369,297 toneladas respectivamente. Se observa un crecimiento constante en la exportación, del cual para el año 2010 el 77.8% fue enviado a los Estados Unidos, el 6.8% a Japón, 5.6% Canadá y el resto se reparte en otros países (IQOM, 2007). Los principales estados productores de aguacate en el país son: Michoacán, Morelos, Nayarit, Edo. de México y Jalisco, de los cuales el Estado de Michoacán es líder de producción y exportación de aguacate con una participación del 83.2 %, de la producción total de aguacate del país, los municipios que destacan son Uruapan que participa con un 18.5%, seguido por Tancítaro, Peribán, Tacambaro y Ario de

Rosales con un 16.7%; 13.6%;10.6%; 9.5% respectivamente (Martinez, Bonales, Pedraza, & Valenzo, 2011).

## REVISIÓN DE LA LITERATURA

La competitividad es usada frecuentemente por los gobiernos, empresas y los medios de comunicación como un concepto “vago”. Sin embargo, aún en los investigadores existe la ausencia de un consenso en cuanto al concepto de competitividad lo cual ha propiciado que los estudiosos hayan abordado dicho concepto desde distintas perspectivas teóricas (Valenzo, Martinez, & Bonales, 2010). Ambastha y Momaya (2004), definen la competitividad como la capacidad de competir. Es decir la capacidad de diseñar, producir, y ofrecer productos superiores en el mercado, a los ofrecidos por los competidores, considerando el precio. Por lo tanto una organización, es competitiva ante los ojos de sus clientes si ésta puede entregar un mejor valor comparado con el de sus competidores, logrando precios más bajos con beneficios equivalentes o superiores a las de sus competidores. El valor del cliente por lo tanto, se puede considerar como la ventaja percibida en lo referente a lo que este exige. En la revisión de diferentes perspectivas teóricas que estudian y conforman el supply chain management (Los estudios revisados fueron: (Newman, Hanna, Gattiker, & Huang, Spring 2009), (Simchi-Levy, Philip, & Simchi-Levy, 2008), (Elmuti, Minnis, & Abebe, 2008), (Long, 2007), (Bowersox, Closs, & Cooper, 2007), (Chopra & Meindl, 2007), (Hinrichs, Rittscher, & Lankmann, 2007) (Lejeune & Yakova, 2005), (Lambert, Garcia-Dastugue, & Croxton, 2005), (Ayers, 2004), (Hugos, 2003), (Giménez & Ventura, 2003), (Roberts, 2003) (Shah, Meyer-Goldstein, & Ward, 2002), (Tang & Tang, 2002), (Mojica Palacios, 2002), (Olhager, Persson, Parburg, & Rusen, 2002), (Frohlich & Westbrook, 2002), (Hill & Scudder, 2002), (Barratt & Oliveira, 2001), (Frohlich & Westbrook, 2001), (Brewer, Button, & Hensher, 2001), (Dewett & Jones, 2001), (Mentzer, y otros, 2001), (HKANA, 2000), (Simchi, Kaminsky, & Simchi-Levi, 2000), (Mentzer, Foggin, & Golicic, 2000), (Handfield & Nichols, 1999), (Carter & Ellram, 1998), (Lambert, Cooper, & Janus, 1998), (Christopher, 1998), (Cooper, Lambert, & Pagh, 1997), (Boyer, Leong, Ward, & Krajewski, 1997), (Das & Handfield, 1997), (Giunpero & Brand, 1996), (The Global Supply Chain Forum, 1996), (Towill, Naim, & Wikner, 1992), (Cavinato, 1992), (Novak & Simco, 1991), (Scott & Westbrook, 1991), (Christopher M. , 1982), (Forrester, 1961).), se realizó un análisis exploratorio y de frecuencia consistió en la realización de un cotejo de variables empleadas en los diversos estudios empíricos y las variables sugeridas a ser empleadas en los estudios teóricos se lograron identificar 95 variables de las cuales se lograron agrupar en las cuatro siguientes:

Administración de las relaciones con los proveedores (ARP)

Cadena de suministro interna(CSi) integrada por: Administración de la Demanda, cumplimiento de los pedidos, administración del flujo de fabricación, administración de inventarios, comercialización y finalmente administración del transporte.

Administración de las relaciones con sus clientes (ARC)

Administración del retorno (AR)

El análisis exploratorio y de frecuencia consistió en la realización de un cotejo de variables empleadas en los diversos estudios empíricos y las variables sugeridas a ser empleadas en los estudios teóricos, ver figura # 1.

El Council of Supply Chain Management Professionals (2008), define a la administración de la cadena de suministro como: “Cadena de suministro abarca la planeación y la administración de todas las actividades involucradas en la compra de componentes, la consecución, conversión, y todas las actividades de la administración de la logística. Es importante, también incluir la

coordinación y la colaboración con los socios del canal de distribución, los cuales pueden ser proveedores, intermediarios, o proveedores de servicios contratados externos, y los clientes. En esencia, la administración de la cadena de suministro integra la demanda y la provisión dentro y a través de las compañías”.

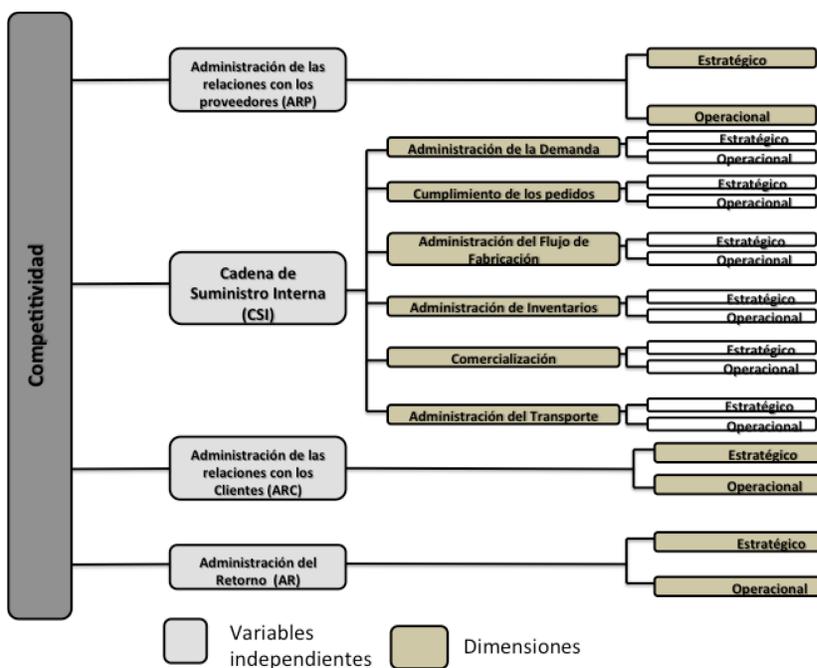
Administración de Relaciones Con los Proveedores (ARP)

Para Lambert, (2004), el proceso de ARP, provee la estructura de cómo las relaciones con los proveedores son desarrolladas y mantenidas. Como su nombre lo sugiere este proceso es un espejo de la administración de relaciones con nuestros proveedores. Y como es el caso para la ARP este envuelve un desarrollo cercano de las relaciones con un subconjunto pequeño de proveedores basados en el valor que estos proveedores dan a la empresa todo el tiempo. Las relaciones a largo plazo proveen un ganar- ganar para ambas partes. Para cada proveedor clave, la empresa deberá negociar y llegar a un acuerdo sobre el producto o servicio prestado y definir claramente los términos de la relación.

Cadena de Suministro interno (CSi)

Esta variable se forma de las siguientes dimensiones: administración de la demanda, el cumplimiento de los pedidos, la administración del flujo de fabricación, la administración de inventarios, la comercialización, y administración del transporte, todas estas dimensiones entendidas como el proceso interno bajo la cual se desarrolla las actividades de la cadena de suministro al interior de las empresas.

Figura 1: Determinación de Variables Que Inciden en la Competitividad en la Administración de la Cadena de Suministro



Fuente: Elaboración propia con base en la Investigación Teórica.

## METODOLOGÍA

Este artículo contiene un enfoque de investigación mixto, con un diseño descriptivo-relacional el cual incluye mediciones estadísticas que permiten mostrar diferentes perspectivas para la medición del fenómeno, es decir, como se encuentra el Supply Chain Management y su relación con la competitividad en la industria exportadora de los aguacates en el Estado de Michoacán con la finalidad de responder la pregunta de la investigación y a su vez, llevar a cabo la prueba de hipótesis. Para la conformación del modelo utilizado en la investigación, se obtuvo principalmente de las revisiones de la literatura, lo que permitió un mayor entendimiento teórico entre las variables propuestas. Se consideraron como variables independientes a la Administración de las Relaciones con los Proveedores (ARP), Cadena de Suministro interna(CSi), Administración de las Relaciones con sus Clientes (ARC) y la Administración del Retorno (AR) y su relación con la variables dependiente competitividad. Con los antecedentes de la problemática del sector exportador de aguacates y el marco teórico descrito, se propone en la presente investigación lo siguiente:

### Objetivo General

Identificar las variables que conforman el supply chain management y en qué medida éstas explican la competitividad en las empresas exportadoras de aguacates al mercado de los Estados Unidos.

### Hipótesis General

La administración de las Relaciones con los Proveedores (ARP), la Cadena de Suministro interna (CSi), la Administración de las Relaciones con los Clientes (ARC) y finalmente una Administración del Retorno (AR) son las principales variables que nos permiten determinar el nivel de Competitividad en la Administración de la Cadena de Suministro en las empresas exportadoras de aguacate en el estado de Michoacán.

### Cuestionario

De acuerdo con la técnica de escalamiento propuesta por Likert (Este método fue desarrollado por Rensis Likert en 1932 y publicó su documento denominado método de evaluaciones sumarias a pesar de que fue realizado a principios del siglo pasado es un enfoque vigente y bastante popularizado principalmente en los estudios de las ciencias sociales.) La cantidad total de empresas exportadoras de aguacates son 34, de las cuales 30 aceptaron participar en el estudio. Cabe indicar que se elaboraron preguntas accesibles e interesantes para el empresario. La entrevista se envió previamente por correo electrónico para que las empresas la conocieran, posteriormente se establecieron reuniones con las empresas in situ y se mantuvo el contacto de los entrevistados por si tenían dudas al respecto. A los ítems elaborados se les asignaron cinco posibles respuestas de las cuales sólo se podía escoger una. A cada respuesta se le asignó un valor numérico máximo de (5) si la respuesta representaba un fuerte impacto en la competitividad en la cadena de suministro y un valor numérico (1) si su impacto era mínimo o nulo. El cuestionario se integró de 137 preguntas con cinco alternativas para cada una en donde se exploraron cada una de las variables Administración de las Relaciones con los Proveedores, Cadena de Suministro Interna, Administración de las Relaciones con los Clientes y finalmente la Administración del Retorno.

### Medición de la Confiabilidad

El método utilizado, por las características de la investigación, fue el coeficiente Alfa de Cronbach que requiere sólo la administración del instrumento de medición a toda la población de empresas exportadoras de aguacates ubicadas en el Estado de Michoacán. Primeramente se muestran los resultados de la prueba de confiabilidad para cada variable como lo siguiere Rivas (2009), la recomendación es medir, siempre que sea posible, el Alfa por variable ya que esto permite conocer la consistencia del instrumento en general y la consistencia de cada variable en particular.

Tabla 1: Prueba de Confiabilidad Por Variable

No.	Variables independientes	Alfa de Cronbach
1	Administración de las relaciones de los proveedores (ARP)	0.905
2	Cadena de suministro interna (CSi)	0.933
3	Administración de las relaciones de los clientes (ARC)	0.867
4	Administración del retorno (AR)	0.866
No.	Variable Dependiente	Alfa de Cronbach
1	Administración de la cadena de suministro (SCM)	0.952

Fuente: Elaboración propia con base en los datos obtenidos del trabajo de campo

## RESULTADOS

El análisis de las respuestas obtenidas de la instrumentación de los cuestionarios aplicados a las empresas exportadoras de aguacates ubicadas en el estados de Michoacán, dan cuenta de la situación que guarda este sector en términos de la competitividad en la cadena de suministro. La competitividad en el SCM se mide considerando las variables en estudio, que incluyen las 137 preguntas del cuestionario y la totalidad de los entrevistados, resultando la mediana de 446 unidades que ubicadas en la escala muestran la opinión generalizada de que es regular competitividad en la administración de la cadena de suministro en las empresas exportadoras de aguacate.

Tabla 2: Rango de Escalas Para La Investigación de la Competitividad del SCM

Muy Baja Competitividad en el SCM	Baja Competitividad en el SCM	Regular Competitividad en el SCM	Alta Competitividad en el SCM	Muy Alta Competitividad en el SCM
137	246.6	356.2	465.8	575.4
685				
446.00				

Fuente: Elaboración propia con base en la Investigación de Campo

La tabla 2 se construye utilizando la puntuación máxima y mínima con la finalidad de obtener rangos de escalas iguales, el procedimiento para calcular el valor máximo es el siguiente; primero se toma en cuenta que (5) es el máximo valor a obtener en la escala tipo likert posteriormente es multiplicada por el número de ítems (137) el valor obtenido es de 685 y al mismo tiempo se obtiene el valor mínimo (1) de la escala likert que multiplicado por los 137 preguntas el valor que se obtiene es de 137, una vez calculados estos valores se procede a realizar un diferencia entre el valor máximo y el valor mínimo y posteriormente se divide entre los cinco rangos de la escala likert y se obtienen rangos iguales de 109.6 puntos cada uno, enseguida se hace una sumatoria del valor mínimo y el rango y de esta manera se van creando cada uno de los rangos que se pretenden medir.

Tabla 3: Índice de Competitividad Por Variable

Variables	Puntaje alcanzado	Puntaje Esperado	Índice de Competitividad SCM
Administración Relaciones con los Proveedores	2808	4200	66.85%
Cadena de Suministro interna	8160	11400	71.57%
Administración Relaciones con los Clientes	2321	3150	73.68%
Administración del Retorno	895	1800	49.72%
Total	14184	20550	69.02%

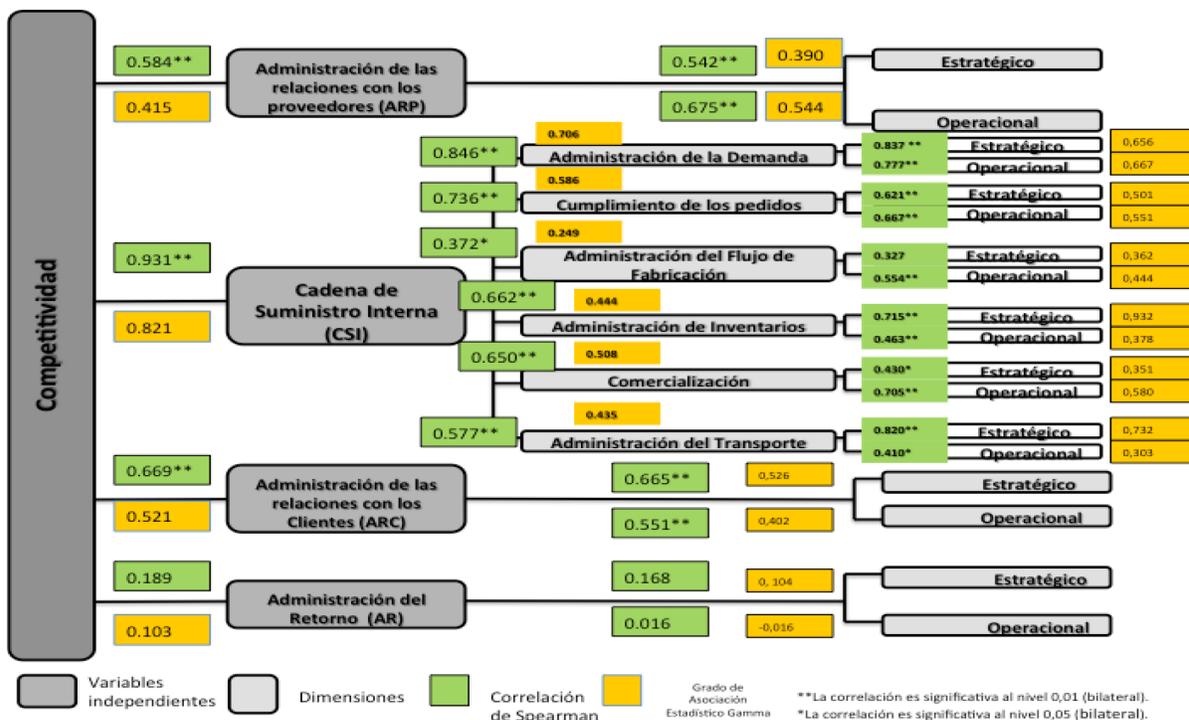
Fuente: Elaboración propia con base en el Trabajo de Campo.

La tabla 3, se contruye tomando en cuenta al número de empresas encuestadas (30), el número de ítems (137) y el valor máximo de la escala tipo likert que es de 5 puntos, de tal manera que el puntaje maximo a obtener es  $(30) (137) (5) = 20,550$ ; de lograrse esta máxima puntuación se podría afirmar que las empresas exportadoras de aguacates manejan adecuadamente su supply chain management e incide en la competitividad del sector exportador. Sin embargo, los resultados generaron un puntaje de 14,184 puntos, lo que equivale al 69% del resultado esperado. Los datos obtenidos en el trabajo de campo se procesaron utilizando los programas SPSS versión 20.0 para Windows, Microsoft Word, y Excel que permitieran probar el grado de asociación utilizando el estadístico gamma entre las variables independientes, dimensiones contrastado con la variable dependiente, además se obtuvo el coeficiente de correlación de Spearman y los resultados se aprecian en la figura siguiente:

La figura 2 muestra los resultados encontrados para cada una de las variables independientes encontradas en la revisión de la literatura que explican el Supply Chain Management integrados por: la Administración de las Relaciones con los Proveedores, cadena de suministro interna, administración de las relaciones con los proveedores y la administración del retorno y su efecto en la Competitividad en las empresas exportadoras de aguacate ubicadas en el estado de Michoacán, para llevar a cabo este análisis se utilizaron las pruebas para el tipo de datos ordinales, es decir, el coeficiente de correlación de Spearman y el grado de asociación del estadístico gamma Se puede apreciar que la variable cadena de suministro interna es la variable que la mayor correlación de 0.931 con la competitividad, seguida por la ARC con 0.669 y su asociación de 0.52; La AR es la que presenta una correlación muy baja con 0.189 y una muy pobre asociación 0.103 Mientras que el coeficiente de determinación de 0.51, nos dice que en un 51%, la competitividad en la Administración de la Cadena de Suministro se explica por la Administración de las Relaciones con los Proveedores.

En lo relacionado con la cadena de suministro interna y la competitividad, muestran un coeficiente de correlación de Spearman de 0.931, y un grado de asociación de 0.821 lo que nos indica que existe una correlación positiva muy fuerte entre estas dos variables. Por lo que respecta a los resultados para la administración de las relaciones con los clientes y competitividad, presentan un coeficiente de correlación de Spearman de 0.669, que indican una alta relación entre estas dos variables. El coeficiente de asociación fue de 0.521, el cual expresa una alta asociación del 52 % con la competitividad. El ARP presenta una correlación moderada 0.584 y un grado de asociación de 0.415. Finalmente, en los que se refiere a los

Figura 2: Coeficiente de Correlación de Spearman y el Grado de Asociación Utilizando el Estadístico Gamma y su Incidencia en la Variable Competitividad



Fuente: Elaboración propia con base en el Trabajo de Campo.

resultados para la Administración del Retorno y la Competitividad, muestran un coeficiente de correlación de Spearman de 0.189 lo que nos dice que existe una correlación positiva debil. El coeficiente de asociación fue de 0.103, lo cual indica que la competitividad se explica en un 10.3 % por parte de la administración del retorno.

### Prueba de Hipótesis

Para llevar a cabo la prueba de hipótesis en donde se asume que existe una asociación positiva entre las variables la ARC, CSi, ARP y AR con el competitividad en las empresas exportadoras de aguacate a continuación se presenta una serie de pruebas estadísticas generalmente utilizadas con variables ordinales y de tipo Likert. Para mostrar el grado de asociación utilizamos el estadístico de Gamma que es una medida del grado y tipo de asociación, entre dos variables cualitativas en una escala ordinal y toma valores entre -1 y +1. Valores próximos a 1 indican fuerte asociación positiva; a medida que aumentan los valores de una variable, aumentan los de la otra; por el contrario, valores próximos a -1 indican fuerte asociación negativa, es decir, a medida que aumenta una variable disminuye los de la otra. Valores próximos a 0, indican no asociación, lo que significa que no puede existir otro tipo de asociación (Ferran, 1996).

Como se observa en la figura # 2, se presentan diferentes grados de asociación para cada una de las variables, las que presentan mayor grado de asociación son cadena de suministro interna y administración de las relaciones con los clientes pero de manera general podemos afirmar que el modelo propuesto se aprueba.

Para llevar a cabo, otra forma de llevar a cabo la comprobación de la hipótesis se aplicaron la prueba de Chi cuadrado utilizando el procedimiento de tablas de contingencia. Podemos apreciar que la variable administración de relaciones con los proveedores se aprueba con valor de 439.33 y una significancia de ,002 (ver tabla #4), para la cadena de suministro interna podemos afirmar

que muestra una asociación positiva en donde se muestra un valor de 450 con una significancia de ,006 por lo que también se aprueba (ver tabla #5), en el análisis de la variable de administración de relaciones con los clientes se observaron valores 366.66 con una significancia de ,002 por lo que también se aprueba (ver tabla #6), la variable administración del retorno presento valores 463.33 y una significancia de ,000 por lo tanto, también se aprueba (ver tabla #7).

Tabla: 4: Prueba de Chi Cuadrado del Procedimiento Tablas de Contingencia (Administración de Relaciones con los Proveedores y la Competitividad).

	Valor	Error Asint.	Típ.	Sig. asintótica (bilateral)
Chi-cuadrado de Pearson	439.33a	357		,002
Razón de verosimilitudes	153.29	357		1,000
Asociación lineal por lineal	14,808	1		,000
N de casos válidos	30			
396 casillas (100,0%) tienen una frecuencia esperada inferior a 5. La frecuencia mínima esperada es ,03.				

*Elaboración propia con base en el análisis de los resultados del trabajo de campo.*

Tabla: 5 Prueba de Chi Cuadrado del Procedimiento Tablas de Contingencia (Cadena de Suministro Interna y la Competitividad)

	Valor	Error Típ. Asint.	Sig. asintótica (bilateral)
Chi-cuadrado de Pearson	450.00	378	,006
Razón de verosimilitudes	158.29	378	1,000
Asociación lineal por lineal	27.22	1	,000
N de casos válidos	30		
418 casillas (100,0%) tienen una frecuencia esperada inferior a 5. La frecuencia mínima esperada es ,03.			

*Elaboración propia con base en el análisis de los resultados del trabajo de campo.*

Tabla: 6: Prueba de Chi Cuadrado del Procedimiento Tablas de Contingencia (Administración de Relaciones con los Clientes y la Competitividad)

	Valor	Error Asint.	Típ.	Sig. asintótica (bilateral)
Chi-cuadrado de Pearson	366.66	294		,002
Razón de verosimilitudes	142.88	294		1,000
Asociación lineal por lineal	12.44	1		,000
N de casos válidos	30			
418 casillas (100,0%) tienen una frecuencia esperada inferior a 5. La frecuencia mínima esperada es ,03.				

*Elaboración propia con base en el análisis de los resultados del trabajo de campo.*

Tabla: 7: Prueba de Chi Cuadrado del Procedimiento Tablas de Contingencia (Administración del Retorno Y la Competitividad)

<i>Valor</i>	<i>Error Asint.</i>	<i>Tip.</i>	<i>Sig. asintótica (bilateral)</i>
<i>Chi-cuadrado de Pearson</i>	463.33	357	,000
<i>Razón de verosimilitudes</i>	161.07	357	1,000
<i>Asociación lineal por lineal</i>	3.43	1	,064
<i>N de casos válidos</i>	30		
<i>418 casillas (100,0%) tienen una frecuencia esperada inferior a 5.</i>			
<i>La frecuencia mínima esperada es ,03.</i>			

Elaboración propia con base en el análisis de los resultados del trabajo de campo.

## CONCLUSIONES

Los resultados obtenidos, en lo que respecta a la competitividad del SCM, el promedio de las empresas exportadoras de aguacates se ubica en 446.00 puntos, es decir, recayó en el rango de regular eficiencia en la competitividad en la Administración de la Cadena de Suministro. Ninguna empresa calificó con baja o muy baja competitividad del SCM, es decir ninguna obtuvo las calificaciones del rango 137 a 356.2 puntos. Por lo tanto, se puede concluir que el modelo propuesto para medir la competitividad del SCM, es aprobado en las variables independientes, (Cadena de Suministro Interna, Administración de las Relaciones con los Proveedores, y en la Administración de las Relaciones con los Clientes) y ello representa elementos importantes para poder medir cualquier industria que tenga Administración de Relaciones con sus Proveedores, aquella que tenga una gestión de la Cadena de Suministro Interna, es decir, aquellos que manejen conceptos como Administración de la Demanda, cumplimiento de pedidos, flujo de fabricación, administración de inventarios, comercialización, administración del transporte y una administración del servicio al cliente, igualmente aquellas que cuenten con una Administración de las Relaciones con los Clientes.

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# PERCEPCIÓN ACTUAL DE LA SEGURIDAD DE LA INFORMACIÓN EN LAS ORGANIZACIONES DEL MUNICIPIO DE TECOMÁN, COLIMA.

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## RESUMEN

*Internet se ha consolidado como medio de interconexión global en las organizaciones. Así mismo la información se ha convertido en unos de los activos principales de estas y por ende una progresiva dependencia hacia sus sistemas de información. De ahí la gran importancia que se debería conceder a la seguridad de la información en las organizaciones implementando medidas que preserven su confidencialidad, integridad y disponibilidad. El presente trabajo de investigación tiene como objetivo analizar y evaluar nivel de importancia y conocimiento destinado a la seguridad de la información en las organizaciones públicas y privadas en el municipio de Tecomán.*

**PALABRAS CLAVES:** Información, Seguridad y organización.

## ABSTRACT

*Internet has become global interconnection medium in organizations. Also information has become one of the main assets of these and thus a progressive dependence on their information systems. Hence the great importance should be given to information security in organizations implementing measures to preserve its confidentiality, integrity and availability. This research aims to analyze and evaluate the level of importance and intended for information security in public and private organizations in the town of Tecoman knowledge.*

**JEL :**L8, L5, M1,O2, O3.

**KEYWORD:** Information, Security, Organization, Systems

## INTRODUCCIÓN

En la actualidad nadie pone en duda que la información se ha convertido en uno de los activos principales de las organizaciones. De ahí la gran importancia que se debería conceder a la seguridad de la información en las organizaciones implementando medidas que preserven su confidencialidad, integridad y disponibilidad.

El estandar ISO/IEC 27001 define la seguridad de la información como la preservación de su confidencialidad, su integridad y su disponibilidad así como los sistemas implicados en su tratamiento, dentro de la organización. La información es confidencial cuando se asegura que es accesible solo a usuarios autorizados; es íntegra cuando hay garantía de exactitud al almacenarse, procesarse o transmitirse en una sistema informático; esta disponible cuando se asegura que los usuarios autorizados tengan acceso a ella cuando la necesitan.

Además, dependiendo del tipo de información manejada y de los procesos realizados por la organización, ésta podrá conceder más importancia a garantizar la confidencialidad, a la integridad o a la disponibilidad entre sus activos de información.

Esta investigación se enfoca principalmente a analizar y evaluar la percepción actual de la seguridad de la información en las organizaciones públicas y privadas del municipio de Tecomán, conocer el grado de importancia que le dan a esta área, que técnicas o herramientas usan para prevenir algún tipo de ataque, que nivel de concientización existe en los empleados en cada una de las organizaciones.

Antecedentes

De acuerdo a diversos estudios realizados a nivel internacional, la percepción de la seguridad de la información tiene sus variantes bien definidas. En un estudio técnico realizado en 2008 en el Reino Unido por el Departamento de la reforma regulatoria de las empresas (BERR, Business, Enterprise & Regulatory Reform, 2008) da a conocer que el 97% de las organizaciones tienen conexión de banda ancha a Internet, el 81% de los directivos asignan una prioridad alta a la seguridad de la información, el 77% de las organizaciones ven la protección de datos de sus clientes como de alta prioridad, el 98% de las organizaciones cuentan con un software para detectar spyware y el 95% escanean el correo de entrada contra virus. Así mismo en este estudio evalúa la evolución que ha tenido la seguridad en los últimos seis años. En el 2002, únicamente el 27% de las organizaciones tenían implementadas políticas de seguridad, y en el 2008 el 55% las han implementado. En lo que respecta a la puesta en marcha de un programa de concientización en los empleados, en el 2002 solo el 20% lo implementaban, y en el 2008 el 55%.

En lo que respecta a estudios nacionales, uno de ellos llevado a cabo en el año 2012 por la Asociación Mexicana de Internet (AMIPCI) dio a conocer que el 28% de las organizaciones no pudieron definir lo que es un dato personal y el 44% no poseen el conocimiento necesario sobre la ley federal de protección de datos personales en posesión de particulares y el 32% no saben que acciones implementar para el cumplimiento de esta ley y solo el 26% ha escuchado sobre la LPDPPP. En otro estudio nacional (percepción de la seguridad de la información 2011), realizado en el año 2011 por la empresa JFS (Join Future Systems), dio a conocer que la mayor preocupación de las organizaciones en México en lo que respecta a la seguridad de la información, es mantener la confidencialidad e integridad de la información con un 76.5% con respecto a otros parámetros como son el robo de identidad, extracción de la información, pérdida de información e Internet. Otro dato interesante que da a conocer este estudio, es de que el personal responsable del área de informática en las organizaciones, el 78% no conoce ninguna norma o estándar para su regulación y solo el 20.5% conocen sobre los estándares ITIL, COBIT e ISO 27001 pero no la aplican.

### La Seguridad De La Información En Las Organizaciones

En la actualidad el entorno empresarial sigue avanzando hacia plataformas estructuradas con una arquitectura centralizada e integradora, donde los puntos de la seguridad de la información son imprescindibles para asegurar las posibles fallas de los sistemas. Sin duda alguna un elemento de gran importancia e impulsor de las nuevas organizaciones es la información, cualquiera que fuese su naturaleza, productos, servicios, ventas la relación con los clientes, el marketing. Es por eso que es importante contar con la eficiencia y eficacia con que se protege, y se administra la información en relación con la visión y misión de todos sus objetivos definidos. Cabe señalar que varias organizaciones especializadas están creando nuevos enfoques con el objetivo de

ofrecer “seguridad y disponibilidad de los recursos de la red simultáneamente”, con lo que se pretende que cada entidad adopte una posición equilibrada que permita asumir un rango de riesgos aceptables para mantener una estabilidad apropiada. (García, 2011)

En cuanto a la protección de las organizaciones es bastante amplia ya que no sólo se conforman con incorporar un simple antivirus o un sistema de detección de intrusos. Si no que habitualmente encuentran opciones más seguras para evitar, proteger y prevenir imprevistos. Ya que al perder información puede ocasionar grandes pérdidas de dinero en la organización. Esto abre una gran oportunidad en el mercado para los emprendedores del sector de software ya que las principales organizaciones interesadas en la seguridad informática la conforman los bancos, las organizaciones gubernamentales y organizaciones de todos los sectores. Además, en la última década se han integrado las pymes para las cuales, han tenido conocimiento que va en aumento los siniestros y las infiltraciones es importante tener resguardados los recursos informáticos (Turabian, 2004).

## **METODOLOGÍA**

La planeación del estudio se dividió en cuatro etapas. La primera etapa contempló la estructuración del marco teórico con base al análisis de diversas fuentes de información (Libros, sitios especializados, artículos referentes a la investigación) que sirvieron de apoyo para la fundamentación de este trabajo de investigación. La segunda etapa comprendió momentos de reflexión y pensamientos más profundos para definir el rumbo de nuestra investigación y lograr formular el Objetivo general, el planteamiento del problema, plantear preguntas de investigación, definición del objeto de estudio, determinación de objetivos general y específicos, formulación de hipótesis y la elaboración de la justificación, conforme a los lineamientos para la titulación en educación superior (Universidad de Colima, 2007). En la tercera etapa se define el diseño y planteamiento de las preguntas que debe tener el instrumento para la recopilación de datos (Cuestionario y encuesta), determinación del tamaño de la muestra para la aplicación del mismo, además de la realización del análisis estadístico de la información recolectada. La cuarta etapa y final, consiste en la interpretación de los resultados, realización de las conclusiones obtenidas para completar el documento final.

### Determinación De La Muestra

Por las características del estudio, se determino que para la selección de la muestra fuera de tipo no probabilístico, denominada también muestra dirigida. Su utilidad permitió que el estudio tuviera una cuidadosa y controlada elección de casos con ciertas características específicas para formar parte de la unidad de análisis.

## **RESULTADOS**

Podemos observar que las organizaciones públicas y privadas si tienen presente la posibilidad de perder información, el 100 por ciento respondieron que si están conscientes que la información se puede dañar o borrar (Ver Figura 1).

Para conocer que tan dedicados están en la protección de la información, mostramos los resultados obtenidos, tras las preguntas sobre seguridad básica. Tomando como seguridad básica el uso de antivirus, la periodicidad con la que son actualizados y el uso de no-break.

Conforme a los resultados obtenidos el 80% de las organizaciones públicas cuentan con un antivirus corporativo en cambio el 20% aun no cuentan con antivirus corporativo. Y en las organizaciones privadas el 100% cuentan con antivirus. Sin embargo no pagaron licencias para obtenerlos.

Figura 1. Porcentaje de posibilidad de pérdida de información

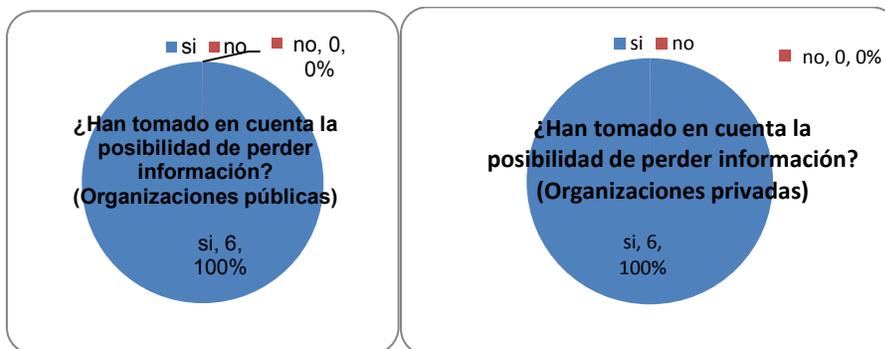
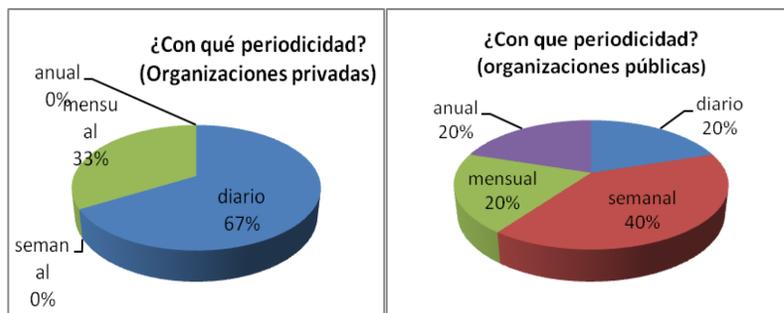


Figura 2. Porcentaje de actualización de antivirus.



En lo que respecta a la actualización de sus antivirus en las organizaciones públicas lo realizan 20% de forma diaria, 40% semanalmente, 20% mensual y 20% anual. Y por parte de las organizaciones privadas lo actualizan un 67% diario y un 33% mensual.

De acuerdo a las encuestas el 20% de las organizaciones no tienen instaladas fuentes de alimentación redundantes en sus servidores con dichas fuentes se evitarían las posibles afectaciones en los equipos de cómputo. Y el 80% de organizaciones públicas tienen instalados fuentes de alimentación redundantes. Mientras que en las organizaciones privadas son 50% las que si tienen y el otro 50% no tiene. El 80% de las organizaciones públicas Tienen instalados Sistemas de Alimentación Ininterrumpida mientras que el 20% no tienen instalados dichos sistemas. Por parte de las organizaciones privadas se encuentran sin ningún tipo de sistema que les permita seguir su funcionamiento a pesar de la falta de energía eléctrica.

En la parte de seguridad media de la empresa, se cuestionó si en la organización contaban con restricciones, para acceso a los recursos, contraseña en el servidor y contraseña en cada equipo de la empresa.

En el 80% de las organizaciones el acceso a los recursos está limitado por usuario mientras que en el 20% de las empresas no cuentan con dichas restricciones lo cual vuelve vulnerable sus sistemas. En las organizaciones privadas el 67% si tiene restricciones por usuario, el resto el 33% no tiene limitación alguna con sus empleados.

Figura 3. Porcentaje de sistemas de alimentación redundante

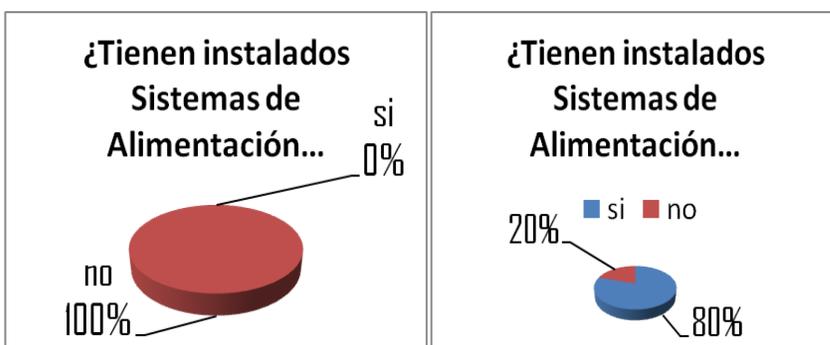
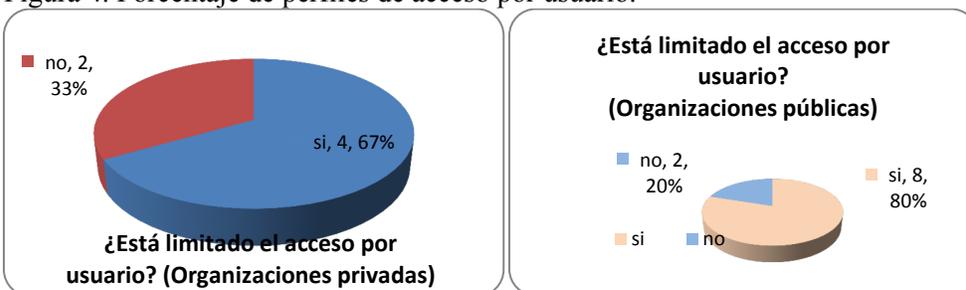


Figura 4. Porcentaje de perfiles de acceso por usuario.



El 80% de las organizaciones públicas de Tecomán utilizan controles para el acceso a sus recursos, mientras que en el otro 20% de las organizaciones no tiene contemplado dichos controles. Nuevamente los números son muy similares en las dos instancias pues el 83% si tiene accesos por contraseñas, mientras que el 17% no tiene, esta medida de seguridad.

Figura 5. Porcentaje de controles de acceso a los recursos.

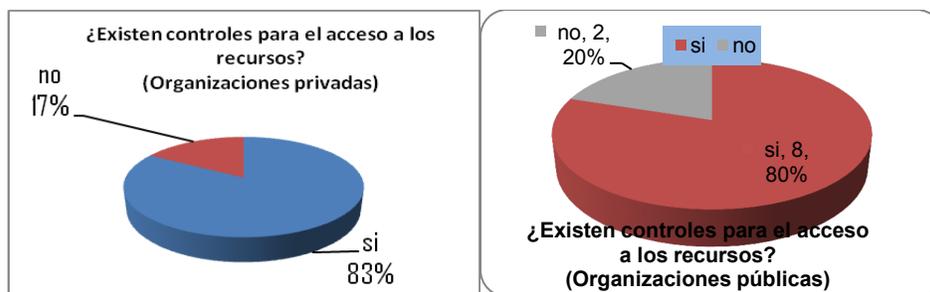
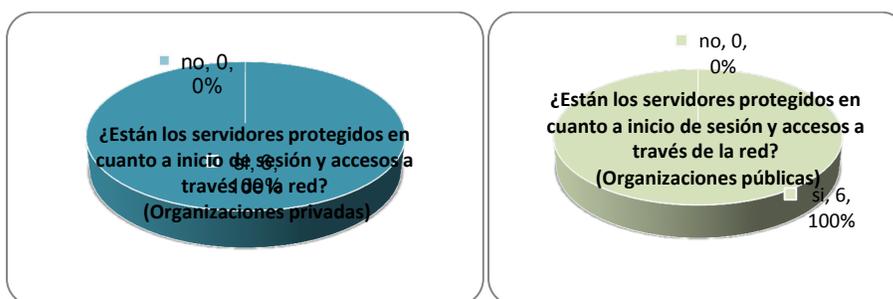


Figura 6. Porcentaje de políticas de seguridad en los servidores

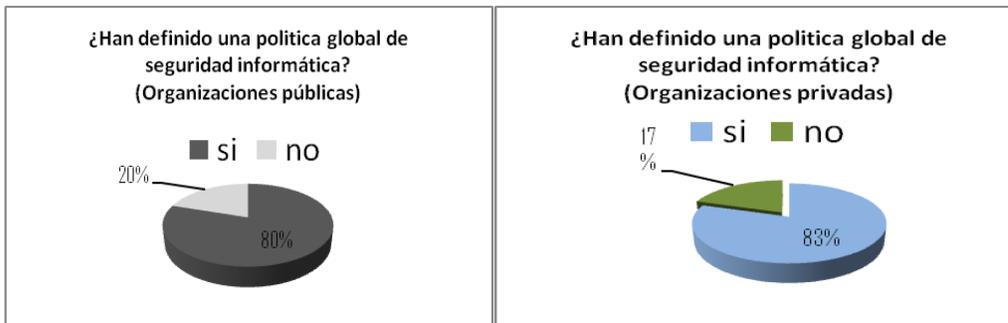


En el 100% de las organizaciones públicas y privadas de Tecomán han tomado en cuenta el proteger los servidores en cuanto a inicio de sesión y acceso a través de la red. Teniendo así al menos una relativa seguridad para la integridad de la información que los servidores contienen.

Como medidas de seguridad altas, se tomaron en cuenta si contaban con un trabajador dedicado al área informática, las políticas de seguridad, plan de seguridad, personal dedicado al área de seguridad informática.

Como se puede apreciar en la grafica un 80% de las organizaciones encuestadas si tienen bien definida una política de seguridad en la empresa, mientras que el otro 20% de las organizaciones no han definido una política global de seguridad. Mientras que en las organizaciones privadas el 83% si tiene definida una política y el 17% no, es decir en ambas organizaciones en su mayoría ya tienen estructurada una política, donde hace restricciones y recomendaciones sobre el uso de los recursos en las organizaciones.

Figura 7. Porcentaje de políticas de seguridad globales.



Los resultados obtenidos en las encuestas nos señalan que el 80% de las instituciones tienen almacenada alguna copia de sus datos fuera de los locales de trabajo, mientras que el otro 20% no almacenan una copia fuera del lugar del trabajo. Así como las organizaciones privadas el 17% no tiene información fuera de su lugar de trabajo, aunque el 83% que es la mayoría si tienen copias fuera de la organización.

Figura 8. Porcentaje de implementación de respaldos fuera de la empresa.

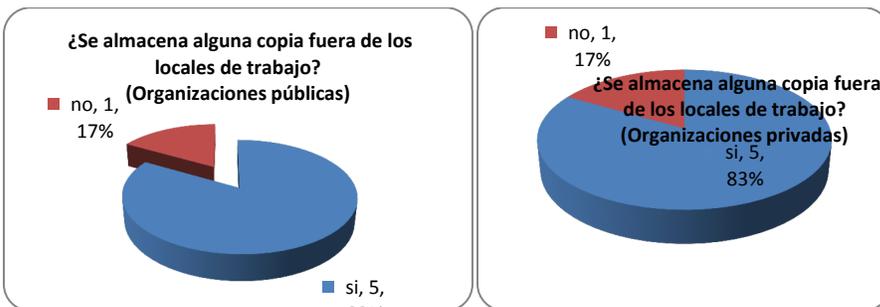
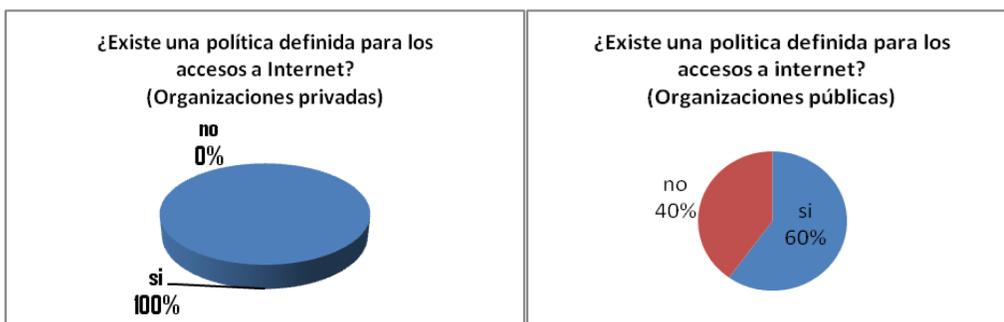


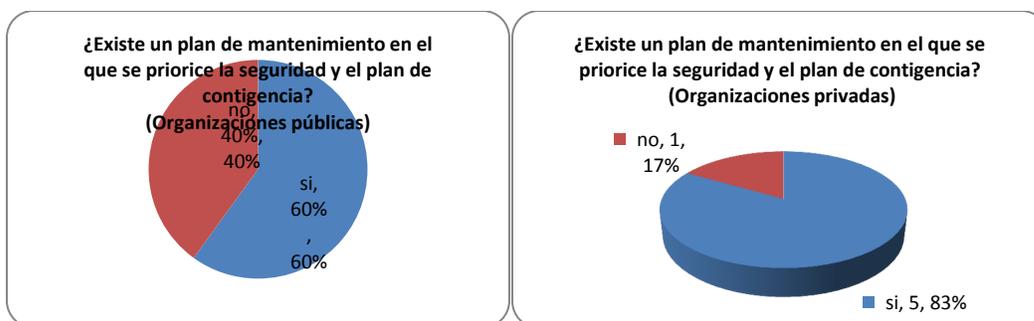
Figura 9. Porcentaje de implementación de políticas de acceso a Internet.



De acuerdo a la muestra el 60% de las instituciones tienen definida una política para los accesos a internet, mientras que el 40% de las instituciones públicas de Tecmán no tienen definidas estas políticas. En las organizaciones privadas en un 100% si tienen políticas de internet, es lo ideal.

De acuerdo a los resultados obtenidos el 40% de las organizaciones tienen un contrato de mantenimiento en el cual se priorice la seguridad y el plan de contingencias mientras que el 60% no cuentan con tal contrato. A diferencia las organizaciones privadas cuentan un 83% con contratos de esta naturaleza. Se debe recordar que estos planes son solo utilizados en caso de que fallen las políticas y los sistemas de seguridad implementados en las organizaciones. No por eso pierden importancia, sino todo lo contrario, son los encargados de proporcionarnos la última seguridad.

Figura 10. Porcentaje de implementación plan de mantenimiento y contingencia



## CONCLUSIONES

El presente trabajo de investigación se realizó con el objetivo de conocer la situación actual de la seguridad informática en las instituciones públicas y privadas del municipio de Tecmán, investigando la importancia que tenía para la institución o dependencia la información, además de las herramientas, medidas y personal especializado en este rubro. Pues a medida que sigue pasando el tiempo la necesidad de tener todo digitalizado se va obligando a actualizar las medidas de crear, organizar, almacenar y trasladar la información. Es por ello que tomó relevancia un estudio de esta índole en la región, para despertar interés en los empresarios, así como en las dependencias públicas y privadas.

Como hipótesis se consideró que más del 80% de los encuestados, si creían en la importancia de la seguridad de la información, no obstante menos del 60% tienen políticas de seguridad bien definidas o planes de contingencia. No cuentan en su mayoría con personal dedicado a la seguridad informática.

La hipótesis planteada, fue positiva pues el 100% de los encuestados cree, que la seguridad informática es importante, aunque mostraron ciertas deficiencias para tener una seguridad informática plena, el primer paso esta dado, pues la concientización de los involucrados en sus respectivas instituciones saben la relevancia que tiene el resguardo de la información. Más del 70% tiene herramientas básicas de seguridad como son el uso de contraseñas y antivirus en cada equipo de cómputo utilizado en sus redes locales. En las afirmaciones “más del 60% tiene respaldo de su información fuera de su lugar de trabajo” y “más del 40% tiene personal con conocimientos básicos de seguridad o contrato dedicado”, también resultó verdadera. Como la hipótesis que menos del 60% de los encuestados tiene política de seguridad bien definida, era esperado el resultado.

Se podría decir que la seguridad, no es una preocupación nueva y menos cuando se trata de información importante dentro de una institución, por eso no fue sorprendente el tener como resultado la unanimidad de los encuestados concordando con que es un tema demasiado relevante, con esta simple respuesta uno se puede aventurar a creer que estarían dispuestos invertir tiempo y dinero para conseguir una red totalmente segura.

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# MÉXICO: POLÍTICA FISCAL Y SISTEMAS TRIBUTARIOS QUE GARANTICEN LA PROGRESIVIDAD FISCAL

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## RESUMEN

*Esta investigación se deriva de una serie de planteamientos que sugieren conocer la estructura del sistema tributario en México; así como la incidencia de la política fiscal en el crecimiento. La principal motivación de emprender esta investigación sobre política fiscal y sistemas tributarios, radica en lo interesante que resulta alentar y proponer el debate político-académico, con pensamientos y propuestas, en torno a temas de una agenda de políticas públicas basadas en aspectos fiscales y hacendarios para el desarrollo económico del país. El objetivo es incitar la discusión de los temas de política fiscal, que se orientan tanto al fortalecimiento de las finanzas públicas y a la sustentabilidad del desarrollo económico y social. En esta propuesta se plantea exponer las discusiones teóricas sobre política fiscal y sistemas tributarios, poniendo énfasis en la disciplina fiscal como esquema de tributación especial.*

**PALABRAS CLAVE:** Política Fiscal, Sistemas Tributarios, Progresividad Fiscal, Disciplina Fiscal

## MEXICO FISCAL SYSTEM

### ABSTRACT

This research stems from a number of approaches that suggest about the structure of the tax system in Mexico, and the impact of fiscal policy on growth. The main motivation to undertake this research on fiscal policy and tax systems lies in how interesting it is to propose and encourage the political and academic debate, with thoughts and proposals on issues of public policy agenda based on fiscal issues and tax for economic development. The aim is to encourage discussion of the issues of fiscal policy, which is aimed at strengthening public finances and sustainability of economic and social development of both. This proposal raises expose theoretical discussions about tax policy and tax systems, with emphasis on fiscal discipline as special taxation scheme.

**KEYWORDS :** Fiscal Policy, Tax Systems , Tax Progressivity , Fiscal Discipline

### INTRODUCCIÓN

Si bien, resulta fácil observar el aumento de personas sin empleo y el escaso crecimiento de México, basta con recorrer las calles de la ciudad y analizar las estadísticas de finanzas públicas, de pobreza y de ingreso-gasto de los hogares mexicanos. Hoy sabemos que han sido los principales costos del capitalismo que floreció en estos magros y adversos resultados. Lo complicado es evidenciar las causas entre la política fiscal y el crecimiento económico, debido a la diversidad de eventos que los interrelacionan; sin embargo, en este trabajo referimos los primeros acercamientos entorno al tema. Es seductor encontrar respuestas que mitiguen la

pobreza, aceleren la economía para propiciar condiciones de empleo. De ahí que resulta interesante destacar la literatura reciente que enfatiza en políticas complementarias contra la crisis, la pobreza, el desempleo y la insolvencia financiera.

Reconocemos las causas del actual escenario económico y financiero mexicano, y se han observado los efectos adversos que han generado esas causas. Ahora la tarea es analizar los efectos adicionales de la política fiscal para lograr el crecimiento de México, y orientar la economía hacia el desarrollo y hacia un mundo justo y pacífico.

Parece haber un consenso creciente de que es posible potencializar el crecimiento de las economías en desarrollo y aumentar las ganancias de productividad mediante el mejor aprovisionamiento de bienes públicos, permitiendo disminuir la pobreza, aumentar el empleo, elevar el crecimiento económico y solventar las finanzas públicas. A su vez, con base a los reportes que en el año 2013 ofrece la CEPAL, en América Latina la evolución de las finanzas públicas abren oportunidades inéditas para la construcción de una arquitectura fiscal contracíclica, que permita suavizar la excesiva volatilidad macroeconómica.

Lo que estimuló los primeros acercamientos sobre política fiscal y sistemas tributarios, radica en lo atractivo que es propiciar el debate político-académico constructivo, que va más allá de la confrontación de la “realidad oficial”. De ahí, la mitigación por estudiar con pensamientos y propuestas, en torno a temas de una agenda de políticas públicas basadas en aspectos fiscales y hacendarios para el desarrollo económico del país.

Es menester finalmente enfatizar la relevancia del nivel y la composición de gastos e ingresos públicos en los objetivos de crecimiento económico, equidad distributiva, e inclusión social. La política fiscal aplicada hasta ahora en México, ha propiciado una caída en la capacidad recaudatoria del Estado (obtención de ingresos), pasando de la petro-dependencia fiscal a la dependencia de los impuestos al consumo, de la disminución de las barreras arancelarias a los grandes volúmenes en los productos importados que representan una fuerte competencia para las empresas mexicanas que producen para el mercado interno, impidiéndoles ser motores de desarrollo. Además, de procurar que de las derivaciones y conclusiones a las que se lleguen sean de utilidad para quienes dirigen el rumbo de la política económica del país, pese a que sus decisiones suelen estar sesgadas por los compromisos partidistas e interés personales, esperamos que los resultados sean bases que orienten mejor su quehacer legislativo.

### El Contexto De La Economía Del Sector Público De México

En las últimas tres décadas, la economía del sector público, amplió su espectro debido a las nuevas actividades que el Estado desarrolla. Este conjunto de actividades son reconocidas por diversos autores como Finanzas Públicas, de ahí que también se utilicen términos como Política Fiscal o Economía del Sector Público, términos que se caracterizan de acuerdo al modelo económico que se esté aplicando en el país, como estrategia de crecimiento y desarrollo económico. Son la economía del sector público y las finanzas públicas, las encargadas de estudiar los efectos derivados de las políticas del Estado como consecuencia del gasto que realiza y de los tributos que establece o en su caso de los recursos que obtiene para financiarlo.

El grado y nivel de intervención del Estado en la Economía es un tema polémico. En términos generales podemos descifrar que aquellos que tiene una actitud más próxima a las ideas socialistas defienden que el Estado intervenga regulando los mercados, disminuyendo las diferencias en la renta, asistiendo a los más necesitados y en su defecto, pugnan por que se tomen

medidas para mitigar los fallos del mercado. En cambio, los que tienen una inclinación ideológica más cercana al liberalismo, defienden que el Estado intervenga lo menos posible y que se deje a los mercados actuar libremente.

No obstante, no podemos quedarnos con una idea general entre una ideología y otra, ya que en el último siglo se observa por un lado que los mercados, aunque se reconocen sus fallos, también se reconoce que han sido más que un instrumento económico, un medio para hacer que la economías desarrolladas funcionen; pero también el Estado ha ampliado sus funciones y ha dejado de ser solo el guardián de la seguridad nacional. Actualmente nos encontramos que la realidad económica demanda y exige un sector público que potencie y resguarde el buen desarrollo de la actividad económica, de tal suerte que se convierta en un agente económico que corrija las fallas del mercado. De ahí que el análisis de la intervención del Estado en la economía nos refiere que no hay una conducta lineal; sino más bien, que se ha dependido tanto de los ciclos económicos, como de los ciclos políticos. Con ello se busca la progresividad tanto del gasto como del ingreso público.

Es común que en épocas de crisis que viven los países subdesarrollados como México, la intervención del Estado se tiende a acentuar. Bajo cualquier caso, sea económico o político, la orientación debe ser en beneficio de la sociedad; donde el debate se orienta a una mayor intervención del Estado, con una mayor acentuación de los gastos de carácter social (por ejemplo, salud, educación, pensiones, vivienda, rescates bancarios, entre otros), y de los gastos productivos (inversión física, proyectos productivos); o en contraparte, suele suceder que en países desarrollados el debate se vuelva a una mayor dosis de liberalismo económico, con menos regulación, mas apertura comercial y financiera, más impuestos al consumo, mayor contención del gasto entre otros; esta situación es algo que permanece abierto y en constante debate, dejando de lado la búsqueda de la progresividad y los beneficios de la política fiscal, y con ello de los sistemas tributarios que robustecen de regímenes fiscales que obligan a personas físicas y sociedades a tributar en diversos esquemas. Ante este general escenario y la diversidad de regímenes especiales fiscales, que vienen a beneficiar a las grandes empresas trasnacionales, iniciamos el análisis de la discusión partiendo de los planteamientos históricos de la economía del sector público, así como la derivación de las finanzas públicas que se tienen en México.

## REVISION LITERARIA

Como antes lo hemos expresado, los acontecimientos ocurridos en 1929 que ocasionaron “La Gran Depresión”, fueron hechos que determinaron el papel del Estado en la Economía. Con razones contundentes se demostró que los mercados estaban fallando, lo que obligó al Estado a hacer algo. Jhon Maynard Keynes (1945), creía que el Estado debía y podía intervenir para hacer frente a las depresiones económicas, en la idea de que únicamente el Estado a través de su actividad económica podría estabilizar la economía del sector público.

En este sentido, la economía del sector público comprende una parte relevante de los recursos económicos de una sociedad, factores productivos y de la producción que son de apropiación pública, incluye todos los departamentos y empresas públicas. Consideramos que la importancia del sector público radica precisamente en el gasto y el ingreso público, pero antes de abordar a profundidad esta temática, se abordan otras perspectivas para puntualizar entre otras cosas, la concepción de la economía del sector público, así como las actividades y funciones del Estado.

De acuerdo con Stiglitz (2000: 24-25), “la economía del sector público en esencia tiene su papel central en el bienestar de los ciudadanos, y estudia cuestiones económicas fundamentales tales como el describir las actividades que realiza el Estado”, así como analizar sus consecuencias,

evaluar las distintas medidas posibles e interpretar las fuerzas políticas que condicionan a las decisiones que toman los Gobiernos.

Desde la opinión de Martínez Álvarez (2000:44), “la economía del sector público no puede separarse del mercado, dado que a través de la acción colectiva, se generan coaliciones de distribución, presionando con legislaciones, la percepción de los ingresos que serán distribuidos a través del gasto”. Sin embargo, desde la perspectiva de Albi et al (2001:7), “la teoría y la práctica de la economía del sector público forman parte del tronco común de la economía como ciencia social, por lo que define a la economía del sector público como un área de la economía que se centra en la adopción de decisiones colectivas sin la ayuda del mercado”, en la actividad de la administración pública y en su financiarización. Desde otra perspectiva y siguiendo a Ayala Espino (2005:25-29), “el sector público es la autoridad formal para tomar decisiones que trascienden a los grupos privados y al mercado, lo cual le da un importante poder e influencia sobre la economía”; y comprende una parte relevante de los recursos económicos de una sociedad, los factores productivos y de la producción que son de apropiación pública.

El surgimiento de la actuación del Estado, mostró que el desarrollo económico no sólo depende de las transacciones económicas en el mercado y el comportamiento del sector privado de la economía, sino también de los bienes y servicios, de las leyes y normas, del bienestar social y de la infraestructura y demás servicios que el Estado brinda a la sociedad...Fuera de cualquier consideración política e ideológica, se ha reconocido que el sector público ha realizado invariablemente un conjunto de funciones, cuya importancia sólo cambia de acuerdo a la orientación de la política económica, pero lo que sí es concurrente, es el destacado papel del Estado en el desarrollo económico...(Ayala Espino, 2005).

Mientras que para Fenochietto (2006:1-2), “la economía del sector público, comprende el estudio de la elección de cuales actividades y de qué manera deberían ser desarrolladas por el Estado y cuales por el sector público”, para después avanzar al estudio de forma en que la acción del Estado afecta la asignación y la distribución del ingreso, analizando para ello, las necesidades del gasto público de un país, de acuerdo a su naturaleza política, economía y social, además de determinar qué recursos son más idóneos para financiar los déficit. Como podemos ver, el papel del Estado en la economía es un tema de amplia discusión, dado que conlleva implicaciones económicas, políticas e ideológicas; sin embargo, bajo estas perspectivas teóricas, se observa que el eje central de la economía del sector público es el bienestar de la sociedad, a través de la captación y distribución de la renta, en el que deben complementarse tanto el sector privado como el público; dando, desde mi opinión, un papel central al Estado en lo referido al ingreso-gasto del gobierno. Consideramos que para explicar los fenómenos económicos que inciden negativamente en el estado de bienestar, es fundamental entender el papel del Estado en la economía como un ente inversionista, y más aún, si hablamos de una economía mixta como la mexicana, es necesario priorizar la actuación del Estado para encontrar respuestas a la desaceleración de crecimiento económico, las elevadas tasas de desempleo y los constantes déficits comerciales y financieros en los que ha incurrido México las últimas tres décadas.

### Actividades Económicas del Estado

Dentro de las actividades que el Estado realiza en la economía se encuentra la asignación de recursos en aquellas áreas cuya producción y provisión de bienes y servicios, el mercado no provee a ningún precio, como son la seguridad pública, infraestructura física e hidráulica, educación, salud etc., ante lo cual, una de sus principales funciones es establecer el marco jurídico bajo el cual se realizan todas las transacciones y actividades económicas. De acuerdo a

Stiglitz (2000:36), “las actividades del Estado se dividen en cuatro clases: a) la producción de bienes y servicios; b) la regulación y la concesión de subvenciones a la producción privada; c) la compra de bienes y servicios, desde misiles hasta la recolección de basura; y d) la redistribución de la renta, es decir, la realización de transferencias como las prestaciones por desempleo”. Dado que la influencia del Estado en la economía depende de las actividades que desarrolla, es importante señalar que, para que influya en la economía, es imprescindible que diseñe una política fiscal y un marco jurídico regulatorio de esas actividades, ya que una sola cifra no puede indicar con exactitud su influencia en la economía. Por su parte Richard y Peggy Musgrave (1992), señala que en la economía del sector público son tres las funciones que el Estado debe desarrollar:

- a) La recaudación de impuestos para poder cumplir con sus objetivos.
- b) La asignación de bienes y servicios a través de la política presupuestaria.
- c) La distribución, generada a partir del cobro de los impuestos en los sectores con mayor capacidad para

contribuir y la ejecución del gasto, dirigido a quienes no tienen capacidad económica para adquirir determinados bienes y servicios.

No se trata de tres funciones independientes la una de la otra, sino entrelazadas o relacionadas entre sí, de forma tal que, un determinado gasto o un impuesto es probable que en los hechos pueda efectuar a más de una de ellas. A continuación se desarrolla con más detalle estas tres funciones:

- a) Función de Recaudación.
- b) Función de Asignación: Esta función implica la provisión de bienes públicos mediante la ejecución del presupuesto del Estado, proceso diferenciado y alejado de los mecanismos del mercado.
- c) Función de Distribución: Toda política de distribución realizada por el Estado genera pérdida de eficiencia, lo cual debe considerarse con carácter previo a su ejecución.

Las políticas distributivas, tanto impositivas como de gasto, generan un costo de eficiencia ya que desalientan la producción y el trabajo. Pese a esto, existe cierto consenso en cuanto a que el Estado debe ejercer esta función de distribución a través tanto del gasto como de los impuestos, al menos con el fin de atenuar los niveles de pobreza, garantizando la igualdad de oportunidades.

Dentro de las distintas áreas de la economía del sector público, “encontramos las actividades exclusivas, mismas que comprenden la prestación de servicios que solo el gobierno puede realizar como el cobro de impuestos, la seguridad pública, la regulación y la educación pública” (Ayala Espino; 2005:36). Como podemos observar desde estas bases teóricas, el sector público, se desarrolló significativamente a lo largo del siglo XX, su papel trascendió a la administración de las finanzas públicas.

De los planteamientos vertidos por los investigadores Irma Manrique (2006), Arturo Huerta (2009 y 2009b), Eugenia Correa (2009 y 2010), Alicia Girón (2010), y otros; se hace eco y se coincide en comprender que: Con la elevada liberalización y desregulación se afectan la soberanía nacional, lo que significa una reducción sustancial de la soberanía financiera y fiscal. Transfiriendo parte de ésta a los mercados financieros mundiales donde domina el conglomerado financiero, con este alto mando de autoridades y organismos financieros (Correa, 2009:29). Ante esto, discernimos en que se requiere una recaudación que permita elevar ingresos públicos

tendientes a atender la insuficiencia en el gasto social y el desarrollo de sectores como el agropecuario, educativo y de salud; pero no mediante el incremento de impuestos y el fomento de la tributación al consumo, sino mediante otras áreas de oportunidad que ofrece precisamente el sector extranjero, como por ejemplo el gravar el flujo de capital extranjero, eliminar los regímenes especiales de tributación, bajo los cuales se otorgan beneficios fiscales a los inversionistas extranjeros y desde luego gravar a los grandes capitales. Por ende, de las diez orientaciones económicas del “Consenso de Washington”, para efectos de esta investigación se estudian seis de ellas; de las cuales, 3 orientaciones se considera que incidieron de manera adversa en las otras 3; es decir, el estudios de: 1) la liberalización del Comercio, 2) la liberalización de los flujos de inversión extranjera (liberalización financiera) y 3) la privatización de las empresas públicas, incidieron de manera antagónica en 4) la obtención del ingreso público, 5) la disposición del gasto y 6) el resultado presupuestario. Las primeras tres variables nos ayudarán entender sus efectos y transformaciones en las finanzas públicas de la economía mexicana a raíz del modelo liberalizador.

### La Economía y Las Finanzas Públicas

En la economía, las finanzas públicas son una parte fundamental de la actividad económica del sector público, dada su peculiar estructura que se vincula con la economía del mercado. En opinión de Dino Jarach (2003:41-43), “es posible generar una teoría general de las finanzas públicas, partiendo de la única premisa de la existencia de una organización humana llamada Estado, con funciones distintas, según sus condiciones y fines, de acuerdo con las fuerzas políticas que predominan en cada país”. Aun y cuando el papel del Estado es motivo de diversos debates, su importancia cobra fuerza en la actualidad, debido a que es considerado el sujeto activo de la actividad financiera.

De ahí, que la evidencia doctrinal que reconoce a las finanzas públicas como una actividad económica del Estado, da origen a la teoría de las finanzas públicas, partiendo de las premisas marginalistas, como: Sax, Pantaleoni, De Viti de Marco, Mazzola, Wicksell y Lindahal. Por otra parte, las doctrinas que también consideran al Estado como un sujeto de las finanzas públicas son la doctrina Keynesiana, la de Hansen y la de Lerner, no obstante, dan mayor peso al papel regulador de la actividad financiera del Estado que a la función de producir servicios públicos (Flores Zavala, 2001).

Es común que en las doctrinas económicas de las finanzas públicas, se conciba al Estado como un instrumento destinado a satisfacer ciertas necesidades de carácter público o social, pero debe ser claro que no son las necesidades públicas los que determinan sus cometidos; es decir, el concepto de necesidad pública no preexiste a la existencia del Estado. En sí, existe una simbiosis entre las necesidades públicas y su existencia. Como podemos apreciar, la relación entre las finanzas públicas y la economía, comprende aspectos de la actividad financiera del Estado; por un lado, la producción de bienes y servicios, y por otro, la política económica, con la finalidad de la redistribución del ingreso, la estabilización y el desarrollo económico, de ahí que, la estructura de las finanzas públicas es concebida como el sistema económico del sector público, formado por la concepción de un Estado protagonista de las finanzas públicas; es decir, bajo la perspectiva de la influencia que el Estado tiene en la sociedad al desarrollar sus funciones económicas, políticas y sociales.

Bajo los planteamientos de Dino Jarach (2003: 55), “el gasto público consiste en la erogación que el Estado realiza para adquirir bienes intermedios y factores de producción, a fin de combinarlos adecuadamente para la producción de bienes y servicios públicos o en su caso para adquirir

directamente bienes en el mercado destinados a asumir la función de bienes públicos”. Aunque el gasto público puede perseguir finalidades diferentes a la producción de bienes y servicios públicos, es importante destacar que estos, son parte fundamental del sistema económico del sector público y en la estructura de las finanzas públicas, es uno de los componentes del proceso recursos-gastos que caracterizan la actividad financiera del Estado.

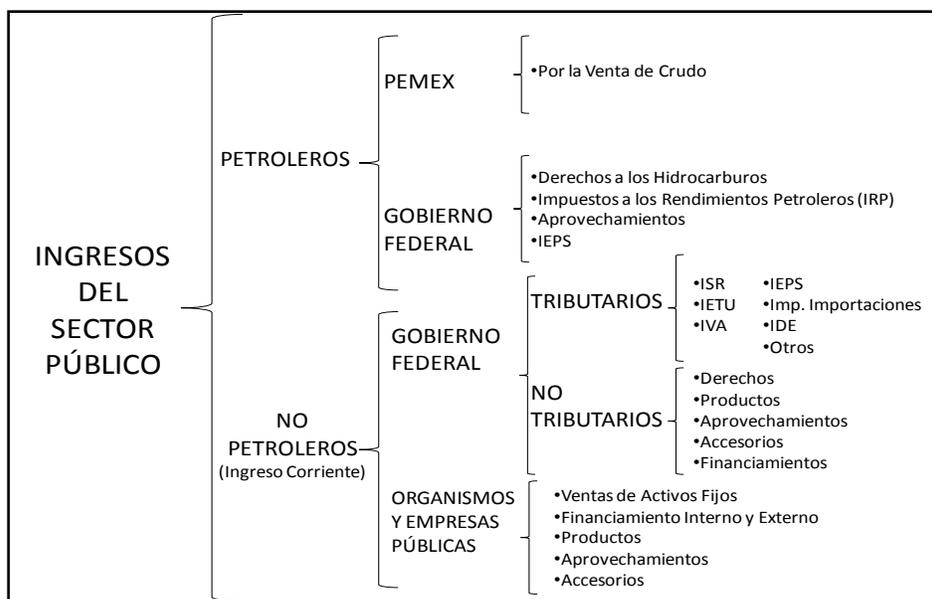
### El Sistema Económico De Las Finanzas Públicas En La Economía De Mercado

El sistema económico del sector público interfiere con el sistema de la economía de mercado, y es precisamente el gasto el que directamente penetra este, ya que los bienes intermedios y los factores de la producción que el Estado transforma en bienes y servicios públicos, constituyen una parte de la demanda global de bienes y servicios en el mercado.

En contraparte, los ingresos actúan alterando desde afuera la demanda o la oferta de bienes y servicios en el mercado, mediante su acción sobre las cantidades ofrecidas o demandadas. Dentro de los ingresos del sector público presupuestario, los conceptos incluidos en el Artículo 1 de la Ley de Ingresos de la Federación puede clasificarse en dos grande categorías: los ingresos petroleros y los ingresos no petroleros, cada categoría se compone de otros conceptos.

La configuración del ingreso del sector público la podemos apreciar en el siguiente esquema (figura no. 8), que muestran cada uno de los componentes del ingreso del sector público.

Figura No. 1: Esquema Del Ingreso Del Sector Público Mexicano



Fuente: Elaboración propia, con datos de la Dirección General de Planeación Hacendaria

y el Banco de México

La Ley de Ingresos, explicita los ingresos que se clasifican por tipo de contribución y sus accesorios de acuerdo con lo establecido en el Código Fiscal de la Federación (CFF), incluye además, los ingresos provenientes de la contraprestación por los servicios que presta el Estado en sus funciones de derecho privado, así como por el uso, aprovechamiento o enajenación de bienes del dominio privado; los ingresos derivados de financiamientos.

Los ingresos del sector público están compuestos por los ingresos petroleros y los ingresos no petroleros dentro de los que se encuentran los impuestos, derechos, productos, aprovechamientos, ingresos derivados de la venta de bienes y servicios del Sector Paraestatal; e ingresos por financiamiento interno y externo. El efecto de los ingresos en la economía no son fácil de discernir, pero su conocimiento es de fundamental importancia, porque actúan sobre las finanzas públicas, lo mismo que el gasto público, así como sobre la economía de mercado.

El gasto público tiene, finalmente, efectos redistributivos que son buscados por el Estado de diversas formas (una de estas formas es a través de la recaudación de impuestos), incidiendo en la composición del ingreso nacional y el bienestar social. Sin embargo, en este rol el Estado asume los efectos del gasto, lo que significa que no pueden aislarse de los efectos de los ingresos, que son el elemento fundamental con los que se financia la actividad económica del sector público.

### LA POLÍTICA FISCAL DE CONTENCIÓN DEL GASTO Y DISCIPLINA FISCAL

A partir de la década de los setentas, se imprimió un hito en el comportamiento de las finanzas públicas, evidente por los constantes desequilibrios registrados en 15% del PIB. Ante esto, se impuso de manifiesto la necesidad de instrumentar un proceso de ajuste macroeconómico que permitiera como objetivo fundamental sanear las finanzas públicas, sometiéndolas a la dura disciplina fiscal como eje principal de ahorro y crecimiento económico.

Los actuales gobiernos de México, siguen pensando que es necesario continuar con la estrategia de “disciplina fiscal” para lograr el equilibrio macroeconómico, e incluso han llegado a proponer como objetivo de corto plazo alcanzar superávit en las cuentas fiscales. Mucho se ha argumentado, que con las finanzas públicas “sanas”, se garantizaría el crecimiento, o en su caso se detendría el estancamiento; sin embargo, los resultados obtenidos durante estos años de neoliberalismo, en términos de crecimiento económico, dejan ver que las finanzas públicas han estado asfixiadas e imposibilitadas de ser bujías que detonen mayor inversión productiva, y por tanto, mayor crecimiento.

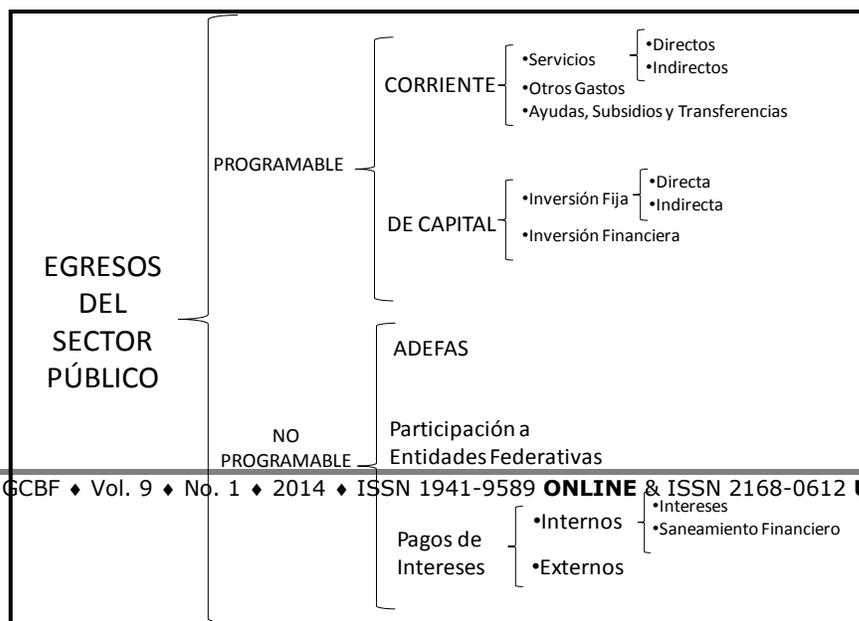


Figura 2: Esquema Del Gasto Del Sector Público Mexicano

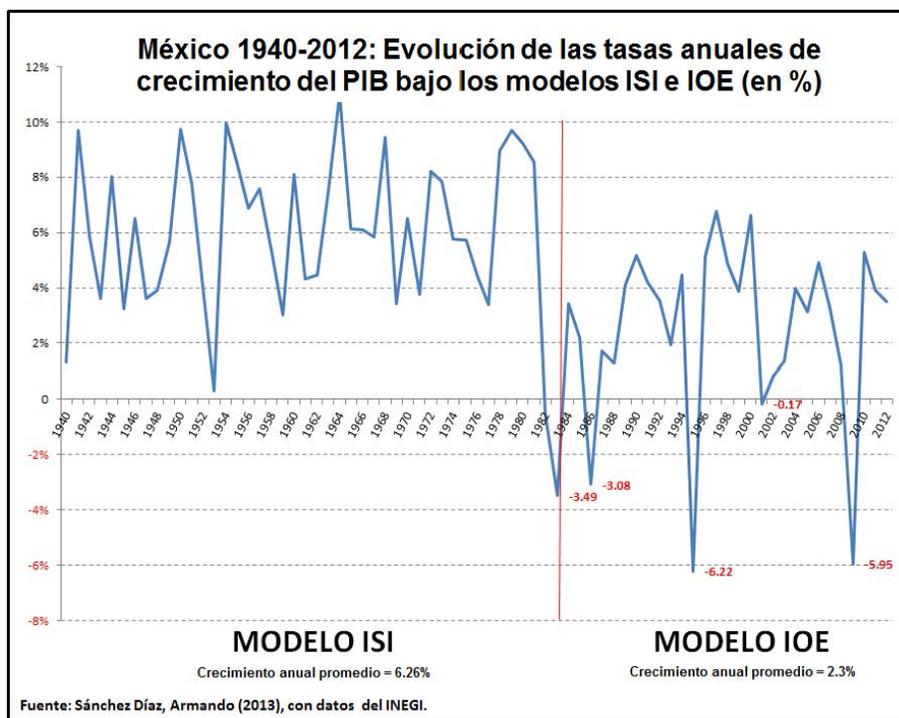
*Fuente: Elaboración propia, con datos de la Dirección General de Planeación Hacendaria*

En este sentido, después de tres décadas, la política fiscal se ha reorientado a la disciplina fiscal, lo que ha implicado que la prudente política fiscal aplicada en México ha permitido argumentar que el país tiene finanzas públicas “sanas” y una progresividad reflejada en una trayectoria sustentable en materia fiscal y la reducción de la vulnerabilidad externa de la económica, pero también esto ha permitido ver que se ha subestimado la aplicación de una política fiscal contracíclica, toda vez que en México, existen sobradas evidencias de retraso económico, desaceleración y estancamiento financiero.

En la gráfica no. 1 podemos observar que en los años de 1940 a 1982, se crecía a tasas promedio anual del 6.6%, en cambio con el actual modelo neoliberal se observa que después de los años de las crisis económicas, en México se tuvieron tasas negativas de crecimiento en 1983 se registra una tasa de -3.49%, en 1987 se registra una tasa del -3.08, en 1995 se tuvo una tasa de -6.22, para el 2002 se registró una tasa del -0.17% y para el año del 2009 un -6.54%.

Podemos ver que en los años en que se aplicaba el modelo ISI, no se tenían tasa negativas, y con la aplicación del modelo IOE, la economía crece por debajo de su potencias, apenas llega al 1.95% de crecimiento promedio anual. Sin duda, estos resultados de bajo desempeño económico, son atribuidos a las políticas de apertura comercial que México ha adoptado desde el Consenso de Washington, en donde la desaceleración de la demanda agregada ha sido permanente, y la falta de inversión en el sector productivo ha sido una constante.

Figura 3: Mexico 1940-2012 Evolución de la Tazas Anuales de Crecimiento



Es evidente que el actual modelo económico impacta negativamente al crecimiento económico y al aumento del ingreso público, en tanto el gobierno mexicano opta por la vía más fácil de política fiscal: contención del gasto público a fin de mantener finanzas públicas sanas, tasas impositivas más altas al consumo, nuevos impuestos, regímenes especiales al capital financiero y desgravación de aranceles; se impide que el Estado disponga de recursos suficientes para invertir en infraestructura, educación y salud; y por consiguiente se clausura el desarrollo del país.

## CONCLUSIONES QUE DEMUESTRAN EL IMPACTO DE LA PROGRESIVIDAD FISCAL

La falta de liquidez en las finanzas públicas del país, obedece en gran medida a la endeble estructura fiscal que le impide gastar e invertir en las magnitudes que reclama la realidad económica, justificando con ello la necesidad de incrementar los ingresos tributarios de México y gravar principalmente al consumo, dado que los fines sociales y productivos reclaman y justifican una recaudación significativamente mayor, sin que el Gobierno Federal quiera apreciar y reconocer que a quienes más afectan este tipo de políticas económicas es a la mayoría de mexicanos.

Así bien; en materia de ingresos público, de acuerdo con lo señalado por Manrique (2005), cuando imperaba el modelo ISI, los ingresos tributarios en materia de comercio exterior, proveían al gobierno de un 30% del Producto Interno Bruto (PIB) en la década de 1960, y un 20% del PIB en la década de los setenta, sin embargo, como producto de la liberalización comercial, estos ingresos tributarios no representan ni la quinta parte del PIB.

En los datos que nos ofrece el Instituto Nacional de Estadística, Geografía e Informática, vemos que a inicio de los años 80s, la inflación paso del 30% al 63%, con una devaluación diaria sostenida que alcanzo el 581% en 1982; entre otros, estos fueron importantes indicios con los que

los gobernantes de México hicieron creer que el modelo ISI se había agotado, a fin de justificar el cambio de política económica.

En 1982, la economía de México se colapsó ante la evolución acelerada del déficit en cuenta corriente, la debilidad del mercado petrolero y la enorme deuda externa acumulada. La deuda externa ascendía a 80 millones de dólares, y representaba un determinante del déficit en cuenta corriente, dado que el pago de intereses era mayor que disponibilidad neta de recursos provenientes de la cuenta comercial. Con todo esto, México al ser un país eminentemente necesitado del financiamiento externo, no pudo quedarse al margen de continuar las medidas del “Consenso”, que prometían condiciones para un crecimiento sostenido, entonces adoptó una política fiscal austera en las finanzas públicas: contención del gasto público, restricción crediticia, ajuste del tipo de cambio, prioridad al pago de la deuda y control a las importaciones. Parte de los cambios de política económica de México, han tomado especial fuerza a partir de los procesos de ajuste y políticas de liberalización que surgieron del “Consenso de Washington”. Es bajo estos acuerdos que se concibieron y gestaron una serie de medidas de política económica para orientar a los gobiernos de países en desarrollo, a mitigar su déficit económico, en el momento de solicitar apoyo financiero a organismos internacionales. Claro fue que bajo la función de la valoración que estos organismos internacionales harían respecto a los avances económicos de países que solicitaría más financiamiento.

Con esta referencia contextual, se dio la renegociación de la deuda externa en la década de los 80's, lo que representó para México adoptar una serie de políticas macroeconómicas para lograr la estabilización económica y financiera. Entre estas políticas de desprotección del mercado interno, de desregulación del comercio y las operaciones financieras, y de desestatización al privatizar las empresas públicas, se destaca la nueva forma que debiese adoptar la política fiscal. Bajo el modelo neoliberal, la política fiscal se ha orientado con base a tres ejes fundamentales: 1) La disciplina fiscal, 2) Prioridades en el gasto público y 3) Las reformas fiscales y tributarias. En este apartado de los lineamientos del consenso de Washington, se argumentó que se requería mitigar el déficit fiscal mediante la modificación y recortes de los componentes del gasto público; esto garantizaría mantener las finanzas públicas del país sanas. El proceso de arranque de una política fiscal disciplinada, prometía un crecimiento en todos los sectores de la economía, lo que permitiría mejorar la distribución del ingreso y un mayor desarrollo económico y social del país. La realidad ha demostrado que las consecuencias derivadas de la aplicación de estas políticas, deja mucho que desear en América Latina y en especial en México, ya que han ocasionado un sentir generalizado de insatisfacción entre la población y los actores sociales.

En este sentido, de acuerdo con Pagaza (2008), entendemos que se ha acentuado la dependencia de las finanzas públicas respecto al ciclo económico, lo que genera inestabilidad en el gasto productivo y con ello vulnerabilidad en la política fiscal fortalecida por la caída de los ingresos públicos, el déficit y la deuda pública, situación que obliga a modificar el esquema de equilibrio fiscal. La disciplina fiscal en el México actual, tiene un sesgo depresivo y anti-acumulativo, que descansa en el aumento de impuestos al consumo y la reducción del gasto público. Al respecto, en cuanto a los efectos de la política fiscal sobre el crecimiento económico, Johansson et al. (2008) y Romero-Ávila y Strauch (2008) señalan que a partir de una muestra de países de la OECD y de la Unión Europea, que el mayor efecto distorsionante y regresivo de la política fiscal corresponde al impuesto de sociedades, seguido del impuesto a la renta personal mientras que los del consumo son los menos perjudiciales.

Por su parte Harju y Kosonen (2012) exponen que cuanto mayor es la progresividad de los impuestos mayor es su efecto negativo sobre el esfuerzo de los emprendedores y el crecimiento

económico. Así también, aunque pareciera absurdo, pero en el estudio realizado por Keane (2011), determina que los impuestos sobre las rentas del trabajo reducen la oferta de trabajo y también la inversión en capital humano. Conforme a este estudio, podemos que del análisis de la literatura disponible, Salinas y Delgado (2012) sistematizan los principales resultados y extraen las siguientes conclusiones para los estudios en países de la OCDE: 1) En general se observa un efecto negativo entre impuestos y crecimiento económico, 2) Además, la mayor parte de los estudios revisados concluyen una relación de signo negativo. Aunque el número de trabajos analizados es reducido, 4 de los 6 estudios sostienen esa conclusión, mientras que los dos restantes no llegan a un resultado estadísticamente significativo. Martner et al (2013), encuentra estudios que sostienen un consenso en las repercusiones del grado de progresividad del sistema tributario sobre el crecimiento económico y destaca que de los 6 trabajos en esta materia se coincide en una relación negativa, es decir, a mayor progresividad de los sistemas tributarios, menor crecimiento económico. También hay unanimidad en los estudios que analizan el impacto de un cambio en la estructura tributaria (o tax mix) consistente en el incremento del peso de la imposición indirecta (impuestos que gravan el consumo) en detrimento de la directa (impuestos sobre la renta de empresas e individuos). Los trabajos revisados prevén mejoras de crecimiento económico con este cambio.

Tabla 1: Literatura Empírica Sobre La Relación Entre Impuestos y Crecimiento Económico: Principales Resultados

<b>LITERATURA EMPIRICA SOBRE LA RELACION ENTRE IMPUESTOS Y CRECIMIENTO ECONOMICO: PRINCIPALES RESULTADOS</b>			
Número de estudios	Número y porcentaje de estudios que concluyen relación positiva	Número y porcentaje de estudios que concluyen relación negativa	Número y porcentaje de estudios que concluyen relación no significativa
Estudios sobre impuestos (21)	1 (4.8%)	13 (61.9%)	7 (33.3%)
Progresividad (6)	0 (0%)	6 (100%)	0 (0%)
Cambio de impuestos: impuestos indirectos en deterioro de directos (5)	5 (100%)	0(0%)	0 (0%)

Fuente: Salinas y Delgado (2012)

El efecto redistributivo de la acción fiscal directa depende del nivel, composición y grado de progresividad de cada componente de impuestos y transferencias. Estas tres dimensiones definen las características del país y su política fiscal (Joumard et al., 2012) Impuestos y transferencias directas tienen un impacto redistributivo significativo en los países de la OCDE; la desigualdad en el ingreso disponible después de impuestos y transferencias es 30% menor que la desigualdad antes de impuestos y transferencias. Medida por el índice de Gini, la reducción es de 15 puntos en promedio en la OCDE.

ii) Los países de la OCDE que tienen una distribución más desigual del “ingreso de mercado” (previo a impuestos y transferencias) tienden a redistribuir más. Los casos extremos son Italia, Inglaterra y Finlandia, cuyos coeficientes de Gini pasan de 0,55 a 0,35, de 0,50 a 0,32 y de 0,48 a 0,25, respectivamente. Un caso especial es Corea, que tiene un bajo coeficiente de Gini (0,34) previo a la acción fiscal, y de 0,31 luego de ella. Aunque este país carece de transferencias directas significativas a los hogares y tiene una presión fiscal reducida, la igualitaria distribución

primaria del ingreso puede asociarse al tremendo salto en educación de los últimos treinta años, pues más de un 65% de la generación de 25-34 años posee educación terciaria, en contraste con algo más de 10% de la generación de 55-64 años.

iii) En los países de la OCDE, las transferencias directas reducen más la dispersión del ingreso que los impuestos; tres cuartos de la reducción en la desigualdad entre el ingreso de mercado y el ingreso disponible pueden atribuirse a las transferencias, y el resto a los impuestos.

iv) Al tratarse esencialmente de pensiones en sistemas de reparto, en el promedio de países OCDE las transferencias reducen sobre todo la inequidad para los mayores de 65 años, pasando el coeficiente de Gini de 0,70 a 0,29 para este grupo etario. En cambio, para la población en edad de trabajar el coeficiente se reduce de 0,41 a 0,31. En países con sistemas públicos de pensiones maduros, los mayores de 65 años son pobres en términos de rentas de mercado y las pensiones públicas son su principal fuente de recursos. En cambio, en los países de América Latina y principalmente en México, la distribución del ingreso, es muy desigual antes de impuestos y transferencias directas, mejora sólo levemente por la acción fiscal directa. Lustig et al. (2013) localizan que la magnitud de la reducción de la desigualdad inducida por impuestos directos y transferencias en efectivo, es muy acotada en México (2% en promedio). El nivel de impuestos y su progresividad impacta también indirectamente sobre la distribución del ingreso. Por tanto, la capacidad del sistema tributario para corregir distribuciones desiguales dependerá del volumen recaudado y de la estructura de tasas según niveles de ingresos, pero también de la evasión del impuesto a la renta y del número de exenciones. A mediano plazo, el sistema tributario puede tener influencia sobre la oferta de trabajo (por ejemplo si existen muchas cargas asociadas al empleador), el esfuerzo individual y el tamaño de las familias, todos asuntos que inciden en la evolución del coeficiente de Gini.

En México, la evidencia empírica reciente revela que las políticas fiscales han afectado significativamente la distribución del ingreso, directamente por el gasto social y la progresividad tributaria, e indirectamente por la calidad de la educación y de las instituciones. Asimismo se subraya el papel primordial de los ingresos laborales en las mejoras recientes a través de la intervención del Estado.

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# ANÁLISIS DE LAS TÉCNICAS DE MOTIVACIÓN EMPLEADAS EN LAS EMPACADORAS DE LIMÓN DE LA CIUDAD DE TECOMÁN, COLIMA

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## RESUMEN

*En este trabajo se analizan las técnicas de motivación como fuente de desarrollo y aumento de productividad de las empacadoras de limón de la ciudad de Tecomán, Colima, tomando las actitudes de los trabajadores y su respuesta al uso de incentivos motivantes adecuados a las necesidades de cada individuo. Para lograr lo anterior se utilizó el Método descriptivo, permitiendo realizar un análisis de los factores de motivación de los empleados en las empacadoras. Esta investigación fue satisfactoria ya que se detectaron las técnicas de motivación más utilizadas en las empacadoras y de igual forma las que dan los mejores resultados para alcanzar los objetivos planteados por la empresa.*

**PALABRAS CLAVE:** Técnicas de motivación, desarrollo, actitudes y productividad.

## ABSTRACT

*In this research work has as its main topic of attention to the analysis of motivational techniques as the main source of development and increased productivity of lemon packing Tecomán City, Colima. Subsequently analyze the attitudes taken by workers to be objective motivating the use of incentives tailored to the needs of each individual and how they influence positive or negative performance of workers. To achieve the above was used a method called "descriptive method", this allows us to perform an analysis of the motivating factors used in the packaging or in breach of those not using them, and deduce the reasons for the lack or achievement motivation in employees, and observe the positive or negative effects that these techniques in the employment and that they impact on the company.*

**KEYWORDS:** Motivational techniques, Attitudes, Development, Productivity.

## INTRODUCCIÓN

El desempeñar o realizar un trabajo de la manera correcta no solo comprende factores laborales, sino que también tiene una estrecha relación con aspectos económicos, sociales, legales y psicológicos. Herzberg (1968), en una de las investigaciones realizadas, sostiene que la motivación es un tema elusivo en virtud de las múltiples diferencias que existen entre las personas acerca del trabajo y del valor que a éste le asignan en sus vidas. En este sentido existirían dos tipos de individuos: Aquéllos que sólo buscan evitar el dolor y, primordialmente, satisfacer sus instintos básicos tales como: alimentación, abrigo y seguridad. Y los que piensan que el trabajo es la principal fuente a partir de la cual satisfacen sus necesidades de crecimiento

personal y de trascendencia en la vida. En esta investigación se llevo a cabo un análisis de los conceptos de la motivación y su influencia en el ambiente laboral dentro de la organización, en especial de las técnicas de motivación que se emplean en las empresas en la actualidad, si es que emplean algunas.

## REVISION LITERARIA

Se dice que los primeros intentos realizados con la finalidad de poder entender la motivación en el ser humano provienen del tiempo de los filósofos Griegos, estos se basaron en un concepto llamado hedonismo como la principal razón que da origen a un determinado comportamiento (Steers, Mowday y Shapiro, 2004, citado por Arrieta, 2008).

De acuerdo a estos estudios a mediados del siglo XX surgieron algunas teorías que estudiaban diferentes aspectos referentes a la motivación, con la aparición de estas teorías se comenzó a relacionar la motivación del empleado con su rendimiento en el ámbito laboral y su satisfacción personal. Estos estudios arrojaron como conclusiones que un trabajador motivado es más eficaz y responsable y además parte fundamental para el origen de un buen clima laboral. (Steers, Mowday y Shapiro, 2004, citado por Arrieta, 2008)

El presente estudio se inclina por considerar a la *motivación* desde una mirada de orientación cognitiva – conductual, es posible entenderla como “una causa hipotética de la conducta inducida por las condiciones ambientales o que se puede inferir de las expresiones conductuales, fisiológicas y de auto- informe” en este sentido, el estudio de la motivación puede ser entendido como “la búsqueda de las condiciones antecedentes al comportamiento energizado y dirigido” (Reeve, 1994, citado por Espinoza, 2006).

### Motivación En El Entorno Laboral

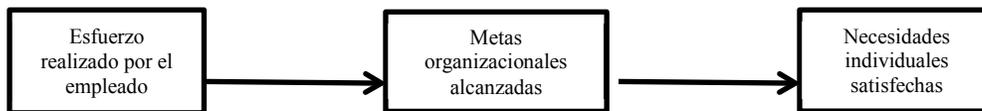
La motivación es un elemento fundamental para el éxito de las empresas, ya que de ella depende en gran medida el cumplimiento de los objetivos de la misma. En distintos sectores no han considerado la importancia de la motivación y siguen haciendo uso de recursos que no traen los resultados necesarios y los cuales no le dan la debida importancia al factor humano, (Strauss, 1991). . También es de gran importancia que la gerencia sepa transmitir adecuadamente el proyecto empresarial para hacer sentir a los empleados y empleadas que forman parte, por tanto participen en su desarrollo. (Sayles, 1991).

### Proceso De La Motivación

Una definición más descriptiva de la motivación plantearía que es la disposición para hacer algo, en donde la habilidad de la persona para satisfacer alguna necesidad condicione algo. (Robbins, 2001).

La motivación al empleado se puede definir como la disposición de un individuo para esforzarse en lograr las metas de la organización, con la condición de que esta habilidad para trabajar satisfaga su propias necesidades. Entonces, inherente a esta definición se encuentran tres componentes: esfuerzo, las metas organizacionales y las necesidades individuales. (Maslow, 1943).

Figura 1: Componentes de la motivación.



Fuente: Maslow (1943)

### Ciclo Motivacional

El ciclo motivacional empieza con el surgimiento de una necesidad. La necesidad es una fuerza dinámica y persistente la cual da origen al comportamiento. Cuando surge una necesidad, esta rompe el estado de equilibrio del organismo, produciendo un estado de tensión, insatisfacción, incomodidad y desequilibrio. Este estado lleva a que el individuo tenga un comportamiento o reacción, capaz de liberar tensión o de liberarlo de la incomodidad y del desequilibrio. (Chiavenato, 2007).

Figura 2: Ciclo motivacional.



Fuente: Chiavenato (2007).

A medida que este ciclo se repite los comportamientos se vuelven más eficaces para la satisfacción de ciertas necesidades. Una vez satisfecha la necesidad deja de motivar el comportamiento, ya que no ocasiona tensión ni incomodidad. (Chiavenato, 2007).

### Modelo E-R-C de Alderfer

Clayton Alderfer, realizó una revisión de las necesidades de Maslow con el fin de superar algunas de sus debilidades, y estimó que existía una jerarquía con tres grandes niveles de necesidades:

1) Necesidades de existencia (E): incluyen las fisiológicas y de seguridad: se refiere a la provisión de los elementos básicos para la supervivencia humana y alude a aquellas que Maslow denominaba fisiológicas o básicas y de seguridad.

2) Necesidades de relación (R): incluyen las sociales y de reconocimiento externo: corresponden al deseo personal de establecer vínculos de importancia y son el paralelo de las necesidades sociales y de estima descritas por Maslow.

3) Necesidades de crecimiento (C): incluyen las de autorrealización y autoestima: estas aluden al anhelo de desarrollo individual, o en otras palabras, de autorrealización (Robbins, 2004).

### Teoría de las expectativas de Vroom

Esta perspectiva, que inicialmente propuso el autor Víctor Vroom (1992) y que luego fue complementando con los aportes de Lawler III, afirma que “la fuerza de una tendencia a actuar de una manera depende de la fuerza de una expectativa de que al acto seguirá cierto resultado que el individuo encuentra atractivo” Los trabajadores se sentirán motivados para aumentar su desempeño, si estiman que ello traerá como resultado una buena evaluación del mismo, inadecuadas recompensas organizacionales y satisfacción de metas personales (Robbins, 2004).

### Efectos de la motivación en el desempeño y productividad laboral.

“Existen muchas pruebas de que el desempeño aumenta con los incrementos en la magnitud de la recompensa ofrecida por un desempeño productivo; sin embargo, algunos investigadores han demostrado disminuciones en el desempeño bajo altos niveles de motivación.”(Vroom, 1992)

Esta teoría se apoya en los siguientes aspectos:

Se dice que una persona bastante motivada puede confundirse y solo llevar a cabo indicaciones que le sean de utilidad para la realización de sus metas u objetivos personales.

Una alta motivación puede llegar a producir una fuerte ansiedad que puede llegar a perjudicar la salud emocional del empleado y por tanto su desempeño.

### La competencia

Esta forma de motivación consiste en aumentos de sueldo y ascensos, que se destinan únicamente a los que cumplen adecuadamente con su trabajo. La competencia ofrece diversas formas de satisfacer las necesidades de los empleados en el que aumentan la perspectiva de ganar una promoción o una alza de salario lo cual forma una meta significativa para el trabajador, el llegar al cumplimiento de esta meta significa para el empleado disfrutar de la recompensa económica, como también llegar a un sentido de realización y cumplimiento, un sentido de progreso y mayor reconocimiento frente a sus compañeros. (Sayles, L, 1991)

### Motivación interiorizada

Consiste en proporcionar oportunidades para la satisfacción de necesidades por medio del desempeño del trabajo y así interiorizar la motivación, de modo que el trabajador disfrute de hacer un buen trabajo.

En este método se utilizan los motivadores de Herzberg (1987), según esta teoría, las personas están influenciadas por dos factores:

La satisfacción que es principalmente el resultado de los factores de motivación. Estos factores ayudan a aumentar la satisfacción del individuo pero tienen poco efecto sobre la insatisfacción.

La insatisfacción es principalmente el resultado de los factores de higiene. Si estos factores faltan o son inadecuados, causan insatisfacción, pero su presencia tiene muy poco efecto en la satisfacción a largo plazo. (Herzberg, 1987).

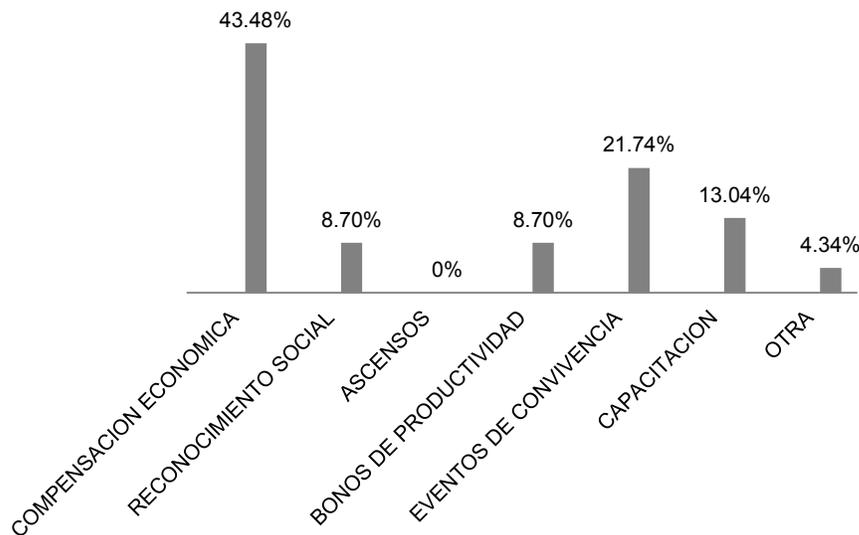
## **METODOLOGÍA**

Se aplicó un cuestionario a los administradores de 16 empacadoras de la ciudad de Tecomán, de un total de 17 Colima, el cual permitió obtener información acerca de los tipos de técnicas de motivación, satisfacción laboral, ventajas o desventajas, así como los diferentes factores que influyen en la motivación de los empleados de estas empresas, con el fin de lograr una investigación confiable.

## RESULTADOS

Se presentan los resultados obtenidos de la realización de encuestas a los gerentes de las diferentes empacadoras de limón de la ciudad de Tecomán, sobre la aplicación de las técnicas de motivación, así como la representación Figura de los datos obtenidos:

Figura 3: ¿Qué Técnicas De Motivación Utilizan?

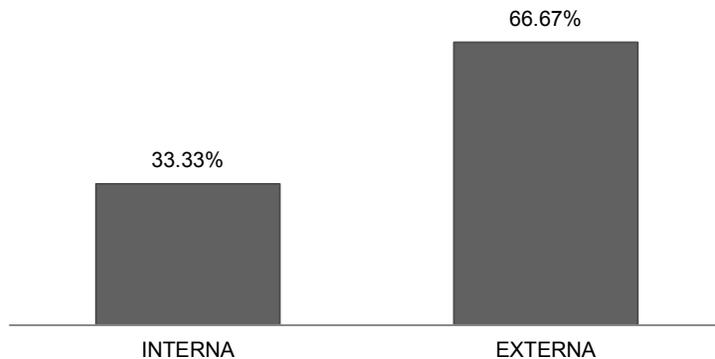


Fuente: Elaboración propia

Según la información recabada en esta pregunta se puede mencionar que la principal técnica de motivación que se emplea es la compensación económica, esto debido a que la mayoría de los empleados se esfuerza en sus labores diarias para obtener un mejor salario que beneficie a sus familias.

Figura 4: Clasificación de la motivación que se utiliza en las empacadoras (interna o externa)

4.- ¿QUÉ TIPO DE MOTIVACIÓN ES LA QUE MEJORES RESULTADOS LE PROPORCIONA?

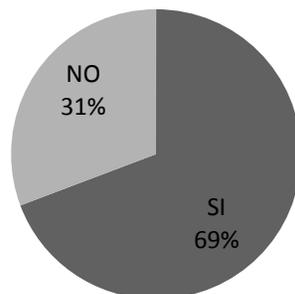


Fuente: Elaboración propia

Esta información viene a corroborar lo ya antes mencionado las empresas se enfocan en ofrecer al trabajador una motivación de tipo monetaria, que posiblemente es la que mejor reciben los empleados.

En este apartado se cuestiona a los gerentes de las emparadoras su opinión sobre las expectativas de sus empleados en el sentido monetario.

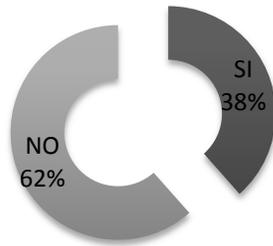
Figura 5: Considera Que Los Sueldos y Salarios Son La Principal Motivación De Sus Empleados?



Fuente: Elaboración propia

De acuerdo a los resultados de este cuestionamiento se logra apreciar que más del 50% de los gerentes opinan que sus empleados se sienten motivados al recibir compensaciones económicas, algunas veces simplemente recibiendo su salario base, el cual ayude para el sustento de su familia. En cuanto a la relación de los conocimientos técnicos del trabajador y el tipo de motivación ideal para este.

Figura 6: ¿Piensa Que La Elección De Una Técnica Debe De Ir De Acuerdo Al Grado De Estudio De Los Trabajadores?



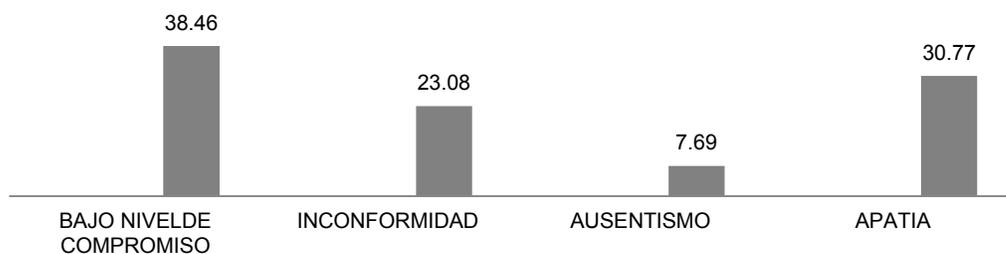
Fuente: Elaboración propia

En esta pregunta la mayoría de los encuestados respondió que NO debido a que muchos de los trabajadores de esos lugares no tienen los suficientes conocimientos académicos pero que con base a sus esfuerzos han logrado ascender. Con la siguiente pregunta se pretende saber que reacciones tienen los trabajadores que no son sujetos a ninguna forma de ayuda para mejorar su calidad de vida y por tanto la calidad de su trabajo.

Otro resultado de la falta de motivación es que el trabajador se vuelve apático en la realización de sus labores, muestra un mal desempeño, que no tenga una buena productividad y no le interese el mejorar su calidad de vida (30.77%).

En esta última pregunta se presentan dos opciones para el gerente sobre dos tipos de técnicas más usuales que se emplean en la motivación del empleado.

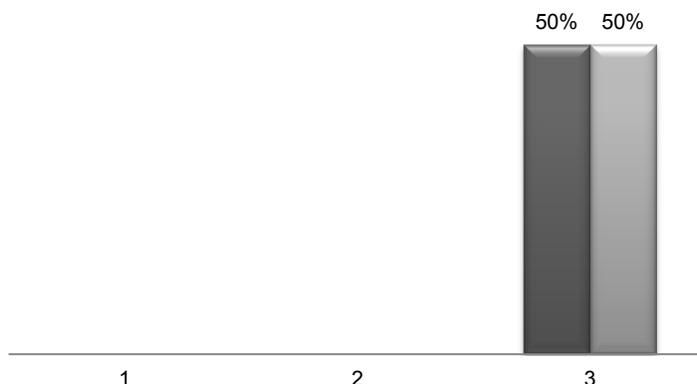
Figura 7: ¿Qué Reacciones Tienen Los Trabajadores Que No Reciben Alguna Técnica De Motivación?



Fuente: Elaboración propia

Figura 8 : ¿Cual Técnica Le Gustaría Desarrollar De Acuerdo Al Perfil De Sus Empleados?

■ RECONOCIMIENTO SOCIAL ■ RECONOCIMIENTO MONETARIO



*Fuente: Elaboración propia*

El 100% de los gerentes de las empacadoras coinciden en que para ellos sería importante llevar a cabo una combinación entre esas dos técnicas de motivación, ya que éstas contribuyen al desarrollo del empleado y de la empresa de una manera parecida y su unión podría tener un importante efecto para el progreso del empleado y de la empacadora.

## CONCLUSIONES

Las hipótesis en su mayoría resultaron ser ciertas ya que las empacadoras que utilizan la motivación como un técnica si aumenta la productividad de los empleados así como de sus empresas. Además también se demostró, que la motivación extrínseca, muestra un resultado mayormente satisfactorio a la hora de utilizarla, ya que tiene una mayor influencia en los trabajadores para que estos se motiven positivamente.

La investigación realizada muestra que las empacadoras del municipio de Tecomán aplican una gran variedad de técnicas de motivación para sus empleados con el fin de aprovechar al máximo sus habilidades, al ver que la empresa se compromete con ellos, estos realizan un mayor esfuerzo para superar las metas personales y por tanto de la empresa. También se demostró que la motivación extrínseca resulta más satisfactoria para los trabajadores que ninguna otra técnica, por ello todas las empacadoras la incluyen en sus técnicas para motivar.

Algunas otras formas de motivación que se encontraron fueron los bonos por la productividad, estos se refieren a algún tipo de vales para intercambiarlos por alimentos. Los eventos de convivencia forman parte también para motivar los cuales se realizan con el fin de que allá una mayor integración de todos los trabajadores de la empacadora.

Con respecto a la hipótesis N°5 el resultado fue que la mayor parte de los gerentes o encargados de estas empacadoras de limón de Tecomán, aceptan la importancia de que el trabajador este contento con su trabajo, que se le tome en cuenta en los objetivos de la empresa pero no solo como objeto de trabajo, si no como una persona que necesita de cierto empuje, apoyo, entusiasmo, para contribuir al desarrollo de la empresa, la mayoría de estos empresarios así lo entienden, y los que han dado una respuesta negativa no es por falta de interés, sino por falta de presupuesto para destinar dichos apoyos o incentivos laborales.

De acuerdo a los resultados arrojados por esta investigación se propone a los gerentes de las distintas empaadoras, el utilizar la técnica de motivación extrínseca hacia sus trabajadores, haciendo un análisis de costo-beneficio, el cual les mostrara las ganancias que se podrán obtener, al tener en cuenta esta herramienta también implica un gasto, pero a su vez originaria una alta productividad en los trabajadores, lo que sin duda resultaría un gran beneficio para las empresas.

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# DISEÑO Y APLICACIÓN DE UN MODELO DE MEDICIÓN DEL RIESGO OPERACIONAL UTILIZANDO REDES BAYESIANAS

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## RESUMEN

*El presente trabajo propone una metodología para la cuantificación de del nivel de exposición al riesgo operativo en una entidad financiera colombiana utilizando un modelo redes bayesianas (causales) para los factores establecidos por Basilea como claves, los cuales se evidencian en una de las líneas de negocio de esta entidad. El riesgo operativo o riesgo operacional es uno de los riesgos financieros que ha sido estudiado a mayor nivel de detalle en la última década tanto a nivel internacional como en el ámbito local, permitiendo que de este estudio se desprendan la adopción de diversas metodologías para su comprensión, cuantificación y gestión.*

**PALABRAS CLAVES:** Riesgo operativo, redes Bayesianas, modelación de riesgos

## DESIGN AND IMPLEMENTATION OF A MODEL OF OPERATIONAL RISK MEASUREMENT USING BAYESIAN NETWORKS

### ABSTRACT

*This paper proposes a methodology for quantifying the level of operational risk exposure on a Colombian financial institution using a Bayesian network model (causal model) to the factors set out by Basel as keys, which are evident in one of the lines business of this entity. Operational risk or operational risk is one of the financial risks that have been studied in greater detail in the last decade both internationally and locally, allowing this study arising adopting various methodologies for understanding , quantification and management.*

**JEL:** G17, G32

**KEY WORDS:** Operational risk, Bayesian networks, risk modeling

### INTRODUCTION

El proceso de gestión de riesgos, el cual consiste en identificar, cuantificar, gestionar y monitorear los riesgos actuales y futuros que afronta una entidad, ha sido implementado por un gran número de empresas financieras y no financieras. El primer tipo de riesgo en ser analizado por las empresas, en este caso financieras, fue el riesgo crediticio. Con este fin, el Comité de Basilea estableció en 1988 los requerimientos de capital mínimo y prácticas internas de gestión que todos los bancos deberían implementar para el manejo de este tipo de riesgo.

En la siguiente década se iniciaron los esfuerzos para la identificación, cuantificación y cubrimiento del riesgo de mercado, es decir, el relacionado con variables internas y externas de

mercado que afecten los precios y por tanto el valor de los activos, algunas de estas variables pueden ser: tasas de cambio, tasas de interés, precios de acciones y materia prima (commodities).

A partir del año 2000, las empresas han enfocado su atención al manejo del riesgo operativo (RO), un tipo de riesgo que había sido considerado por muchas instituciones financieras como no cuantificable. El Comité de Basilea, ha venido elaborando los cimientos para un Nuevo Acuerdo, cuya versión final fue publicada hacia fines del año 2004

El objetivo del presente estudio es profundizar en la implementación de nuevas metodologías de cuantificación del nivel de exposición de capital a las pérdidas potenciales por RO así como la determinación de los requerimientos mínimos de este capital para afrontar estos riesgos.

Para este fin se propone realizar una revisión de los diferentes modelos de medición propuestos a niveles internacionales y validados y reconocidos por el ente de regulación financiero nacional (Superintendencia Financiera de Colombia), partiendo, por supuesto de los acuerdos internacionales desarrollados por el Banco Internacional de Pagos, BIS, por sus siglas en inglés.

Adicionalmente se profundizará en la cuantificación del RO a través de la metodología de Redes Bayesianas evaluando las aproximaciones teóricas a los modelos y decantando en las posibles aplicaciones que en diferentes contextos se hayan realizado, proponiendo para un Banco comercial de importante trayectoria en Colombia un modelo de medición y cuantificación del nivel de exposición de su capital a las pérdidas por riesgo operativo.

## **REVISIÓN LITERARIA**

En este trabajo de investigación se propone utilizar una metodología eficaz que permitirá cuantificar el nivel de exposición al riesgo operativo ya sea de una entidad financiera o real, con datos exactos obtenidos de bases de datos ciertos, o de una entidad ficticia con datos simulados o estimados construidos de manera artificial.

Se utilizó la metodología de las redes bayesianas dado que este es un modelo bastante poderoso cuando los datos históricos existentes sobre la variable de interés son pocos, poco confiables o de difícil modelación con otro tipo de técnicas, dado que estos datos, antes de ser considerados, son previamente validados por expertos con el fin de parametrizar su posible comportamiento (distribuciones o probabilidades a priori) (Yasuda, 2003)

La principal diferenciación a favor de utilizar esta metodología se basa en la simplificación en la aplicación del modelo, se propone una serie de pasos o fases sistemáticas para su implementación (Mendoza 2004) pasando desde la definición de las variables o factores de riesgo operativo a medir en la entidad financiera, hasta la validación de las probabilidades a priori una vez la información histórica de la entidad lo permita.

Estos resultados, así como las conclusiones que de él se deriven son válidos en las condiciones y realidades propuestas y tendrán así mismo una vigencia temporal dada.

Una vez validado el modelo con las pruebas de escritorio que revisaron la consistencia y parametrización de éste y a la par con la realización de la simulación y definición de la carga de capital a provisional por cada factor de riesgo, por unidad de negocio y total para la entidad, se procedió a determinar las probabilidades a posteriori de ocurrencia de eventos de riesgo operativo en la entidad. Para esto se tomó la base de datos históricas de eventos en los cuales se ha

presentado evidencia de pérdidas asociadas a factores de riesgo operacional en cada uno de los niveles determinados contra la totalidad de operaciones o transacciones por cada línea y se incorporaron estas probabilidad en el modelo (evidencia) lo que generó un nuevo resultado para la simulación.

Queda faltando únicamente un contraste entre los resultados del modelo bayesiano con el propuesto por la entidad de supervisión y control financiero (Superintendencia Financiera de Colombia) para determinar la carga de capital expuesta a riesgo operacional.

## METODOLOGÍA

En esta sección se busca implementar una metodología que permita identificar y cuantificar la exposición de una entidad financiera que presente una estructura de líneas de negocios de acuerdo con las definidas por el comité de Basilea, al riesgo operativo. Teniendo en cuenta la escasez de información histórica por la falta de documentación y sistematización de estos eventos de pérdida debidas al riesgo operativo que se presenta en la mayor parte de las entidades financieras colombianas, se debe desarrollar una metodología que tenga en cuenta la información cualitativa que se puede obtener por fuentes externas (expertos) de una manera estructurada pero que, al mismo tiempo, sea capaz de incorporar los eventos de pérdida debidos al riesgo operativo, en la medida que éstos se vayan presentando.

Así, la metodología que se desarrolla y se explica en este modulo permite tener en cuenta las cuatro fuentes de información identificadas en el capítulo anterior para la medición del riesgo operativo en entidades financieras, las cuales son: eventos de pérdida internos, eventos de pérdida externos, indicadores de riesgo y juicios de los expertos.

La metodología consta de 9 etapas o pasos los cuales se presentan a continuación.

Tabla 1: Etapas a seguir para implementar el modelo de medición de exposición al riesgo operativo en cada línea de negocio

No	Etapas
1.	Selección de la línea de negocio de la entidad
2.	Categorización de los posibles eventos de pérdida
3.	Definir niveles de severidad para los eventos de pérdida
4.	Identificar indicadores de riesgo
5.	Establecer relación entre indicadores y eventos
6.	Construir el modelo de red bayesiana
7.	Validar el modelo de red bayesiana
8.	Obtener la distribución de pérdidas agregadas
9.	Calcular la provisión de la entidad para la línea de negocio

*En esta tabla se describe la secuencia de pasos que se deben implementar para la medición determinación y cuantificación del riesgo operativo asociado a cada uno de los factores establecidos en Basilea. Fuente: Elaboración propia*

## RESULTADOS

Consideraciones generales sobre la recolección de la información

El proceso de selección y clasificación de los datos para el desarrollo del modelo se convierte en un elemento fundamental del proceso, uno porque de la disponibilidad de esta información se

podrán realizar las pruebas que nos permitan determinar las distribuciones de probabilidad a priori sobre las que se fundamenta la técnica de modelación Bayesiana y dos porque de esta información se desprenden los controles que conllevan en la entidad financiera a implementar el Sistema de Administración de Riego Operativo en su etapa de gestión de riesgos.

Las fuentes de información sobre las cuales se realizara la toma de datos se clasifican en dos dimensiones (internas y externas) de las entidades objetos de intervención, a saber:

Fuentes internas:

Eventos de pérdidas asociados a RO, Información de severidad de las pérdidas ocasionadas por RO

Fuentes Externas:

Bases de datos teóricas de eventos y severidad construidas por la entidad de regulación y control, Juicios de expertos consultados sobre eventos y severidad, Indicadores de riesgo estándar utilizados a nivel nacional e internacional

La primera fuente de información está representada por los datos sobre las pérdidas debidas a eventos internos y externos. De acuerdo con el Comité de Basilea estos datos están conformados tanto por los eventos de alta frecuencia y bajo impacto económico como por eventos de baja frecuencia y alto impacto económico.

#### ETAPA 1: Seleccionar las Líneas de Negocio

La línea de negocio seleccionada fue Banca Empresarial. Esta línea de negocios se encuentra orientada a las personas jurídicas que utilizan la entidad financiera para realizar sus actividades de inversión y financiación mediante una variada cantidad de productos financieros como cuentas de ahorro, cuentas corrientes empresariales, CDT's , tarjetas de crédito empresariales y líneas de crédito como capital de trabajo, leasing y fiducréditos, así como servicios adicionales para el manejo de los recursos de manera rápida y eficiente mediante una sucursal virtual mediante la instalación de un software al cliente, que le permite realizar consultas y transacciones financieras, desde su propia oficina, sobre los diferentes productos y servicios que tiene con el banco, respondiendo a sus necesidades de información de manera eficiente y segura.

#### ETAPA 2: Categorizar los Posibles Eventos de Pérdida

El grupo de trabajo de Banca Empresarial seleccionó las siguientes categorías de eventos de pérdida, definidas por el Comité de Basilea, para tenerlas en cuenta en la identificación y cuantificación del Riesgo Operativo:

Fraude Interno, Fraude Externo, Prácticas de Empleo y Seguridad del área de Trabajo, Clientes, Productos y Prácticas del Negocio, Interrupción del Negocio y Fallas en los Sistemas de información, Ejecución y Manejo de Procesos

#### ETAPA 3: Definir Niveles de Severidad para los Eventos de Pérdida

El grupo de trabajo de Banca Empresarial definió los siguientes niveles de severidad para los eventos de pérdida:

Nivel 1: pérdidas entre \$0 y \$50.000.000

Nivel 2: pérdidas entre \$50.000.000 y \$100.000.000

Nivel 3: pérdidas entre \$100.000.000 y \$200.000.000

Nivel 4: pérdidas entre \$200.000.000 y \$500.000.000

Nivel 5: pérdidas entre \$500.000.000 y \$1000.000.000

#### ETAPA 4: Identificar Indicadores de Riesgo

Para la identificación y definición de los indicadores se siguieron cada uno de los pasos sugeridos por la metodología para esta etapa:

El grupo de trabajo de Banca Empresarial identificó indicadores de riesgo para cada una de las categorías principales de eventos de pérdida. Las siguientes tablas muestran los indicadores identificados para cada una de las categorías. Adicionalmente, las Tablas presentan una descripción de cada indicador, los posibles niveles definidos por el grupo de trabajo de Banca Empresarial, y el nivel en el cual el grupo cree que se encuentra ubicado el Banco actualmente, a continuación se presenta un ejemplo del procedimiento establecido para determinar niveles y subniveles de indicadores para el factor de riesgo Fraude interno.

Tabla 2: Clasificación de los indicadores y sub indicadores por categoría de evento asociado a riesgo operativo

CATEGORÍA	INDICADORES			SUB-INDICADORES		
	INDICADOR	DESCRIPCION	NIVEL	SUB-INDICADOR	DESCRIPCION	NIVEL
Fraude Interno	1. Seguridad en el envío de Claves	Nivel de eficiencia y seguridad en la entrega de claves a nuestros clientes	1. BAJO 2. MEDIO 3. ALTO	Generación de claves	Personas que intervienen en la generación de claves	1. UNA PERSONA 2. VARIAS PERSONAS
				Seguridad en la recepción de las claves por parte del cliente	Nivel de privacidad en el correo de los clientes que reciben las claves	1. BAJO 2. MEDIO 3. ALTO
	2. Restricciones en la asignación de códigos de convenios	Nivel de restricción en la asignación de cuentas en el momento de habilitar la opción de pagos a terceros	1. BAJO 2. MEDIO 3. ALTO			
	3. Supervisión	Existencia de supervisión al procesos de asignación de claves	1. NO 2. SI			
	4. Confidencialidad de la información	Manejo adecuado de la información de los clientes	1. NO 2. SI			
5. Calidad del personal	Calidad del personal Relacionado con la Terminal	1. MALO 2. REGULAR 3. BUENO	Antecedentes disciplinarios	Reseña en Entidades Judiciales del personal	1. NO TIENEN 2. TIENEN	
			Nivel de Vida	Forma y estilo de vida	1. BAJO 2. MEDIO 3. ALTO	

*Se construyó una matriz que permitiera asociar los diferentes eventos de exposición a R.O con indicadores y sub indicadores de nivel.  
Fuente: Elaboración propia*

#### ETAPA 5: Establecer la Relación entre los Indicadores de Riesgo y los Eventos de Pérdida

Al igual que en el paso anterior, se definió un orden de importancia entre los indicadores para identificar cuáles de ellos eran más importantes para explicar la ocurrencia los eventos de pérdida, adicionalmente, se definió la relación entre los indicadores y los eventos de pérdida relacionados:

#### ETAPA 6: Construir el Modelo de Redes Bayesianas

La construcción del modelo de Redes Bayesianas se realizó en dos pasos: Definición de Variables y Estimación de las Probabilidades Condicionales, para la definición de variables en la Red Bayesiana se consideraron para las diferentes categorías de eventos de pérdida, los indicadores y sub-indicadores de Riesgo definidos en estas.

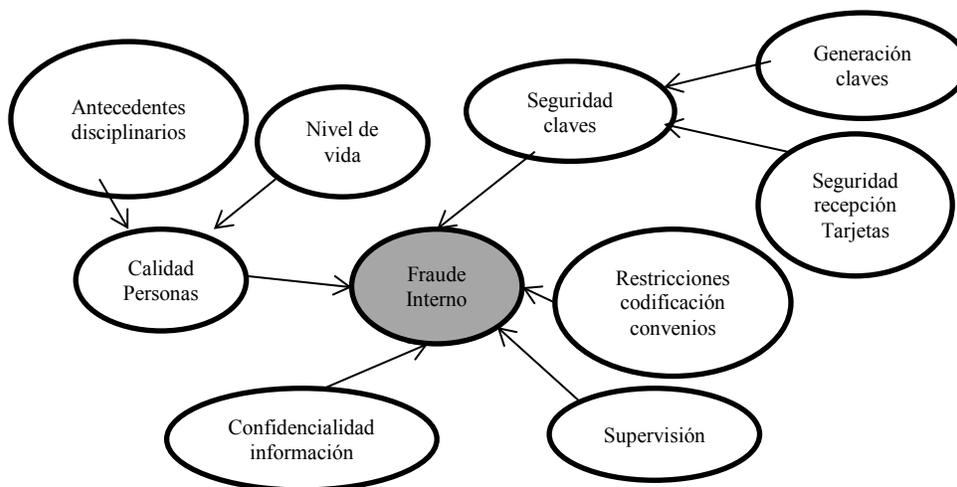
Con la ayuda del software Hugin Lite 7.6 se construyó la red Para cada uno de los sub-indicadores o indicadores que no dependen de otros indicadores, se debe fijar el nivel en el cual se encuentra actualmente el banco, de acuerdo con lo definido por el grupo de trabajo. Esto es importante ya que nos presenta la evidencia necesaria para construir las probabilidades a priori entre cada indicador construido y el factor de riesgo al cual se encuentra asociado.

Tabla 3: Relación evento de pérdida – Indicador asociado para su cuantificación

CATEGORÍA	INDICADOR	NIVEL	RELACIÓN CATEGORÍA - INDICADOR
FRAUDE INTERNO	1. Seguridad en el envío de Claves	1. BAJO 2. MEDIO 3. ALTO	Si existe más seguridad en el envío de claves, disminuye la posibilidad de que ocurran pérdidas debidas a Fraudes Internos.
	2. Restricciones en la asignación de códigos de Convenios	1. BAJO 2. MEDIO 3. ALTO	Si aumentan las restricciones en la asignación de códigos de convenio, disminuye la posibilidad de que ocurran pérdidas debidas a Fraudes Internos.
	3. Supervisión	1. NO* 2. SI	Si aumentan los niveles de supervisión, disminuye la posibilidad de que ocurran pérdidas debidas a fraudes Internos.
	4. Confidencialidad de la información	1. NO 2. SI	Si se mantiene la confidencialidad de la información, disminuye la posibilidad de que ocurran pérdidas debidas a Fraudes Internos.
	5. Calidad del personal	1. MALO** 2.REGULAR 3. BUENO	Si el producto es manejado por un personal de alta calidad, disminuye la posibilidad de que ocurran pérdidas debidas a Fraudes Internos.

En esta tabla se hace una clasificación de cada uno de los niveles asociados a los indicadores que serán utilizados para la medición de los eventos de riesgo operativo, en algunos casos la escala es binomial (\*) para asignar uno o cero de acuerdo con la presencia o ausencia del control respectivo, en otros casos se clasifica en una escala mayor (\*\*) por ejemplo en alto, medio y bajo cuando los controles existen y se implementan pero no en una forma eficiente. Fuente: Elaboración propia

Figura 1: Esquema del modelo de red bayesiana para la cuantificación de riesgo operativo en la entidad financiera



Esquema del modelo de red bayesiana asociado al factor fraude interno. Fuente: Elaboración propia, en el cual se pueden observar 5 niveles (Calidad de las personas, Confidencialidad de la información, Supervisión, Restricciones en la codificación de convenios y seguridad en el manejo de claves) a su vez este último nivel tiene dos subniveles (Generación de claves y Seguridad en la recepción de las tarjetas). Fuente : Elaboración propia apoyada en el software Hugin Lite 7.6 para la modelación de la red

Estimación de las Probabilidades Condicionales: las probabilidades condicionales se estimaron con base en el orden de importancia y las relaciones entre sub-indicadores e indicadores y entre indicadores y categorías de eventos de pérdida, definidos en las etapas 4 y 5. Para ello, inicialmente, se estimaron las probabilidades condicionales para los indicadores que dependían de sub-indicadores, para ello, se estimó la probabilidad de ocurrencia de cada nivel del indicador principal dados los diferentes niveles en los sub-indicadores de los cuales dependía. Por ejemplo, en el caso del indicador Seguridad en el Envío de Claves, para el cual se definieron dos sub-indicadores y se estimaron las siguientes probabilidades

Tabla 4: Calculo de las probabilidades condicionales Para el indicador Seguridad en el manejo de claves

Generación de claves	Seguridad en la recepción de claves					
	Baja		Media		Alta	
	Una Persona	Varias Personas	Una Persona	Varias Personas	Una Persona	Varias Personas
Baja	0.2	0.4	0.1	0.4	0.2	0.3
Media	0.5	0.5	0.2	0.3	0.2	0.5
Alta	0.3	0.1	0.7	0.3	0.6	0.2

*La construcción de las probabilidades condicionales fue realizada con el aporte de los expertos de la entidad, estas probabilidades deberían ser revisadas posteriormente con la evidencia que se obtiene en campo. Fuente: Elaboración propia apoyada en el software Hugin Lite 7.6 para la modelación de la red*

De esta manera, si la seguridad en la recepción de claves por parte del cliente es baja y la generación de claves en el banco es realizada por una sola persona, entonces el grupo de trabajo estimó que la Seguridad en el Envío de Claves será baja con una probabilidad de 0.2, media con probabilidad de 0.5, y alta con probabilidad de 0.3.

Las probabilidades condicionales para las demás categorías de eventos de pérdida, se estimaron de manera similar.

#### ETAPA 7: Validar el Modelo de Redes Bayesianas

Debido a la ausencia de información histórica sobre eventos de pérdida, no fue posible validar las probabilidades condicionales definidas en el paso 6. Sin embargo, el modelo planteado permite actualizar fácilmente las probabilidades en caso de que se cuente con nueva información.

Después de aplicar las primeras 7 etapas de la metodología se obtiene la distribución de probabilidad para cada una de las demás categorías de eventos de pérdida.

Finalmente el modelo general se detalla en la siguiente tabla, en la que se observa por ejemplo que la probabilidad de que se presente una pérdida de nivel 1 (bajo) en el factor riesgo interno es del 67,8%.

Tabla 5: Cálculo de las probabilidades a posteriori asociadas con los factores de riesgo operativo para la línea de negocio Banca Empresarial

Probabilidad de ocurrencia de un evento de riesgo operativo asociado a cada factor						
Pérdida de nivel	Fraude interno	Fraude externo	Práctica empleados	Clientes / Productos	Interrupción y fallos servicio	Procesos
1	67.89	80.39	72.40	80.00	75.00	72.20
2	13.02	7.84	16.10	15.00	15.00	14.60
3	7.80	4.90	5.50	5.00	5.00	5.20
4	7.22	3.92	3.60	0.00	5.00	5.10
5	4.10	2.94	2.40	0.00	0.00	2.90

De acuerdo con lo anterior los eventos de pérdida de mayor nivel tienen una menor probabilidad de ocurrencia según el modelo, quedando aún por reevaluar de acuerdo con la evidencia. Fuente: Construcción propia

### ETAPA 8: Obtención de la Distribución de Pérdida

El grupo de expertos estableció que por cada uno de los clientes de la línea de negocio Banca Empresarial se podían presentar los distintos eventos de pérdida definidos en la etapa 2. De esta manera, para cada una de las categorías de eventos, el número de operaciones sujetas a pérdida es igual al número de clientes, que actualmente en la compañía para esta línea de negocio es de 5638. Teniendo en cuenta las distribuciones de probabilidad estimadas en el paso anterior, se plantea un modelo, el cual se muestra en la Tabla 28, para obtener la distribución de pérdidas por cliente para Banca Empresarial durante un año.

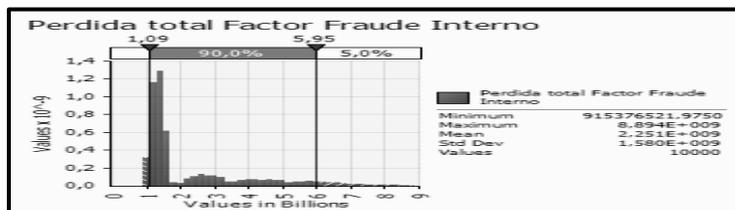
Tabla 6: Distribución de las pérdidas asociadas a cada nivel de severidad

Simulación de las Pérdidas para cada evento de Riesgo Operacional					
Nivel de Pérdidas	Distribución de Probabilidad	Mínimo	Máximo	Media	Desviación
Nivel 1	Uniforme [0, 50.000.000]	-	50.000.000	25.000.000	14.433.756
Nivel 2	Uniforme [50.000.000 , 100.000.000]	50.000.000,00	100.000.000	75.000.000	14.433.756
Nivel 3	Uniforme [100.000.000 , 200.000.000]	100.000.000,00	200.000.000	150.000.000	28.867.513
Nivel 4	Uniforme [200.000.000 , 500.000.000]	200.000.000	500.000.000	350.000.000	86.602.540
Nivel 5	Uniforme [500.000.000 , 1000.000.000]	500.000.000,00	1.000.000.000	750.000.000	144.337.567

Todos los niveles se modelaron con una distribución uniforme, en vista de que no se tenía información previa sobre el comportamiento de esta variable. Fuente: Construcción propia

Utilizando el paquete de simulación @Risk, se encontraron tras una corrida con 10.000 iteraciones, las distribuciones de probabilidad para los factores de riesgo operativo asociado a la línea de negocios Banca Empresarial y las distribuciones de probabilidad para los niveles de pérdidas observables, como ejemplo se muestra la distribución de pérdidas del factor fraude externo.

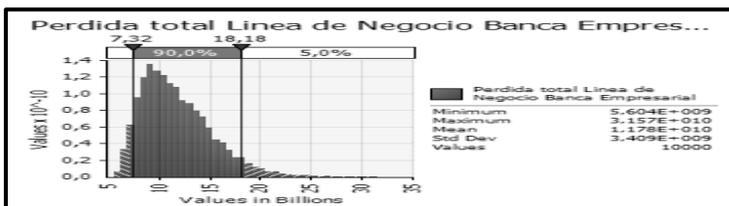
Figura 2: Distribución de probabilidades del factor fraude interno



Un intervalo de confianza del 9= establece una pérdida asociada a fraude interno de entre 1,09 y 5,99 billones de pesos. Fuente: Construcción propia apoyada en el software @Risk.

Luego de realizar una simulación con 10.000 iteraciones se encuentra la distribución de probabilidad de las pérdidas agregadas para cada factor de riesgo y la distribución de perdidas agregadas para la línea de negocios Banca Empresarial, se muestra gráfica del factor Fraude interno.

Figura 3: Pérdida agregada para la línea de negocio Banca empresarial



La distribución de pérdida total para la línea de negocio Banca Empresarial, muestra que la pérdida anual esperada es de \$11.780 millones. La variabilidad de esta pérdida, es alta aunque disminuye con respecto a la variabilidad de las categorías individuales.

Teniendo en cuenta las distribuciones de pérdida, se puede calcular la pérdida no esperada o Valor en Riesgo (VaR) para cada una de las categorías como la diferencia entre el percentil correspondiente al 95% y la pérdida esperada. La siguiente tabla muestra la pérdida esperada y la pérdida no esperada para cada una de las categorías de eventos de pérdida.

Tabla 7: Cuantificación de las pérdidas Obtenidas de acuerdo con el modelo de red Bayesiana propuesto

	Pérdida esperada	Pérdida no esperada
Factor Fraude Interno	\$2.250.223.000	\$5.917.107.089
Factor Fraude Externo	\$1.908.038.000	\$5.323.537.846
Factor Practicas de Empleo y seguridad en el ambiente de trabajo	\$ 1.992.582.000	\$5.008.415.602
Factor Clientes/Productos	\$ 1.687.430.000	\$3.280.690.298
Factor Interrupción en el Servicio	\$1.889.213.000	\$4.606.901.855
Factor Procesos	\$2.052.879.000	\$5.465.198.939
Línea de Negocios Banca Empresarial	\$ 11.780.360.000	\$18.271.787.677

Finalmente, con base en la distribución de la pérdida anual total de la línea, se calcula la provisión anual que el banco debe hacer para cada línea de negocios, en el caso de la línea Banca Empresarial, el valor de esta provisión corresponde a la pérdida no esperada.

$$\begin{aligned} \text{Provisión} &= \text{Pérdida 95\%} - \text{Pérdida Esperada} \\ \text{Provisión} &= \$18.271,78 \text{ millones} - \$11.780,36 \text{ millones} \\ \text{Provisión} &= \$6.491,42 \text{ millones} \end{aligned}$$

ETAPA 9: Calcular la Provisión Total

Debido a que en este caso se aplicó la metodología solamente en una línea de negocio, no se puede calcular el nivel de exposición al riesgo operativo de todo el banco, no obstante el procedimiento sigue la misma dinámica.

CONCLUSIONES

La identificación, medición, cuantificación y gestión de los diferentes tipos de riesgo en las entidades financieras y no financieras es un tema particularmente relevante para el desarrollo y funcionamiento de las mismas. Dicha gestión se requiere de la vinculación de gran parte del capital humano, técnico y económico de la organización para su realización.

Los eventos de pérdida que se pueden presentar asociados a la exposición al riesgo operativo pueden tener un alto impacto en el funcionamiento de las empresas, incluso poner en riesgo la continuidad del negocio financiero. Por esta razón, el proceso de gestión del riesgo operativo es un tema de estudio reciente a nivel mundial, que actualmente es relevante para las entidades financieras más importantes del mundo y para entidades reguladoras como el Comité de Basilea.

El proceso de obtención, sistematización y análisis de la información, tanto cualitativa como cuantitativa, es de particular importancia para la aplicación de esta metodología. Por un lado, debido a la necesidad de definir categorías de eventos de pérdida, indicadores de riesgo y relaciones entre éstos, el grupo de personas que suministren esta información debe conocer detalladamente el funcionamiento de la línea de negocio que esté siendo evaluada no solo en la entidad sino en general en una entidad financiera cualquiera. Por otro lado, para tener en cuenta la información histórica sobre los eventos de pérdida se debe contar con unas bases de datos confiables y bien organizados, a pesar de haber sido diseñada para entidades financieras, la metodología puede aplicarse en otro tipo de entidades realizando ajustes en algunas de las nueve etapas propuestas.

Esta metodología representa un soporte importante para la etapa de Identificación y Cuantificación de las Exposiciones de la Metodología general de Administración de Riesgo propuesta por Smithson (1998), y presentada en el Capítulo 3, página 13 de su libro.

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# **LOS ABOGADOS, SUS PERCEPCIONES Y ACTITUDES HACIA LAS NUEVAS TECNOLOGÍAS DE INFORMACIÓN Y COMUNICACIÓN. ESTUDIO DE CASO: INSTITUTO PROFESIONAL DE LA REGIÓN SUR DE LA UNIVERSIDAD AUTÓNOMA DEL ESTADO DE MORELOS**

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## **RESUMEN**

*Se realizó un estudio cuantitativo, no experimental, transversal y descriptivo con el objetivo de*

*analizar las percepciones y actitudes de los profesores abogados del Instituto Profesional de la Región Sur (IPReS) de la Universidad Autónoma del Estado de Morelos (UAEM), hacia las Nuevas Tecnologías de Información y Comunicaciones (NTIC). La investigación se llevó a cabo por medio del método de encuesta y la recolección de información a través de la aplicación del Cuestionario de Actitudes de los Maestros hacia las Computadoras derivado del instrumento Teacher's Attitudes Toward Computers de Knezek y Christensen (1996), al total de docentes con licenciatura en derecho que laboran en el instituto. Las dimensiones implicadas en el cuestionario fueron: gusto/utilidad, correo electrónico, frustración/ansiedad, aprendizaje/productividad e impacto negativo. Los resultados proyectados en el estudio reflejaron que los profesores tienen una actitud positiva (de media a favorable) con respecto a la computadora y correo electrónico. Además, los resultados mostraron la inexistencia de docentes con sentimientos de angustia, nerviosismo o temor al utilizar la computadora.*

**PALABRAS CLAVES:** Tecnología Educativa, profesorado, abogados, actitudes y percepciones.

## **THE LAWYERS AND THEIR PERCEPTIONS AND ATTITUDES TOWARDS NEW INFORMATION AND COMMUNICATION TECHNOLOGIES: CASE STUDY PROFESSIONAL INSTITUTE OF THE SOUTHERN REGION FROM AUTONOMOUS UNIVERSITY OF THE STATE OF MORELOS**

### **ABSTRACT**

*We performed a quantitative, non-experimental, cross-sectional and descriptive with the aim of analyzing the perceptions and attitudes of teachers Professional Institute attorneys in the Southern Region (IPReS) of the Autonomous University of the State of Morelos (UAEM), to the New Information and Communications Technologies (NTIC). The research was carried out by the method of survey and collection of information through the application of the Questionnaire of Attitudes of Teachers towards Computers derivative instrument Teacher's Attitudes Toward Computers of Knezek and Christensen (1996), the total lawyers teachers who work in high school. The dimensions involved in the questionnaire were: taste/utility, email, frustration/anxiety, learning/productivity, and negative impact. The results projected in the study reflected that teachers have a positive attitude (medium to favorable) with respect to the computer and email. In addition, the results showed the absence of teachers with feelings of anxiety, nervousness or fear of using the computer.*

**JEL:** M10

**KEYWORDS:** Educational Technology, Teachers, Lawyers, Attitudes and Perceptions

### **INTRODUCCIÓN**

En las últimas décadas del siglo pasado, aparecieron las llamadas “nuevas tecnologías”, que al incorporarse en la vida del ser humano, determinaron una serie de cambios y transformaciones en todos los ámbitos de su vida, dando origen al advenimiento de una nueva era en configuración de la sociedad, a la que conocemos como la “Sociedad del Conocimiento” (SC), identificada por la posibilidad de acceder a una cantidad y variedad inimaginable de información y mantenerse en

contacto con grandes colectividades, traspasando las barreras del tiempo y el espacio. Las instituciones de educación superior también han sufrido estas transformaciones al incorporar las nuevas tecnologías de información y comunicación (NTIC), sin embargo, habrá que señalar que para que exista una adecuada inserción de las mismas, se debe tomar en cuenta las percepciones y las actitudes que tenga el personal docente hacia ellas. En el IPReS actualmente se imparten las carreras de Contaduría, Administración y Derecho, cada una de las cuales tiene adscritos profesores cuya carrera profesional es la de licenciado en Derecho. Este estudio tuvo la intención de analizar las percepciones y actitudes de los profesores abogados hacia las nuevas tecnologías.

Atento a lo anterior, cabe preguntarse, ¿cuáles son las percepciones que tiene el profesor abogado del Instituto Profesional de la Región Sur?, ¿qué actitud tienen con respecto a la computadora y correo electrónico?, ¿tienen sentimientos de angustia, temor o nerviosismo al utilizar una computadora? En el presente estudio se muestra de la siguiente manera. En la sección de revisión de la literatura se plantean argumentos que señalan la importancia de las percepciones y actitudes de los docentes hacia las TIC, para que se logre una correcta incorporación en las aulas; además de la reflexión en relación a la reticencia al uso de las computadoras por parte de los abogados. Posteriormente se presenta la metodología utilizada, en donde describe el enfoque, alcance y diseño del estudio, así como el instrumento empleado para la recolección de los datos. Seguidamente se presentan los resultados de la investigación. Finalmente, las conclusiones y recomendaciones.

## REVISIÓN DE LITERATURA

Existen investigaciones que señalan que para que se logre una exitosa incorporación de las TIC en el aula es necesario primero, conocer qué piensa el profesor respecto a estas herramientas, si las cree de utilidad o por el contrario, las perciben como un impedimento que dificulta su trabajo como docente. Considerando que la percepción y expectativa influirá en la aceptación o rechazo que tengan de las mismas, en su satisfacción personal como docentes y en la difusión que realicen entre profesores, alumnos y autoridades de sus instituciones (Bañuelos, 1999). Ha este respecto se señala que son las experiencias del sujeto, sus vivencias y su concepción los que dan la pauta y orientan el uso de las computadoras (Campos et al., 2000). Es decir, las actitudes de los docentes hacia las TIC afectarán su integración de manera positiva o negativa según el caso en sus prácticas de enseñanza (Valdes-Cuervo, Arreola-Olivarria, Angulo-Armenta, Carlos-Martínez, & García-Lopez, 2011). Una percepción puede definirse como un proceso por el cual los individuos organizan e interpretan sus impresiones sensoriales a fin de darle un significado a su ambiente (Robbins, 1999). Los individuos interpretamos nuestro entorno y con base en ello nos comportamos. Características del que percibe tales como intereses, aficiones, inclinaciones, experiencias y expectativas, así como las características del objeto observado y el contexto en el cual se observa influyen en gran medida en nuestra percepción. Las actitudes son conceptualizadas como patrones de sentimientos, creencias y tendencias de comportamiento dirigidas de manera específica hacia personas, grupos, ideas, temas u objetos (Hellrieger & Slocum W., 2009). Las actitudes son el segundo componente importante de la conducta individual, son lo que una persona siente de otras, o de los sentimientos que guarda hacia la gente, los objetos, los sucesos o las actividades. Estas sensaciones pueden ser positivas o negativas y casi siempre se aprenden a lo largo de un tiempo dado (Hodgetts & Altman, 1990). Las actitudes son enunciados o juicios de evaluación (ya sean favorables o desfavorables) respecto a los objetos, la gente o los eventos. (Robbins, 1999). Una vez que interpretamos el mundo que nos rodea (percepción), estamos en condiciones de tener una actitud (positiva o negativa), la cual se reflejará en tres niveles: cognoscitivo, afectivo y comportamental.

Estos tres componentes de las actitudes: afectivo (emociones, sentimientos, sensibilidades, disposición de ánimo); cognoscitivo (creencias, conocimientos y opiniones) y el conductual (inclinación para actuar de una forma específica, según una evaluación favorable o desfavorable de algo), se interrelacionan funcionando entre sí, de tal manera que una actitud es la fusión de emociones, creencias y formas de actuar respecto a una situación, fenómeno u objeto. Para esta investigación, el poner nuestro foco de atención hacia los docentes con la profesión inicial de Licenciados en derecho, es interesante, ya que es bien sabido que el derecho y la tecnología no han ido siempre de la mano, los licenciados en derecho de generaciones pasadas tenían cierta reticencia al uso de las nuevas tecnologías. “Los abogados son, en general muy reacios al uso de las nuevas tecnologías. No es algo reciente; se ha dado siempre. Los abogados casi siempre llegan tarde a los desarrollos que se producen en otras ramas del conocimiento. Esa reticencia o falta de espíritu abierto a la innovación es algo que afecta profundamente al derecho, para cuya actualización a veces hay que esperar demasiados años. El mundo cambia y los abogados parecen querer resistirse a verlo, o tomar medidas para poder seguirle el paso a la fluctuante realidad” (Carbonell, 2011).

Ha este respecto, Pérez-Luño, nos dice que “La coyuntura presente, reclama de los juristas, los filósofos y los teóricos del derecho una consciencia tecnológica, es decir, una actitud reflexiva, crítica y responsable ante los nuevos problemas que en las diversas esferas del acontecer social suscita la tecnología y ante los que ni el Derecho, ni quienes lo aplican o lo estudian pueden permanecer insensibles”. Dado los elementos conceptuales antes mencionados, surgió la necesidad de conocer, que piensan, que sienten y cuáles son las ideas y formas de actuar de los profesores abogados, respecto a las tecnologías, en virtud de que son las experiencias del sujeto, sus vivencias y su concepción los que dan la pauta y orientan el uso de las computadoras (Campos et al., 2000).

## **METODOLOGIA**

En este estudio se utilizó un enfoque cuantitativo, con un alcance descriptivo y un diseño transversal, ya que se analizaron las percepciones y actitudes en un periodo determinado. La investigación se llevó a cabo por medio del método de encuesta y la recolección de información a través de la aplicación del Cuestionario de Actitudes de los Maestros hacia las Computadoras derivado del instrumento Teacher’s Attitudes Toward Computers de Knezek y Christensen (1996), al total de docentes abogados (15), que laboran en el instituto. De los 15 profesores encuestados un 40% fueron mujeres y un 60% hombres. La edad fluctuó entre 25 y 67 años. Las dimensiones implicadas en el cuestionario fueron: gusto/utilidad, correo electrónico, frustración/ansiedad, aprendizaje/productividad e impacto negativo.

## **RESULTADOS**

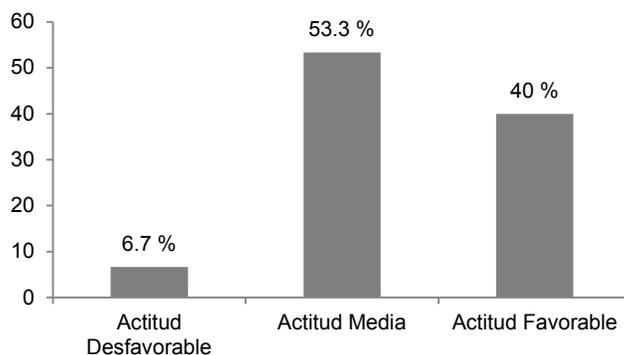
A continuación se muestran los resultados para cada una de las dimensiones implicadas en esta investigación.

### Gusto/Utilidad

En la Figura 1 se observan los resultados en cuanto a las actitudes que tienen los profesores de gusto y motivación para aprender mediante la computadora, así como la facilidad y utilidad que

esta representa tanto en la práctica docente como en la vida cotidiana. A este respecto, un 53.3% de los profesores a los cuales se les aplicó el instrumento de recolección de datos muestran una actitud media, el 40% una actitud favorable y solo un 6.7% manifestó tener desagrado y no encontrar utilidad en el uso de la computadora.

Figura 1: Actitudes de los Profesores en Relación a la Dimensión Gusto/Utilidad

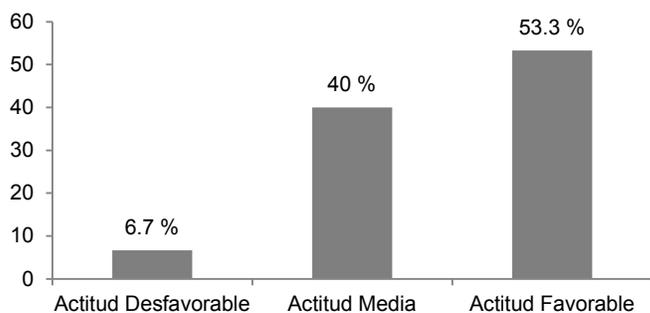


*Esta figura representa la percepción que tienen los profesores de gusto y motivación para aprender mediante la computadora, además de la facilidad y utilidad que esta representa tanto en la práctica docente como en la vida cotidiana. Fuente: elaboración propia.*

### Correo Electrónico

En cuanto a la dimensión Correo Electrónico, que está determinada por la percepción de los sujetos acerca del correo electrónico, como un buen medio de aprendizaje, de difusión, útil y práctico dentro del salón de clases se observa que el 53.3% de los profesores tienen una actitud favorable, un 40% manifiesta una actitud media y solo 6.7 de los encuestados presenta una actitud desfavorable. (Ver Figura 2.)

Figura 2: Actitudes de los Profesores en Relación a la Dimensión Correo Electrónico

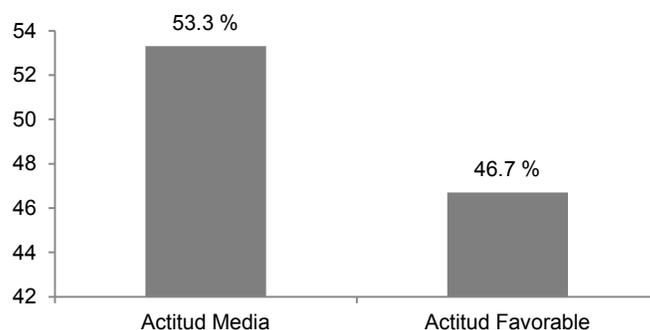


*Esta figura muestra la percepción de los sujetos acerca del correo electrónico, como un buen medio de aprendizaje, de difusión, útil y práctico dentro del salón de clases y como un buen motivador ya que propicia la interacción entre los estudiantes y también entre estudiantes y maestros. Fuente: elaboración propia.*

### Frustración/Ansiedad

La Figura 3, nos permite visualizar las actitudes que tienen los docentes en cuanto a la dimensión frustración/ansiedad y reconocer si el profesor tiene sentimientos de amenaza, temor, dependencia, nerviosismo, angustia, frustración y ansiedad al trabajar con una computadora. El 53.3% de los profesores presenta una actitud media y el 46.7% una actitud favorable. Ninguno de los docentes manifestó tener sentimientos de temor o angustia al trabajar con una computadora.

Figura 3: Actitudes de los Profesores En Relación a la Dimensión Frustración/Ansiedad

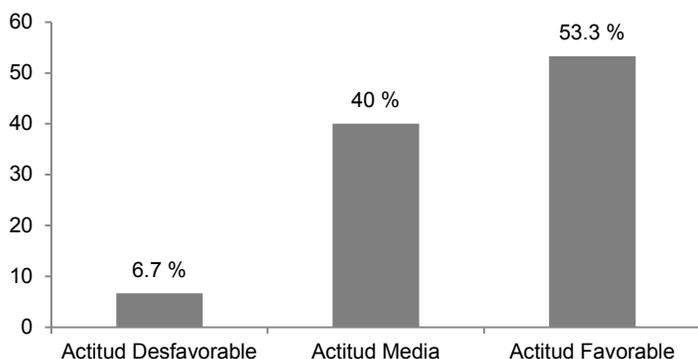


*En esta figura están representados los resultados en relación a sentimientos de amenaza, temor, dependencia, nerviosismo, tensión, angustia, frustración y ansiedad, ante el hecho de trabajar con una computadora, así como la percepción de poca utilidad y baja productividad en la práctica profesional. Fuente: elaboración propia.*

### *Aprendizaje/Productividad*

En la Figura 4, se observan las actitudes de los profesores en aspectos relacionados con la utilidad y la alta productividad dentro y fuera del salón de clases a través del uso de la computadora, en ella se observa que el 53.3 % de los docentes tiene actitudes favorables, el 40% actitudes medias y sólo un 6.7% manifestaron tener actitudes desfavorables.

Figura 4: Actitudes de los Profesores en Relación a la Dimensión Aprendizaje/Productividad

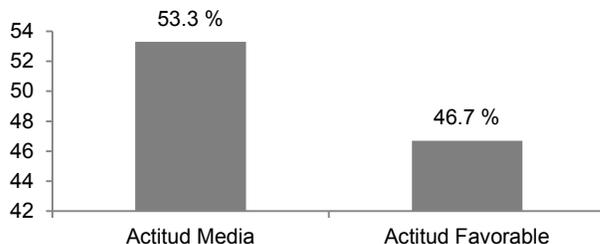


*Esta figura muestra la percepción de utilidad y alta productividad en las actividades en el salón de clases y en la vida cotidiana a través del uso de la computadora. Fuente: elaboración propia.*

### Impacto Negativo

La dimensión Impacto negativo se observa en la Figura 5, en ella se revelan las actitudes de los profesores en aspectos relacionados con la deshumanización y frialdad en las interacciones entre las personas que utilizan una computadora. En esta dimensión podemos ver que el 53.3 % de los docentes tiene actitudes medias y el 46.7% actitudes favorables. Ninguno de los profesores atribuye un impacto negativo a la computadora.

Figura 5: Actitudes de los Profesores en Relación a la Dimensión Impacto Negativo



*Esta figura muestra la percepción de deshumanización y frialdad en las interacciones entre las personas que utilizan una computadora tanto en la práctica profesional como en la vida cotidiana. Fuente: elaboración propia.*

## CONCLUSIONES

De manera general, en esta investigación se concluye que los profesores con profesión de abogados tienen percepciones y actitudes de medias a favorables (positivas), hacia la computadora y correo electrónico. Lo anterior arroja un hecho interesante, ya que es bien sabido que el derecho y la tecnología no han ido siempre de la mano, los licenciados en derecho de generaciones pasadas tenían cierta reticencia al uso de las nuevas tecnologías. “Los abogados son, en general muy reacios al uso de las nuevas tecnologías. No es algo reciente; se ha dado siempre” (Carbonell, 2011). Se puede concluir además, que no existen profesores con sentimientos de nerviosismo, frustración o ansiedad al usar una computadora y que ninguno le atribuye un impacto negativo. Lo anterior puede ser aprovechado por las autoridades del IPReS para generar estrategias que permitan una incorporación efectiva de las nuevas tecnologías al interior del salón de clases.

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# PROTECCIÓN DEL PATRIMONIO CULTURAL DE LAS TRADICIONES OAXAQUEÑAS: UN CASO PRÁCTICO LA CALENDIA

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## RESUMEN

*“Oaxaca, como la reserva espiritual de México”, es la depositaria de esta maravillosa tradición de cohesionar y sensibilizar a sus pueblos a través de la realización de un calendario, que hoy se nos antoja muy saturado de fiestas, pero que indiscutiblemente para la Cultura Madre resulta muy escuálido en comparación al tiempo antes de la invasión y colonización en la que los Viejos Abuelos tuvieron que adaptarse al nuevo orden.*

## PROTECTION OF CULTURAL HERITAGE TRADITIONS OF OAXACAN A CASE "LA CALENDIA"

## ABSTRACT

*" Oaxaca, as the spiritual reserve of Mexico " , is the custodian of this wonderful tradition to unite and raise their peoples through the implementation of a calendar, which today seems to us highly saturated party , but arguably for Culture mother is very skinny compared to the time before the invasion and colonization in which the old grandparents had to adapt to the new order . In the more than seven millennia in the " own - our " Anahuac civilization developed , the parties were the social tool that allowed strengthen and expand the spiritual energy generated by human groups in this type of activity . At least three thousand years before the conquest and colonization, the peoples of what is now the Mexican territory formed , maintained a variegated, complex and saturated party calendar . Well had 18 months of 20 days and usually had more than four parties a month . Some larger and more lavish , more small and austere . At least three thousand years before the conquest and colonization, the peoples of what is now the Mexican territory formed , maintained a variegated, complex and saturated party calendar . Well had 18 months of 20 days and usually had more than four parties a month . Some larger and more lavish , more small and austere . But all parties.*

## INTRODUCCIÓN

En los más de siete milenios en que se desarrolló la civilización “propia-nuestra” del Anáhuac, las fiestas fueron el instrumento social que permitía el potenciar y expandir la energía espiritual que generan los grupos humanos en este tipo de actividades.

Por lo menos en los tres mil años antes de la conquista y colonización, los pueblos de lo que ahora conforma el territorio mexicano, mantenían un abigarrado, complejo y saturado calendario de fiestas. Pues tenían 18 meses de 20 días y generalmente tenían más de cuatro fiestas al mes. Unas más grandes y pródigas, otras más pequeñas y austeras. Por lo menos en los tres mil años antes de la conquista y colonización, los pueblos de lo que ahora conforma el territorio mexicano,

mantenían un abigarrado, complejo y saturado calendario de fiestas. Pues tenían 18 meses de 20 días y generalmente tenían más de cuatro fiestas al mes. Unas más grandes y pródigas, otras más pequeñas y austeras. Pero todas fiestas.

Objetivo General. Preservar las tradiciones de nuestra cultura Oaxaqueña, con la Celebración de una Calenda por la conclusión del plan de Estudios del Doctorado en Ciencias de la Administración agosto 2011 Julio 2013

Objetivos específicos: Preservar las tradiciones culturales del estado de Oaxaca  
Convivir el grupo de egresados de la segunda generación del Doctorado en Ciencias de la Administración, en la convivencia Calenda de fin de cursos.  
Participar al pueblo en general, el inicio de los actos de clausura de la segunda generación, del Doctorado en Ciencias de la Administración de la FAC de la UABJO.

Hipótesis: Proteger el patrimonio cultural de las tradiciones oaxaqueñas, asegurará la vigencia del folklore, alegría, folklore, indumentaria, gastronomía, música y sentimiento a través de la calenda oaxaqueña

Variables Manifestaciones populares, políticos y religiosos.  
Fenómenos naturales  
Logística

Misión: Conservar una de las tradiciones especiales que tiene la cultura oaxaqueña, su alegría, folklore, indumentaria, gastronomía, música y sentimiento a través de la calenda oaxaqueña.

Visión: Preservar y proteger el patrimonio cultural de las tradiciones oaxaqueñas, para futuras generaciones, reproduciendo el encanto de “Oaxaca, como la reserva espiritual de México”, es la depositaria de esta maravillosa tradición de cohesionar y sensibilizar a sus pueblos a través de la realización de la Calenda Oaxaqueña

## **CALENDA**

La calenda (en ocasiones calinda) es un baile de origen africano, específicamente de la costa de Guinea, que se extendió por el Caribe como consecuencia del tráfico de esclavos, y formaba parte del conjunto de bailes que los negros de Nueva Orleans ejecutaban en Congo Square, en la primera mitad del siglo XIX, como la bamboula y otras.

Las primeras referencias a esta danza se recogen en Martinica, donde se bailaba los domingos, acompañada de percusión, aunque su mayor popularidad la alcanzó en Luisiana. En la primera mitad del siglo XX aún se bailaba en la propia Martinica, en Haití y en Trinidad. En Cuba se llamó caringa, y existen testimonios de observaciones de este mismo baile en lugares tan alejados como Montevideo.

Algunos autores, como William Francis Allen, consideraron a la calenda una contradanza. Parte del martirologio que recoge los nombres y hechos de los santos, así como las fiestas de cada día.

Es la anunciación de que inician las festividades, pueden ser varias.

Tipos de Calendas o festividades

Religiosa: aquella que celebra un santo, patrono o Iglesia

Guelaguetza: Anuncia el inicio de las festividades del lunes del cerro, con el paseo de las delegaciones que participaran.

Congresos: Convoca al inicio de cualquier evento importante.

Académicos: Termino o culminación de estudios de licenciaturas

Bodas: Al término de la celebración religiosa, inicia el festejo de la boda

Relatoría : Es difícil saber el origen de la costumbre colonial de nombrar padrinos del Niño Dios en las fiestas de la Natividad y la Epifanía. Lo que sí es indudable es que no podía existir templo o capilla que contase con la imagen del Niño Dios y que no lo festejase en ambas ocasiones y el día de la Candelaria. La costumbre ordenaba que por lo menos tres días antes de la Navidad, los padrinos se llevaran "el niño" a su casa donde se le colocaba en el nacimiento, realizando un tributo con el rezo del Rosario a las 8:00 de la noche, concluido esto se ofrecía a los asistentes cigarros, bebidas y alimentos.

El día 24 por la mañana se colocaba al niño en una charola de plata o en una canastilla arreglada exprofeso, hacia las 3:00 de la tarde, llegaba la música a la casa y comenzaba a interpretar sus melodías, al anochecer se congregaban los vecinos que acompañarían en la calenda, los padrinos, para agradecer su presencia les brindaba atole de leche y tamales. De acuerdo con la distancia al centro de la ciudad y al templo se determinaba la hora en que partiría la calenda. Llegado el momento de partir se distribuyen a los asistentes faroles con los colores del barrio, silbatos y luces de bengala. Inicia la calenda, la estrella con el nombre del barrio, los coheteros, la banda de música, el vecindario con faroles y la madrina acompañada de San José y la Virgen, ángeles y pastores; dependiendo de la economía la madrina se traslada a pie o en carro alegórico. La cita común, era alrededor del Zócalo, al que por costumbre se tenía que darle tres vueltas y regresar hacia el templo; generalmente la misa de gallo se celebraba a las 12:00 de la noche, momento en que todas las campanas de la ciudad repicaban y se quemaban cohetes y coheteros al unísono. Al terminar la misa la madrina "daba a besar al niño" en la puerta del templo repartía la colación. No importaba la presencia de recursos, lo más importante, era que toda la ciudad supiera que el niño Dios había tenido padrinos y calenda.

Todas las fiestas patronales en los Valles de Oaxaca, se inician con "La Calenda". Es la manera en que se "anuncia y se invita" a todo el pueblo a la fiesta. Es un desfile de colores y formas en el que los amigos y vecinos participan en la fiesta.

Ejemplo. Con fe y devoción, la Calenda religiosa recorre la capital del estado y templos alternos en la majestuosa calenda en honor a la patrona de los Oaxaqueños, Nuestra Santísima Virgen de La Soledad. Las festividades de la Virgen de La Soledad comenzaron; sin duda alguna una de las fiestas más grandes en el Estado de Oaxaca. El 16 de diciembre en punto de las 7 de la noche se iniciara la calenda, recorrerán como todos los años desde el atrio de la Basílica Menor y que congrega a cientos de personas que, unidas con su fe y devoción, recorrerán durante toda la noche las calles de la Verde Antequera "Honorable Ayuntamiento de la Ciudad de Oaxaca de Juárez, Oaxaca". Encabezando la calenda con las marmotas de la Basílica de La Soledad, los monos de calenda y una enorme mojiganga; seguido por un grupo de personas que bailan al ritmo de la banda de música; las chinas oaxaqueñas de Doña Genoveva Medina con sus vistosas canastas de flores en forma de liras, media luna y de la Virgen de La Soledad darán paso al grupo de personas con canastas, flores, faroles y un carro alegórico (alusivo a la virgen). Detrás las chinas oaxaqueñas de Doña Casilda Flores con sus canastas de luces envolviendo de diversos colores las calles oaxaqueñas; para finalizar la calenda se encontraran con la delegación de San Sebastián

Tutla, quienes al ritmo de la banda de música no dejan de gritar sus tradicionales vivas. (Viva la Virgen de la Soledad, Viva la Reyna de los Oaxaqueños, etc.).

Así es como la enorme calenda recorrerá la iglesia del Ex Marquesado, San Francisco de Asís, Catedral, Carmen Alto, Guadalupe, Jalatlaco y demás iglesias de la capital, culminando en la Basílica Menor de la Virgen de la Soledad para así dar paso a los días principales de la fiesta.

### Organización De La Calenda

Lleva por delante a la Chirimía y el Tambor: reminiscencias milenarias que esencialmente recuerdan un rito ancestral a pesar de todo el sincretismo con el que ahora las apreciamos y nos recuerdan el origen espiritual de estas fiestas.

Después vienen los coheteros, verdaderos “especialistas” que van tirando cuetes y cohetones, que anuncian la cercanía de la procesión. Los primeros se arrojan al cielo con la mano y los segundos, más potentes, se lanzan desde una base que permite poner distancia al encender la mecha. Los cuetes y cohetones son indispensables en las fiestas oaxaqueñas y su cuidadoso manejo se les deja a un grupo de “expertos” que saben dónde, cuándo, cantidad, ritmo y son quienes cuidan de que no causen accidentes, tanto en los participantes como en las casas del pueblo.

Los Gigantes o Marmotas siguen en la calenda. Están hechas con un armazón de carrizo, su ropa de tela y su cabeza con papel. Generalmente son cargados por niños y jóvenes, por lo que es común ver a unos “Gigantes chiquitos”. Cuando se tocan los sones y bailan las Chinas, estos formidables personajes las acompañan en el baile, dando vertiginosas vueltas, perdiendo la vertical sin caer y llevando sus brazos como remolino de colores. Los personajes son producto del imaginario colectivo.

Después sigue la banda de música que tocará durante toda la calenda. Las bandas de aliento llegaron a Oaxaca y México, con la invasión francesa. Los oaxaqueños, especialmente se apropiaron de esta organización orquestal y la han hecho propia. La cultura popular tiene como base de expresión una banda de aliento. En Oaxaca se supone que existen más de cinco mil bandas.

El cortejo continuo con la imagen del Santo Patrón o el símbolo de la fiesta.

Las “Chinas Oaxaqueñas” siguen en la comitiva. Mujeres que llevan cargando sobre sus cabezas canastas con bellos arreglos florales. Para hacer la calenda los mayordomos seleccionan a una “madrina principal”, quien a su vez tendrá que ir a invitar a señoras de la comunidad para que participen como Chinas oaxaqueñas con sus canastas. Todo esto implica, tiempo, dinero y un esfuerzo físico, pues las canastas son pesadas y costosas. Algunas mujeres participaron con canastas con fuegos de artificio. Verdadera proeza de valor y entusiasmo.

### Logística del Recorrido de la Calenda Religiosa

Todo se inicia en la casa de la Madrina Principal, quien tendrá que ofrecer mezcal, rompopo, refrescos y galletas mientras se congregan las canastas. Después llega la música y ameniza la espera. No importa que llueva o relampaguee, la gente del pueblo ira llegando. La comitiva sale hacia la casa de los mayordomos. Donde se les bailará un son y de ahí parte la comitiva al templo

del pueblo donde en el atrio se baila algunos sones y de ahí se parte a los puntos que cada comunidad ha tomado como tradicionales.

Generalmente a las casas de ex-mayordomos, donde existe una capilla o cruz, algún templo o barrio, en estos lugares se organiza una recepción en la que no falta la comida (tamales, tepache, tortas, café, dulces regionales, galletas) y la bebida (mezcal, rompopes, anís) para todos los participantes.

La calenda termina en el templo del pueblo, donde las chinas dejarán su ofrenda de flores al Santo Patrón o Virgen de la comunidad. Acto seguido en el atrio del templo se inicia la quema y baile de las canastas con fuegos artificiales, los toritos y si se puede, al final los Castillos.

Las mujeres son las que “bailan” las canastas. Remolino de luz y fuego que enciende las emociones de toda la concurrencia. Las mujeres siempre son asistidas por sus esposos o novios y ellos bailan con ellas cuando las luces iluminan de colores el entorno. Los jóvenes y los hombres bailan “los toritos”, en lances que agitan a la concurrencia, pues generalmente despiden unas luces de colores que cruzan veloces entre las piernas de los espectadores. La calenda termina en la casa del mayordomo con una cena para todo el pueblo, por supuesto que acompañados por la banda de música.

## CONCLUSIÓN

Las calendas son un producto de la cultura mexicana que siguen vivas y palpitante en los Valles de Oaxaca. La calenda es participación, encuentro, apoyo, fiesta, sacrificio físico, económico, tiempo, amistad, fraternidad y comunitariedad.

En la calenda con un poquito de mezcal y cerveza de piña, los problemas interfamiliares e interpersonales, se aflojan, se minimizan, encuentran cauces de comunicación y solución. La fiesta es pretexto para que se restablezca la armonía y la amistad. Es momento para refrendar la amistad, el compadrazgo y la unión de la familia amplia. Es gusto y entusiasmo, necesidad de compartir lo más profundo y lo más íntimo, de continuar con la tradición.

Las calendas universitarias, se llevan a cabo cuando se conmemoran los días feriados del estudiante, del contador, administrador o cuando concluyen a nivel Licenciatura, no se ha realizado en nivel Maestrías y Doctorados. Es la primera vez que una generación de Doctorado, realiza una Calenda de termino de cursos, cabe señalar que esta celebración no participarán solo los alumnos, sino también los familiares, amigos, alumnos de la Licenciaturas y pueblo en General

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## GESTIÓN DE COMPETENCIAS DIRECTIVAS EN UN HOSPITAL DE SALUD PÚBLICA

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### RESUMEN

*En este trabajo se analizan las competencias gerenciales en un hospital de salud pública. El objetivo fue diagnosticar y evaluar las competencias más importantes del hospital para la elaboración de un perfil, para mejorar el desempeño. Se trata de un estudio de caso, no experimental, transversal, con enfoque cualitativo y cuantitativo. Se aplicó una metodología tipo Delphi con 20 expertos y una evaluación de 360° de las competencias de los directivos. El resultado fue un perfil de 32 competencias a evaluar. Se hizo el diagnóstico en los directivos del hospital, posteriormente se inició una estrategia de formación continua, de acuerdo a las necesidades encontradas, de motivación y concientización para autodesarrollo y capacitación, en cursos de desarrollo gerencial, con las herramientas que proporciona la institución, mejorando las competencias con una brecha mayor al deseado y reforzando las que se encontraron bien. Se realizó una evaluación posterior, comparándola además con la satisfacción del usuario, encontrando un mejor resultado y las quejas disminuyeron. Este hospital es una organización de gran importancia para la comunidad, por lo que el haber obtenido mejores resultados con la implementación de las competencias, se traduce en un mejor servicio a la sociedad.*

**PALABRAS CLAVES:** Competencias directivas, aprendizaje organizacional, organización de salud pública.

# INFLUENCIA DEL PLACEMENT EN LAS PELÍCULAS SOBRE LA MEMORIA EXPLÍCITA E IMPLÍCITA: ESTUDIO DESDE LA PERSPECTIVA DE LOS CONSUMIDORES

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## RESUMEN

*El uso del placement en el mundo se ha incrementado en los últimos años como una herramienta de comunicación en marketing. Sin embargo, aún no existe consenso en cuál podría ser la manera más apropiada de medir su influencia en los consumidores. El presente estudio busca indagar sobre la efectividad del placement en las películas y su influencia en las memorias explícita e implícita de las audiencias. Se realiza un estudio experimental a una muestra de 205 universitarios chilenos, 91 hombres y 114 mujeres, quienes son expuestos a películas que contienen distintos tipos de placement. Se halla que mientras mayor es el grado de integración de la marca con la trama, mayor es la probabilidad de estimular la memoria explícita de los participantes y con esto el recuerdo y reconocimiento de marca. Se observa además que el placement consigue estimular la memoria implícita de los participantes a través de un incremento en la intención de compra de las marcas que utilizan placement.*

**PALABRAS CLAVE:** placement, memoria explícita, memoria implícita, reconocimiento de marca, intención de compra.

## THE INFLUENCE OF PRODUCT PLACEMENT IN MOVIES ON EXPLICIT AND IMPLICIT MEMORY: A STUDY FROM THE CONSUMERS PERSPECTIVE.

### ABSTRACT

*The use of product placement in advertising has increased in the recent years as a marketing communication tool. However, there is still no consensus on what might be the most appropriate way to measure their influence on consumers. This study seeks to investigate the effectiveness of product placement in movies and their influence on explicit and implicit memory of the audience. An experimental study is performed on a sample of 205 Chilean university, 91 men and 114 women,*

*who are exposed to films containing different types of product placement. The results indicate that the prominence of the brand influence explicit memory, brand recall and recognition. In addition, the product placement stimulates implicit memory through an increase in purchase intent for brands that use this type of tool.*

**JEL:** M37.

**KEYWORDS:** Product placement, explicit memory, implicit memory, brand recall, purchase intention.

## INTRODUCCIÓN

Debido a la amplia oferta publicitaria existente en televisión y su disminución en la eficacia para llegar a los mercados objetivos, a la que se enfrentan las marcas hoy en día, sumado a la falta de interés por parte de las audiencias y el mayor control sobre lo que ven dado el desarrollo tecnológico, existe un mayor interés por buscar maneras más efectivas de dirigirse a los consumidores y promover las marcas fuera de los espacios publicitarios tradicionales, por ejemplo, a través del product placement (Smit, van Reijmersdal, y Neijens 2009). El product o brand placement ha sido definido como “La inclusión pagada de productos de marca o identificadores de marca, a través de medios de audio y/o visuales, dentro de la programación de los medios masivos de comunicación” (Karrh 1998, p.33). Este concepto implica la integración planificada de un mensaje comercial en el espacio de entretenimiento de los medios de comunicación y pretende ser discreto o no obstructivo, de modo que los consumidores no lo perciban como un intento de influencia comercial explícito y la aparición de la marca sea más creíble (Balasubramanian 1994). Su uso se ha incrementado rápidamente alrededor de todo el mundo como una estrategia de comunicación integrada de marketing (Eisend 2009) y actualmente, se puede apreciar en una gran variedad de medios de comunicación, tales como radio, internet, juegos de video, libros o canciones, pero por sobre todo, se puede encontrar en las películas y programas de televisión (Stephen y Coote 2005).

Diversas son las maneras en las que se pueden categorizar los tipos de placement en las películas, por ejemplo, según el formato en que es presentada la marca (verbal, visual o audiovisual) (Gupta y Lord

1998), grado de integración con la trama (Russell 1998; d'Astous y Séguin 1999), notoriedad en la escena (sutil o prominente) (Gupta y Lord 1998) y su relación con el personaje principal o estrella de cine (si es o no usado por este) (Murdock 1992). Últimamente, los autores Yang y Roskos-Ewoldsen (2007) han clasificado el placement visual en tres diferentes niveles según el grado de integración de la marca con la trama. En primer lugar, la marca puede presentarse como parte del fondo, expuesta en una escena con un personaje, pero sin ser utilizada; puede ser usada por un personaje principal, pero no de una manera relevante en el argumento; o estar conectada con la historia, funcionando como una parte integral en el desarrollo de la película. Los autores basaron estas definiciones en el modelo landscape, que expone los patrones de activación de la información en la memoria de los individuos, como parte del proceso de comprensión (van den Broek et al. 1996, 1999).

Los beneficios de esta práctica usada en los largometrajes, son importantes tanto como para los productores o directores de cine, a través de una manera de obtener apoyo financiero y aumentar el realismo de sus películas, como también para las empresas y la exposición que pueden lograr con sus marcas (McKechnie y Zhou 2003). A pesar de que aún no existe consenso en cuál podría ser la manera más apropiada de medir la efectividad del placement, las tareas utilizadas más comunes son las medidas de memoria basadas en el tipo de procesamiento utilizado por el consumidor (explícito o implícito) y la naturaleza de las tareas que se requieren para medir estas memorias (Duke y Carlson 1993).

Cuando un consumidor recurre a la memoria explícita para recuperar información sobre un anuncio o exposición a un evento pasado, incurre en un proceso consciente o reflexivo por parte del consumidor, que implica un esfuerzo deliberado o intencionado para intentar acceder a la información previa (Shapiro y Krishnan 2001). Law y Braun (2000) concluyen que dos procesos cognitivos, el recuerdo y el reconocimiento de marca, afectan al mismo tipo de memoria (explícita) y que el impacto del product placement en las películas, se puede medir mediante las pruebas de memoria explícita. Por otra parte, Shapiro y Krishnan (2001) explican la memoria implícita como un proceso de recuperación automático o a nivel inconsciente, que no se basa en una búsqueda intencional en la memoria para acceder a la información a la que se estuvo expuesto previamente y que como mencionan Law y Braun (2000),

generalmente es medida solicitándoles a los consumidores que completen o terminen palabras después haber estado expuestos a un mensaje, o a través de tareas conductuales de elección de marcas e intención de compra, sin hacer referencia al episodio previo de exposición. Estos procesos que afectan la memoria subconsciente de los consumidores, juegan un rol importante influenciando el consumo (Krishnan y Trappey 1999), ya que influyen el comportamiento de los consumidores, sin la necesidad de que estos estén conscientes de la exposición anterior a un evento (Goode 2007).

En Chile, el placement se ha realizado principalmente en los programas de televisión, teleseries y reality shows, y es una industria que todavía se encuentra en desarrollo (Uribe y Campo 2008). No obstante, en los últimos años se ha extendido también hacia los largometrajes y series chilenas. Un ejemplo reciente es el de la película “Stefan v/s Kramer” (2012), en la que aparecen más de 20 marcas, como Citroën, Nokia, Apple o Sony, y que según el productor y director ejecutivo de la película, financiaron alrededor del 80% del filme (Salazar 2012).

La presente investigación busca entonces estudiar la influencia del placement en las películas sobre la memoria explícita (recuerdo espontáneo y reconocimiento de marca) y memoria implícita (intención de compra) de una muestra de consumidores chilenos, según los distintos tipos de placement en las películas identificados por los autores Yang y Roskos-Ewoldsen (2007), (1) marcas como parte del fondo, (2) usadas por un personaje principal, y (3) conectadas con la historia. En base a las observaciones halladas, los encargados de marketing pueden disponer de evidencia empírica respecto a cómo se ve influenciada una muestra de universitarios chilenos, tomando en cuenta que la mayoría de los estudios se han realizado con consumidores estadounidenses (McKechnie y Zhou 2003). Esto podría ser de ayuda para las marcas nacionales por ejemplo, a la hora de evaluar el empleo de sus presupuestos comunicacionales en la utilización de placement en producciones chilenas, dada la escasa información y evidencia que existe en Chile sobre la efectividad de esta herramienta.

La revisión de literatura investigada, evidencia la presencia de un efecto del placement en la memoria explícita de las audiencias, usando tareas de recuerdo espontáneo, recuerdo sugerido y reconocimiento de

marca (Gupta y Lord 1998; Law y Braun 2000; Brennan y Babin 2004). En relación a los tipos de placement, se ha encontrado que marcas altamente integradas con la trama se recuerdan y reconocen mayormente (Russell 2002; Lehu y Bressoud 2009), al igual que para placement acompañados de un personaje principal (d'Astous y Chartier 2000). Apoyando estos hallazgos, Yang y Roskos-Ewoldsen (2007) ratifican el mayor impacto en el reconocimiento de la marca usada por un personaje principal y conectada con la historia sobre el placement de marca como parte del fondo. Las hipótesis 1 y 2 son formuladas entonces con el propósito de confirmar el grado en cada uno de los tipos de placement influencia el recuerdo espontáneo y reconocimiento de marca posterior de los participantes.

H1: La tasa de recuerdo espontáneo para los participantes expuestos al placement en las películas es mayor en el placement de marca conectada con la historia, seguido del placement de marca usada por un personaje principal, y por último el placement de marca como parte del fondo.

H2: La tasa de reconocimiento para los participantes expuestos al placement en las películas es mayor en el placement de marca conectada con la historia, seguido del placement de marca usada por un personaje principal, y por último el placement de marca como parte del fondo.

A pesar de que existe una menor evidencia en cuanto a la memoria implícita, diversos autores han confirmado una posible influencia en las audiencias, utilizando tareas en que los participantes deben completar palabras, elegir marcas o mencionar su intención de compra (Chung y Szymanski 1997; Law y Braun 2000; Morton y Friedman 2002; Cholinski 2012). Sin embargo, en relación a los tipos de placement la evidencia no es clara. Law y Braun (2000) y Chung y Szymanski (1997) por ejemplo, hallan en sus estudios que el placement visual consigue un mayor impacto en tareas de memoria implícita que el placement de audio, mientras que Yang y Roskos-Ewoldsen (2007) no encuentran diferencias significativas entre el placement de fondo, utilizado por un personaje o conectado con la historia. La hipótesis 3 es expuesta con el objetivo de corroborar el efecto general del placement en la tarea de intención de compra implícita posterior al experimento, comparándolo con el grupo de control. De manera más específica, la pregunta de investigación 1 pretende identificar si existe alguna relación entre los efectos de cada uno de los tipos de placement sobre la intención de compra, y el modelo landscape, debido a que en este caso no se ha observado fundamento en la literatura sobre una posible relación significativa.

H3: La exposición de los participantes al placement en las películas influye positiva y significativamente en la intención de compra posterior de las marcas.

PI1: ¿Posee la tarea de intención de compra rendimientos diferentes según el tipo de placement al que son expuestos los participantes?

## **MÉTODO**

### Participantes

Se selecciona una muestra no probabilística por conveniencia de 205 alumnos de diferentes universidades de la Región Metropolitana de Chile, de ambos sexos (44% hombres y 56% mujeres) y de edades entre 19 y 26 años. Se excluyen los sujetos pertenecientes a las carreras de publicidad, marketing o cine, y que podrían haber inferido en los propósitos de este estudio.

Como información adicional, alrededor de un 80% de la muestra menciona asistir al cine entre una y dos veces al mes, y un 72% dice ver en promedio una a dos películas a la semana, principalmente a través de Internet (online), Televisión de Pago y en el cine. Los géneros de películas mayormente indicados como favoritos son la comedia, acción, drama y el suspenso.

### Procedimiento

El experimento se realiza durante los meses de enero y febrero en un ambiente de laboratorio (Malhotra, Dávila y Treviño 2004), disponiendo de salas aisladas y sin mayores distractores, donde se asignan los participantes aleatoriamente a uno de los tres grupos experimentales según los tres tipos de placement identificados. Cada encuestado observa un video editado que exhibe extractos de diferentes películas en un lapso de 14 minutos y que contiene dos marcas de categorías de producto diferentes y solo uno de los tres tipos de placement visuales.

Los tres videos seleccionados son mostrados, previamente a la realización de los experimentos, a dos académicos de marketing de la Facultad de Economía y Negocios de la Universidad de Chile, junto con las definiciones correspondientes a cada uno de los tres tipos de placement, con el propósito de que estos juzguen si efectivamente el placement exhibido se adecuaba a la definición otorgada y de esta forma

asegurar la validez interna de las películas elegidas, tal como lo hacen en su estudio Hong, Wang y De

Los Santos (2008). Además, se aprueba que las audiencias de las películas seleccionadas son correspondientes a la población definida para este estudio.

Inmediatamente después de haber visto los videos, se les proporciona a los encuestados una hoja que

contiene una pregunta abierta no estructurada, con el fin de tener una medida del recuerdo espontáneo

sobre las marcas presentes en las películas vistas. Solo esta pregunta se encuentra presente en la hoja y se

entrega separada del resto del cuestionario. Posteriormente, se les proporciona a los encuestados el resto

del cuestionario, en donde se presentan en una primera página, doce imágenes con distintas marcas, dos

de las cuales aparecen en la películas vistas y diez marcas distractoras, con el propósito de identificar si

los integrantes del estudio son capaces de reconocer las marcas colocadas en el tratamiento experimental.

Las marcas exhibidas para esta tarea, son mostradas en distintos órdenes para los individuos del estudio a

través de tres versiones distintas del cuestionario, de manera de controlar el sesgo de orden (Churchill

2001). Luego de acabar con las pruebas de memoria explícita, se exhibe un formulario de hábitos de

consumo de Cine y datos demográficos, como una tarea de distracción antes de la prueba de memoria

implícita. Completada esta sección, se retira el cuestionario.

Finalmente y ya cuando los encuestados piensan que ha finalizado el experimento, se les proporciona una

última tarea, en la que se presentan dos categorías de productos, cada una con cuatro marcas. Solo una de

estas marcas para cada categoría, había aparecido en las películas a las que el participante estuvo expuesto. De esta manera, se intenta medir la intención de compra, solicitándoles a los integrantes que

elijan las marcas que estarían dispuestos a comprar en un centro comercial o supermercado para consumo

personal o regalo. Para esta tarea, no se les menciona a los encuestados el experimento anterior, con el fin

de medir el impacto en la memoria implícita que produce el placement. Al igual que en la tarea de reconocimiento, se realizaron tres versiones distintas de esta prueba para controlar el sesgo de orden.

Como último paso, se responden las inquietudes sobre el experimento y se les entrega un pequeño snack

en señal de agradecimiento por la disposición y tiempo.

### Instrumento

En el estudio se miden tres variables dependientes y unidimensionales, el recuerdo espontáneo y el reconocimiento, que representan el efecto cognitivo que produce el placement en la memoria explícita de los consumidores; y la intención de compra, que representa el efecto conductual en la memoria implícita. Como ha sido demostrado por numerosos estudios de manera empírica, estas variables parecen verse influenciadas por el placement en las películas, que en este caso será la variable independiente de marketing manipulada para analizar el efecto en los consumidores.

### Análisis de datos

Para el análisis de datos, se aplica en una primera fase el procedimiento de la Regresión Logística Binaria, con el objeto de evaluar si los tipos de placement predicen o se relacionan con las variables dependientes mencionadas. En una segunda fase, se utiliza el test de la varianza ANOVA, con el propósito de identificar diferencias entre los grupos experimentales y de control. Los datos fueron analizados mediante el programa estadístico SPSS, versión 19.

## **RESULTADOS**

### Memoria Explícita

Para analizar si los tipos de placement predicen y se relacionan con las variables de recuerdo espontáneo y reconocimiento de marca, se aplica el procedimiento de la Regresión Logística Binaria (RLB). En este caso, se define la variable dependiente y dicotómica “recuerdo”, que puede tomar el valor “1” cuando el participante recuerda al menos una marca y “0” en caso contrario. Luego, para identificar la proporción de las marcas que aparecen en las películas y que son correctamente recordadas o reconocidas por los participantes para cada uno de los tipos de placement, y analizar si existen diferencias estadísticamente significativas entre los tres grupos experimentales, se utiliza el análisis de la varianza ANOVA de un factor. Previo a la realización del test, se calcula para todos los participantes la “tasa de recuerdo espontáneo”, sumando el número de aciertos (marcas que el participante es capaz de recordar) y dividiéndolo por el total de marcas que aparecen en las películas. De esta manera, se obtiene una variable medida en escala de intervalo, la cual resulta útil para aplicar el test ANOVA. El mismo procedimiento es usado para la tarea de reconocimiento.

### Tarea de Recuerdo Espontáneo de Marca.

El análisis de la RLB para la variable dependiente “recuerdo”, señala la presencia de un modelo significativo y la existencia de una relación estadísticamente significativa con la variable “tipo de placement” ( $p = 0,000$ ), por lo que se puede mencionar que el recuerdo espontáneo de las marcas que aparecen en las películas se puede predecir según los distintos tipos de placement y existen diferencias dependiendo de si la marca es parte del fondo, usada por un personaje principal o se encuentra conectada con la historia. Posteriormente, el análisis ANOVA para la tarea de recuerdo arroja un  $F(2, 147)$  de 39,169 estadísticamente significativo ( $p = 0,000$ ), por lo que se puede señalar al igual que en la RLB, que existen diferencias significativas entre los rendimientos de los tres grupos experimentales. Para identificar si las diferencias son significativas en todas las combinaciones de grupos, se realizan las pruebas post hoc. Debido a que la prueba de homogeneidad de varianzas indica un estadístico de Levene no significativo ( $p = 0,058$ ), se acepta la hipótesis de igualdad de varianzas poblacionales y los principales estadísticos para esta condición (Tukey, LSD, Bonferroni, etc.) arrojan diferencias estadísticamente significativas ( $p < 0,05$ ) para todas las combinaciones entre los tres grupos experimentales. La tasa de recuerdo para el grupo expuesto a la marca conectada con la historia fue de 68%, lo que indica la proporción de las marcas que son recordadas y escritas correctamente por los participantes. Esta tasa es bastante superior a la arrojada por el grupo expuesto a la marca usada por un personaje principal (30%), y a la vez ambos grupos obtienen mayores tasas al de marca como parte del fondo (15%). La hipótesis 1 que indica el grado en que el recuerdo espontáneo es influenciado por cada uno de los tipos de placement, es apoyada. Tarea de Reconocimiento de Marca.

El análisis de la RLB para la variable dependiente “reconocimiento”, señala la presencia de un modelo significativo y la existencia de una relación estadísticamente significativa con la variable “tipo de placement” ( $p = 0,000$ ), por lo que se puede mencionar que el reconocimiento de las marcas que aparecen en las películas se puede predecir y presenta diferencias según los distintos tipos de placement. El análisis ANOVA en este caso, arroja un  $F(2, 147)$  de 46,597 ( $p = 0,000$ ), por lo que se puede mencionar que existen diferencias significativas entre las medias de las tasas de reconocimiento para los tres grupos experimentales, tal como resulta en la RLB. Siguiendo los pasos de la tarea de recuerdo espontáneo, se obtiene un estadístico de Levene significativo ( $p = 0,000$ ), por lo que en este caso se usan los estadísticos

Tamhane, Dunnett y Games-Howell, los que arrojan diferencias estadísticamente significativas ( $p < 0,05$ ) entre los rendimientos para la marca conectada con la historia y los dos grupos restantes. Sin embargo, no se encuentran diferencias significativas ( $p > 0,05$ ) entre la marca usada por un personaje principal y la marca como parte del fondo. Para el placement de marca conectada con la historia, la tasa de reconocimiento es de 96%, lo que indica una elevada proporción de marcas que son correctamente reconocidas por este grupo. Para la marca usada por un personaje principal, el rendimiento es inferior con una tasa de reconocimiento de 58%, y en menor medida para la marca como parte del fondo, con una tasa de 44%. Debido a que no se puede corroborar en los test anteriores la diferencia estadística entre el placement de marca usada por un personaje principal y el de marca como parte del fondo, la hipótesis 2 que indica el grado en que el reconocimiento es influenciado por cada uno de los tipos de placement, es parcialmente apoyada.

### Memoria Implícita

#### Tarea de Intención de Compra.

En el caso de la tarea de intención de compra, se utiliza el procedimiento de la RLB para analizar si la existencia de placement en las películas se relaciona y predice el comportamiento de la intención de compra de las marcas posterior al experimento. Para esto, se define la variable dependiente “intención de compra”, que puede tomar el valor “1” cuando el participante elige al menos una de las marcas que aparecen en las películas y “0” en caso contrario. La variable independiente o explicativa corresponde al grupo al que fue asignado cada encuestado (grupo experimental o grupo de control). Luego, se utiliza el test ANOVA de un factor para comparar las respuestas entre los grupos experimentales y grupo de control, y de esta forma, identificar el efecto real del placement sobre la intención de compra de los participantes (Pope 2002). Además, se utiliza el test para contrastar los rendimientos entre los tres grupos experimentales y analizar si existen diferencias significativas entre los tipos de placement y la elección de las marcas que aparecen en las películas respectivas.

El análisis de la RLB para la variable dependiente “intención de compra”, señala la presencia de un

modelo significativo y la existencia de una relación estadísticamente significativa según el grupo al que fueron asignados los participantes ( $p = 0,03$ ) y según los tipos de placement ( $p = 0,000$ ). En este sentido, se puede mencionar que el grupo que estuvo expuesto al placement en las películas posee una mayor influencia en la intención de compra comparada con el grupo de control y que esta variable se puede predecir según los distintos tipos de placement. El test ANOVA realizado entre los participantes del grupo experimental y grupo de control, para analizar el efecto del placement en la intención de compra (Hipótesis 3), arroja un estadístico F (1, 313) de 10,108 significativo ( $p = 0,002$ ), por lo que se puede admitir la existencia de diferencias significativas entre las medias de las tasas de intención de compra para los grupos experimentales y de control, apoyando los resultados de la RLB. La tasa de intención de compra en el grupo experimental es de 36%, superior al rendimiento obtenido en el grupo de control (24%). Es decir, la proporción de las marcas que aparecen en las películas y que son elegidas por los participantes, fue un 12% superior a la proporción de estas mismas marcas elegidas por el grupo de control, el cual no había estado expuesto previamente al placement. La hipótesis 3, que asevera una influencia en la intención de compra de los participantes previa exposición al placement en las películas, es entonces apoyada.

Para analizar la existencia de diferencias entre los tres grupos experimentales (PI1) se genera una nueva variable, “tasa de variación en la intención de compra”, con el propósito de poder hacer efectiva la comparación entre los tres tipos de placement (debido a que el efecto real del placement se consigue por el nivel de variación en cuanto al grupo de control). El análisis ANOVA arroja un F (2, 147) significativo de 4,244 ( $p = 0,016$ ), lo que implica la existencia de diferencias entre los promedios de variación de la intención de compra de los tres grupos. Observando las pruebas de comparaciones múltiples, la única relación significativa ocurre entre la marca usada por un personaje principal (22% de variación en la intención) y la marca como parte del fondo (5% de variación). No se hallan resultados significativos para la marca conectada con la historia (8% de variación) y los demás grupos. En relación a la pregunta de investigación PI1 entonces, se puede mencionar que el placement de marca usada por un personaje

principal posee un mayor impacto en la variación de intención de compra, en comparación a la marca como parte del fondo, sin embargo no se presentan relaciones significativas con la marca conectada con la historia.

## CONCLUSIONES

Los resultados obtenidos en esta investigación resultan importantes, ya que son indicios de que el placement en las películas podría ser una herramienta de marketing efectiva, en cuanto a la influencia que provoca la exposición de marcas en las memorias explícita e implícita de los participantes chilenos.

Un primer hallazgo del estudio corresponde al grado en que los tipos de placement parecen influenciar la memoria explícita de los consumidores chilenos. Basado en el modelo landscape, que explica los niveles de activación de la información en la memoria en los procesos de comprensión (van den Broek et al.

1996, 1999), se puede fundamentar el hecho de que el placement de marca conectada con la historia haya

obtenido los mejores rendimientos en las dos pruebas realizadas para medir la memoria explícita, consistente a los resultados obtenidos por Russell (2002) y Lehu y Bressoud (2009). Con tasas menores,

le sigue la marca usada por un personaje principal, que actúa como facilitador o apoyo para darle sentido

a una escena, por lo que se encuentra en un nivel intermedio de activación en la memoria explícita, tal

como sucedió en la tarea de recuerdo y reconocimiento. Por último, se encuentra la marca como parte del

fondo, que incorpora la información que no es necesaria para la comprensión del argumento y que por lo

tanto es la que representa el menor nivel de activación en la memoria explícita, acorde con el rendimiento

en la tarea de recuerdo espontáneo y los resultados obtenidos por Yang y Roskos-Ewoldsen (2007).

En este sentido, utilizar el placement en las películas y específicamente la marca conectada con la historia, podría ser una buena estrategia para los encargados de marketing o avisadores que deseen

fortalecer la conciencia de sus marcas en la mente de los consumidores, ya que implica una mayor

probabilidad de estimular la memoria explícita y con esto el recuerdo y reconocimiento de las marcas.

Los productos o identificadores de marcas que pertenecen a este tipo de placement representan información fundamental para la comprensión y desarrollo de la película, por ejemplo, ayudan al protagonista a resolver un problema o lo rescatan de una situación difícil. Es por esto que los consumidores expuestos a este placement tendrían una mayor probabilidad de recordar explícitamente

estas marcas en el futuro (Yang y Roskos-Ewoldsen 2007). Este podría ser el caso recomendado, por

ejemplo, a las marcas nuevas en el mercado, que necesiten generar conciencia o respuestas cognitivas, de manera que los consumidores sean capaces de recuperar o identificar las marcas a las que estuvieron expuestos (Hong et al. 2008; Ho, Lin, y Yang, 2011), o también en categorías de productos de alto involucramiento para los consumidores, que requieran un mayor esfuerzo para obtener información previa, como podrían ser las decisiones que implican un alto riesgo, costo o importancia para el consumidor (Shapiro y Krishnan 2001).

Una segunda observación comprende el efecto que parece producir el placement en la memoria implícita de los consumidores, lo que es demostrado para los participantes de este estudio a través de una prueba de intención de compra que no hace referencia a la exposición previa del estímulo. Los rendimientos son significativamente superiores a los obtenidos en el grupo de control, consistente con las observaciones de Law y Braun (2000); Morton y Friedman (2002). En cuanto a los tipos de placement, solo se identifica una influencia significativa mayor en la marca usada por un personaje principal, en comparación al placement de marca como parte del fondo. Se ha mencionado que placement sutiles podrían influir mayormente en las tareas implícitas, como explicaron Ho et al. (2011) en su estudio de placement para videojuegos, sin embargo, en esta investigación los resultados fueron contrarios. En este sentido, no se encuentra una relación con el modelo de comprensión de la información que propone el modelo landscape (van den Broek et al. 1996, 1999), lo que es consecuente con la evidencia que soporta que la memoria implícita no se vería influenciada por el modo en que se procesa la información en la memoria (Yang y Roskos-Ewoldsen 2007). Una posible explicación podría ser que cuando la marca es usada por un personaje, aumenta el sentido de familiaridad (Yang y Roskos-Ewoldsen 2007), lo que podría funcionar como una heurística al momento de elección de las marcas.

De esta forma, utilizar el placement en las películas y específicamente la marca utilizada por un personaje principal, es recomendado también como una buena estrategia para estimular la memoria implícita cuando los productos son existentes en el mercado, de manera de reforzar las respuestas conductuales de los consumidores como la intención o compra efectiva, (Ho et al. 2011), por ejemplo, en situaciones de bajo involucramiento o compras impulsivas, donde el consumidor emplea un bajo esfuerzo cognitivo para tomar una decisión y tiende a usar reglas de decisión simples o heurísticas, como elegir la

marca que capta la vista o que sobresale visualmente entre los competidores (Chung y Szymanski 1997).

En estos casos, el consumidor podría recuperar de manera automática o inconsciente los estímulos a los que estuvo expuesto durante el placement y verse influenciado el consumo (Shapiro y Krishnan 2001; Krishnan y Trappey 1999).

Los resultados obtenidos en la presente investigación complementan los hallazgos que observaron los autores Yang y Roskos-Ewoldsen (2007), en relación a los tipos de placement visuales y su influencia en las audiencias, consiguiendo establecer una tendencia clara y significativa entre el grado de integración de la marca con la trama y la probabilidad de activación de la información en la memoria explícita (en la tarea de recuerdo espontáneo), lo cual no fue posible establecer en su totalidad en el estudio de los autores mencionados. Por otro lado, se confirma también una influencia del placement en la memoria implícita para los participantes de esta investigación y se entregan precedentes sobre una mayor influencia en la memoria implícita cuando se usa la marca usado por un personaje principal, de lo cual no se ha encontrado evidencia en la literatura, y que podría orientar futuras investigaciones, incluyendo nuevas variables explicativas de este suceso, como la empatía hacia los personajes, la familiaridad de marca o la empatía y actitudes hacia la marca.

Una de las limitaciones que presenta esta investigación se relaciona con el diseño muestral utilizado. La muestra en cuestión no se recolecta de manera probabilística, por lo que los resultados no son generalizables a la población de universitarios chilenos. En cuanto a la metodología usada, se miden los efectos inmediatos en los participantes, mediante tareas que son proporcionadas seguidamente a la exposición al placement en las películas. Interesante podría ser el análisis de los efectos del placement luego de semanas realizada la exposición a los estímulos. Otras limitaciones podrían relacionarse con el número de marcas evaluadas o las categorías de productos utilizadas, donde se podrían integrar también comparaciones entre productos con o sin carga ética, de bajo o alto involucramiento, etc.

Desafíos para futuras investigaciones incluyen incorporar un mayor número de variables para el entendimiento de la memoria implícita y la mayor influencia hallada cuando la marca es usada por un personaje principal, por ejemplo, tiempos de exposición de las marcas, experiencias de consumo previo y

familiaridad de marca, la empatía hacia los personajes o variables individuales. Debido a que el uso del placement se está incrementando cada vez más en Chile, otro desafío a futuro podría ser el hecho de expandir el estudio a otras medidas de efectividad del placement, por ejemplo, desde el punto de vista financiero de una empresa, usando medidas como el cambio en el valor del precio de la acción para las marcas que aparecen en las películas chilenas o el crecimiento en las ventas posterior al estreno.

Finalmente, otra sugerencia se presenta en la toma de datos de la muestra, la cual podría realizarse mediante una investigación de campo, por ejemplo, a la salida de los cines, teniendo en cuenta que la mayoría de los estudios en este ámbito se realizan en ambientes de laboratorio. De esta forma, podría mejorarse la validez externa de los experimentos.

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# LOS EFECTOS DEL EMPLAZAMIENTO DE LA MARCA EN ADVERGAMES DE PROMOCIÓN TURÍSTICA SOBRE LA RECORDACIÓN, LA CONSCIENCIA DE LA MARCA Y LA ACTITUD HACIA LA MARCA

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## ABSTRACT

*El uso de advergames -videojuegos concebidos y desarrollados específicamente para dar a conocer, posicionar y/o promover una marca o producto determinado en el mercado meta vía su emplazamiento en el contenido multimedia-, constituye un esfuerzo de los anunciantes para alcanzar consumidores cada vez más sofisticados y renuentes a la publicidad tradicional dada la saturación y diversificación de los medios de comunicación tradicionales. Esta herramienta les permite adaptarse y aprovechar la evolución de las tecnologías de la información y comunicación y supone, además de ser un elemento diferenciador, ser capaz de influir en el comportamiento de los consumidores. En el ámbito turístico, algunas organizaciones encargadas de promover destinos han incursionado en este terreno intentando obtener ventaja competitiva sobre el resto. Sin embargo, las investigaciones empíricas sobre la efectividad de los advergames en general y de los de promoción turística en particular son muy escasas. En consecuencia, se propone la realización de un experimento verdadero con grupo de control post test basado en la exposición de un advergame desarrollado específicamente para esta investigación que permita manipular la variable independiente Tipo de emplazamiento para conocer sus efectos sobre las variables dependientes Recordación, Conciencia y Actitud hacia la marca de los sujetos de estudio.*

**JEL:** M3

**KEYWORDS:** Advergames, Turismo, Emplazamiento.

## INTRODUCCIÓN

La saturación y diversificación publicitaria de los medios de comunicación tradicionales, la variedad de los medios utilizados y la fragmentación de audiencias, ha ocasionado que los consumidores exijan experiencias de marketing cada vez más personalizadas y únicas, al mismo tiempo que los consumidores son cada vez más sofisticados y renuentes a la publicidad tradicional (Martí, Currás y Sánchez, 2010).

De manera casi análoga, el evidente crecimiento de la industria turística, considerada como la segunda actividad económica más importante a nivel mundial (Rubio, 2003, Sancho, 2006), se ha enfrentado a un sinnúmero de desafíos (Ritchie y Crouch, 2000). Para el marketing turístico, entendiéndolo a través de la presente adaptación de la definición dada por la American Marketing Association (2013) como: “actividad, conjunto de instituciones y procesos para crear, comunicar,

entregar e intercambiar ofrecimientos turísticos que tengan valor para consumidores, clientes, socios y la sociedad en su conjunto”, la promoción de los destinos turísticos hace frente a cambios producidos por las Tecnologías de la Información y la Comunicación (TIC), y a partir de su evolución se generan nuevos retos en las condiciones de mercado para las organizaciones turísticas (Buhalis y Law, 2008).

Las TIC brindan una gama amplia de dispositivos, hardware y software, y han provocado un cambio en la forma en la que, tanto la información como ellas mismas son utilizadas (Oladipo y Andrew, 2012). Así, su potencial para el marketing de destinos turísticos supone la consecución de ventajas competitivas, no sólo a través de la reducción de costos asociados a los canales de distribución respecto a los medios tradicionales, sino también en cuanto a las posibilidades de manejo de información se refiere (Bigne, Font, y Andreu, 2000). Algunos investigadores sostienen que los impactos de las TIC han despertado la necesidad, hoy crítica, de re-elaborar los productos turísticos de una manera proactiva (Buhalis y Law (2008).

En efecto, el uso de Internet ha transformado las maneras en que las personas se comunican, buscan información e interactúan tanto con la información como entre personas (Winer, 2009). La transición de información estática y unidireccional a dinámica y colaborativa –esta última también conocida como Web 2.0- ofrece a los usuarios alternativas tales como el uso de redes sociales, blogs y foros. Adicionalmente, las búsquedas en Internet a través de comunidades de viajeros en línea permite a los consumidores, actuales y potenciales, obtener información acerca de destinos que podrían seleccionar (Casaló, Flavián, y Guinalú, 2010). Mas aun, el incremento en la accesibilidad a dispositivos móviles capaces de aprovechar estas tecnologías abre las puertas a otras estrategias de comunicación de marketing (Buhalis y Law, 2008). Y es que, tal como aclara Porter (2001), las TIC no son la vía del marketing a tomar por su simple uso ya que el éxito de su aprovechamiento depende de una adecuada planeación estratégica.

Esta situación ha llevado a los profesionales del marketing a desarrollar estrategias alternativas de promoción turística que utilizan el emplazamiento marcas, productos o destinos en películas, programas televisivos y videojuegos que resultan atractivos para el consumidor (Moore, 2006), no obstante, los efectos de su utilización sobre distintas variables del comportamiento del turista permanecen aún poco explorados y la investigación empírica al respecto en el ámbito del marketing turístico es, en el mejor de los casos, escasa ya que si bien se ha identificado un interés creciente en la investigación de marketing turístico, éste no se ve reflejado, con en la misma intensidad, en los trabajos que poseen un vínculo directo con las nuevas tecnologías (Bigné, Andreu, García y Alvarado, 2008).

Luego, con el objetivo de conocer los efectos que los distintos tipos de emplazamiento pueden tener sobre variables selectas del comportamiento del consumidor turístico, tradicionalmente asociadas a aspectos publicitarios y promocionales, se diseñó y se lleva a cabo una investigación cuantitativa de sección transversal ad hoc basada en un experimento verdadero con grupo de control post test usando como elemento audiovisual un advergame desarrollado propiamente para ello, el cual que permita manipular la variable independiente Tipo de emplazamiento (TE) para conocer sus efectos sobre las variables dependientes Recordación (RM), Conciencia (CM) y Actitud hacia la marca (AM) de los sujetos de estudio. En este documento se presenta el diseño experimental del estudio en curso.

## REVISIÓN DE LA LITERATURA

### Emplazamiento de Marca

El emplazamiento de marca en medios dedicados al entretenimiento ha sido utilizado como una forma efectiva para hacer llegar mensajes publicitarios a los consumidores y relacionarse con ellos (Moore, 2006). A diferencia de los medios publicitarios tradicionales tales como la televisión, la radio y los materiales impresos, el emplazamiento de marca se integra con el contenido donde ocurre, sin interrumpir la experiencia de la audiencia, pudiendo incluso no ser percibido como publicidad (Nelson, Keum, y Yaros, 2004) y, en algunos casos, mejorando la experiencia de los sujetos al dotar de realismo a las obras.

Una clasificación de los tipos de emplazamiento que es útil para los efectos de esta investigación es la propuesta por Russell (1998) la cual se fundamenta en sus variaciones de modalidad y reconoce además las de intensidad. Según sus postulados existen tres tipos distintos de emplazamientos: el primero -emplazamiento visual- se da mediante la simple aparición de la marca en escena, en donde el producto o la marca es colocado como parte del entorno; el segundo tipo -emplazamiento auditivo- se basa en la mención sonora de la marca, ya sea como parte de los diálogos de los personajes o mediante la inclusión de algún sonido que sea fácilmente identificable por la audiencia como representativo de una marca; y finalmente, el tercer tipo de emplazamiento -de argumento-, es aquel en que se da a la marca o producto un papel importante en la trama misma de la obra y se asocia, frecuentemente, a inserciones mixtas (tanto visuales y auditivas) procurando una conexión más estrecha con el argumento. En los tres casos, la intensidad puede variar de baja a alta dependiendo, principalmente, del lugar que ocupa el emplazamiento en la escena, del número de veces que la marca aparece o es mencionada y del énfasis de la inserción o de la mención.

Estos tipos de emplazamientos también pueden ser identificados en los videojuegos en general y en los advergames en particular ya que han sido aprovechados por la industria de desarrollo de videojuegos y sus costos pueden variar según su interactividad y visibilidad (Nelson et al., 2004).

### *Advergames*

Martí, Sanz, y Ruiz (2012) reconocen el origen del término advergame de la siguiente manera: “Etimológicamente el término advergame es un neologismo inglés acrónimo de *advertisement* (anuncio) y *game* (juego) cuya filiación no está exenta de cierta controversia” (p. 73). Por otra parte, Selva (2009:151) define advergame como “un videojuego financiado por un anunciante y creado para un producto o marca con un determinado objetivo publicitario”, y si bien el término ha sido referenciado también como “publijuego” (Lenderman y Sánchez, 2008), su forma anglosajona ha tenido más aceptación en la comunidad científica. En cualquier caso para que un videojuego pueda ser considerado un advergame, su esencia debe girar en torno a la marca, y la forma en la que ésta es emplazada puede variar en modo, frecuencia e intensidad (Nelson et al., 2004), luego, los advergames son una forma especial de videojuegos centrada en la marca o producto que promocionan o anuncian.

Los videojuegos tienen la característica de estar dirigidos a públicos de distintas edades y no únicamente al segmento infantil (Tapscott, 2009), un estudio publicado por la Junta de Clasificación de Software de Entretenimiento (Entertainment Software Rating Board, n.d.) indica que la edad promedio de los jugadores de videojuegos en Estados Unidos en 2010 era de 34 años. De hecho, los advergames han probado ser una herramienta de marketing que ejerce una influencia poderosa en jóvenes (Van Reijmersdal, Jansz y Peters, 2010) y adultos (Celtek, 2010); y si bien los niños no son quienes suelen tener la decisión de compra pues todas sus necesidades

son cubiertas por los padres, se reconoce que éstos tienen un rol considerable como influenciadores para quien adopta esta decisión (Loudon y Della, 1995).

Por lo general, los advergames suelen ser de naturaleza más sencilla que los videojuegos tradicionales. Así, los primeros tienen características más rudimentarias, animaciones más simples y una trama menos elaborada que los segundos (Grossman, 2005). Sin embargo la integración de la marca es fundamental para que los advergames logren su propósito, y esta puede ser a través de elementos con los cuales el jugador interactúa como parte de la trama (Moore, 2006), como un elemento visible en el fondo de la pantalla o una combinación de ambos en varias formas, tipos y momentos del juego.

El uso de advergames en el marketing ofrece ventajas, tanto para consumidores como para las empresas; Los primeros obtienen un producto que, además de ser gratuito para ellos, tanto en sus versiones en línea (Grossman, 2005) como en aplicaciones móviles, puede resultarles más interesante que un programa de televisión o cualquier otra producción similar ya que interactúan y se entretienen jugando (Afshar, Jones y Banerjee, 2004; Nelson, Keum, y Yaros, 2004). El tipo de interacción que se puede lograr con los videojuegos es una ventaja clara sobre los medios tradicionales de publicidad al involucrar activa y ampliamente al consumidor (Moore, 2006) y, a diferencia de lo que ocurre con los televidentes, los jugadores usan el advergame de manera voluntaria (Lenderman y Sánchez, 2008). Por su parte, las empresas pueden aprovechar formatos de aplicaciones susceptibles de ser utilizadas en cualquier momento y lugar (Martí et al., 2012) captando la mayor parte de la atención del consumidor a través de la interactividad de la cual los medios tradicionales de comunicación publicitaria carecen (Winer, 2009).

En efecto, si bien los altos precios de los dispositivos móviles capaces de ejecutar juegos y otras aplicaciones habían sido una limitación (Celtek, 2010) para usuarios y productores ya que eran distribuidos por las compañías de telecomunicaciones, actualmente han alcanzado costos accesibles y la navegación en Internet y el uso de tiendas de aplicación son formas estándar de descargar contenidos a éstos dispositivos (Feijoo, Gómez-Barroso, Aguado, y Ramos, 2012) que permiten a las empresas ofrecer a sus consumidores contenidos de carácter lúdico como los advergames (Selva, 2009).

Parte esencial de los advergames es lograr que los emplazamientos permitan a los jugadores reconocer y ser conscientes de la marca por lo que ésta debe ser claramente visible para ellos (Gross, 2010). La exposición a mensajes publicitarios tiene un impacto en la memoria explícita, la cual implica que el consumidor realice un esfuerzo en recordar un anuncio para recordar la información. La memoria explícita puede ser medida a través de pruebas de reconocimiento o de recordación libre, siendo la primera utilizada cuando el tiempo entre la prueba y la exposición no son inmediatas (Shapiro y Krishnan, 2001). Adicionalmente, en lo que a la actitud hacia la marca se refiere, los resultados de investigaciones recientes sobre los efectos que el emplazamiento de marca en videojuegos tienen sobre esta variable, contradicen postulados teóricos en el sentido de que la publicidad refuerza las actitudes hacia la marca cuando el consumidor tiene conocimiento previo de la misma (Mackay, Ewing, Newton, Windisch, 2009) por lo que, la corrección de dichas afirmaciones permanece en duda en el ámbito de los advergames y constituye un llamado a ampliar los estudios al respecto en medios de publicidad emergentes (Mackay et al., 2009).

Adicionalmente, aun cuando los sitios Web han basado parte de su éxito en diseños atractivos capaces de llamar la atención de los usuarios (Tang, Jang, y Morrison, 2012), los advergames consiguen ir más allá logrando una mayor exposición e interacción con la marca y han encontrado así un mercado reciente en los usuarios de dispositivos móviles. Una aplicación más reciente de

los advergames ha tenido su origen en “ayuntamientos y oficinas de turismo” interesados en crear una relación con los consumidores que aprovechan Internet para realizar búsquedas y contrataciones de servicios turísticos (Martí et al., 2012), en el entendido de que los advergames de promoción turística permiten ofrecer información valiosa acerca de los destinos y además educan al turista de una manera entretenida (Celtek, 2010), lo que los hace útiles para fomentar la industria turística a aprovechar las ventajas de llevar a cabo estas prácticas (Celtek, 2010).

Ahora bien, aun cuando algunos estudios han demostrado que las aplicaciones móviles pueden tener efectos sobre la conciencia de marca (Celtek, 2010, Gross, 2010, Nelson, 2002, Okazaki y Yagüe, 2012, Selva, 2009, Svahn, 2005, van Reijmersdal, Jansz y Peters, 2010), las actitudes (Gross, 2010, Martí et al., 2012, Okazaki y Yagüe, 2012, Redondo, 2010, Selva, 2009, Svahn, 2005, van Reijmersdal, Jansz y Peters, 2010) y la recordación de marca por parte de los consumidores (Gross, 2010, Nelson, 2002, Okazaki y Yagüe, 2012, van Reijmersdal, Jansz y Peters, 2010), hasta donde llega nuestro conocimiento, los efectos de los distintos tipos de emplazamientos incorporados a un advergame sobre estas variables permanecen sin estudiar y menos aun en un advergame de promoción turística.

## EXPERIMENTO PROPUESTO

En el presente apartado se detalla la propuesta metodológica que pretende llevarse a cabo para analizar los efectos del tipo de emplazamiento de una marca en advergames de promoción turística sobre la recordación de marca, conciencia de marca, actitud hacia la marca. En consecuencia, se describen la naturaleza de la investigación, el tipo de investigación, las técnicas y las herramientas a utilizar.

Dada la naturaleza del trabajo de investigación se realizará una investigación causal que permita deducir y determinar las relaciones entre los distintos tipos de emplazamiento de marca en un advergame de promoción turística y sus efectos sobre la recordación de marca, conciencia de marca y actitud hacia la marca (Malhotra, 2008). Se realizará un experimento verdadero con grupo de control sólo posterior a la prueba basándose en la exposición de un videojuego desarrollado específicamente para esta investigación el cual permitirá la manipulación de la variable TE en el mismo ambiente de un advergame, lo que permitirá maximizar su validez interna. Este diseño fue seleccionado por ser el que ofrece un mayor control de las fuentes de invalidez tanto interna como externa (Malhotra, 2008). Así, se pretende manipular el TE de marca para medir el efecto las variables dependientes seleccionadas (v.g. RM, CM y AM). Otras variables extrínsecas como el tiempo de exposición, la dificultad del juego, la intensidad de cada emplazamiento individual, el tamaño de la imagen de la marca y el género del juego, se mantendrán uniformes para cada uno de los grupos. Se controlará también el entorno de los sujetos a través de un ambiente artificial, que simule las condiciones del entorno de una sala de estar de una casa habitación, de manera que los factores ambientales como los niveles de temperatura, iluminación y ventilación, o cualquier distractor, no afecten la experiencia del jugador durante el experimento.

El experimento manejará tres tipos de emplazamientos: en el primero, se emplazará la marca de manera visual exclusivamente, en el segundo, la marca se emplazará de manera auditiva exclusivamente y en el tercero se conjugarán creando un emplazamiento audiovisual.

Se utilizarán cuatro grupos de estudio correspondiendo: los tres primeros a sendos grupos experimentales para cada uno de los tipos de emplazamientos a emplear y un cuarto grupo (grupo de control) que estará expuesto al advergame pero sin emplazamiento alguno. Para asegurar la homogeneidad de los grupos, los sujetos serán elegidos al azar para la conformación de cada grupo y, de igual manera se seleccionará de manera aleatoria el tipo de tratamiento que corresponderá a cada uno de estos. La observación se realizará mediante la aplicación de una encuesta a los sujetos de los cuatro grupos para obtener las medidas de post test sobre la recordación de marca, consciencia de marca y actitud hacia la marca, el grupo de control servirá para medir la eficacia de cada tipo de emplazamiento de marca. El esquema propuesto se sintetiza como sigue:

GE1	(R)	X1	O1
GE2	(R)	X2	O2
GE3	(R)	X3	O3
GC	(R)		O4

En lo relativo a la muestra, se propone seleccionar personas cuyas edades estén comprendidas entre 18 y 48 años de edad. Esto obedece a dos razones: la primera se relaciona con cuestiones éticas en los estudios con experimentos, pues si bien individuos menores de 18 años pueden ser un mercado que disfruta de los videojuegos, consideramos que es preferible excluirlos para evitar conflictos de esta naturaleza; la segunda razón está basada en que se conoce que las personas nacidas a partir de 1965 tienen una afinidad mayor hacia el uso de diversos medios entre los que se encuentran los videojuegos que aquellas nacidas con anterioridad a ese año (Tapscott, 2009).

En lo que al advergame a desarrollar se refiere, se optó por usar las imágenes, actividades y marca de un destino existente pero del cual los sujetos de estudio no tuvieran un conocimiento previo para evitar sesgos derivados de su eventual reconocimiento. Por ello, se solicitó y obtuvo el apoyo de la Dirección General del Parque Nacional Volcán Nevado de Colima (México) y se realizó un trabajo de campo preparatorio para construir un acervo fotográfico específico y se propuso un storyboard para el desarrollo del juego, el cual se muestra en la Figura 1 a continuación. Las cuatro versiones del juego tendrán la misma historia y dinámica y únicamente variarán en el tipo de emplazamiento empleado en cada una de ellas. En el caso del grupo de control no se realizará emplazamiento alguno.

Figura 3: Storyboard del Advergame De Promoción Turística



Pantalla de inicio muestra una imagen del Volcán Nevado de Colima, en un costado se aprecia la imagen desvanecida del Rey Colimán. El título del juego se lee en fuente grande con tipografía estilo aventura y detalles de naturaleza. Al iniciar el juego, aparece la instrucción de proporcionar el nombre de la persona. La redacción del juego siempre será por su nombre o en segunda persona. Música de fondo con tono de aventura similar al tema de la película "La isla".



Descripción: Se presenta una imagen de uno de los inicios de un sendero para caminata. A la vista están dos compañeros esperando a que estés listo para salir a la caminata. Dinámica del juego: encuentra los elementos necesarios para tu caminata (la pista se basa en la forma de los objetos). Por cada artículo encontrado se proporcionará información de su importancia para dicha actividad.

Instrucción: Te encuentras en "La Joya" listo para emprender tu aventura. Prepara tu mochila con el equipo básico para empezar tu aventura: encuentra los elementos de la lista para agregarlos a tu mochila.



A lo largo de la caminata se observan paisajes de bosques encino, pino, oyamel y aile. El texto lee una explicación de la vegetación y los tipos de aves de la zona.

Instrucciones: Utiliza tus binoculares para encontrar las cinco aves listadas y tómalas una fotografía.

De manera casi discreta un ave sobresale de las demás.

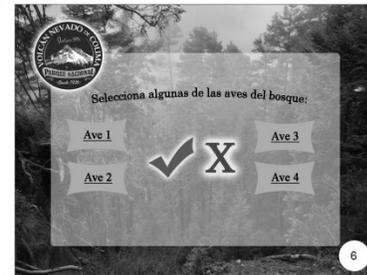


Es un Ergaticus Ruber. El nivel no puede continuar hasta tomarle una foto. Ocurre un diálogo entre el ave y el jugador.

El ave se transforma en una hermosa criatura, la hija del Rey Colimán. La criatura explica que el Volcán (el Rey Colimán) yace dormido en protección de la riqueza del área, lo asombroso de la vida silvestre y su fragilidad. Imágenes desde puntos más altos del lugar aparecen mientras sucede la explicación. La criatura le invita a seguir un poco más para ser testigo de tal majestuosidad.



Aparece un collage con aves y mamíferos terrestres características del área en forma de rompecabezas. El usuario deberá completar el rompecabezas para avanzar. Al completarlo se le felicita y se muestran los detalles de las aves (nombre y características).



En la última escena el usuario deberá completar cuestionarios interactivos para poder avanzar. La información de los cuestionarios será basada en la información proporcionada durante el juego.

Tras completar el cuestionario con un puntaje alto, aparecerá la princesa para felicitar al jugador por su interés y explicarle todos los beneficios del lugar. Encomendando el tesoro del rey colimán, educar a las personas para la conservación y preservación de la biodiversidad que en el volcán hábitat.

Imágenes de:  
commons.wikimedia.org(2013)  
freedigitalphotos.net(2013)  
Archivo del Parque Nacional Volcán Nevado de Colima(2013)

El storyboard del advergame que se muestra en la Figura 1 detalla una historia que lleva al jugador a través de una serie de dinámicas de juego donde se llevará a cabo la manipulación de la variable independiente como se estableció en párrafos precedentes.

## CONCLUSIÓN

El presente trabajo forma parte de una investigación en proceso y a través del mismo se somete a la consideración de la comunidad académica la propuesta metodológica para la realización de un experimento que permita conocer y determinar, empíricamente, los efectos que los distintos tipos de emplazamiento de marca realizados en un advergame en general, y de promoción turística en particular, puedan tener sobre la recordación, la consciencia y la actitud hacia la marca de los consumidores. Se espera que los resultados obtenidos del estudio generen nuevos conocimientos respecto al uso de advergames como herramienta de marketing de promoción de destinos

turísticos y que brinden, en consecuencia, una mayor claridad en la toma de decisiones a los responsables de promover y posicionar un destino.

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# CONTRATOS INTERNACIONALES: RESPONSABILIDAD CONTRACTUAL

Gabriel Alfonso Rodríguez González, Benemérita Universidad Autónoma de Puebla

## RESUMEN

*La globalización de las relaciones mercantiles ha hecho necesaria la adopción de normas jurídicas que rijan las transacciones internacionales con independencia de la nacionalidad de las partes. El derecho privado actual, ligado al marco normativo de cada uno de los países, se vislumbra como un orden jurídico que tiene plena aplicación a la circunscripción territorial de cada uno de éstos, sin embargo, en un mundo con fronteras bien limitadas (como el nuestro), pareciera que ésta metodología es aceptable. Sin embargo, ante el incremento de transacciones comerciales internacionales entre los distintos países y, la apertura de fronteras a fin de contener con el flujo (o incrementarlo) de operaciones comerciales, el Derecho Privado (limitado a un territorio y Estado) resulta insuficiente. Lo anterior es así, ya que el ámbito contractual supera en demasía la normatividad interna de cada uno de los países y/o entes contratantes, por lo tanto, la responsabilidad contractual es hoy una figura fundamental en el Derecho. Su uso es extenso y su campo de acción ha ido evolucionando con las nuevas necesidades que van surgiendo a partir de recientes hechos y realidades. Por todo lo anterior, el presente trabajo sólo buscar hacer notar a todos los participantes del “quehacer” jurídico, la Responsabilidad, ética, moral y contractual que se deposita en nuestras manos, de tal forma que nos sujetemos a los cuerpos normativos que regulan la actividad comercial internacional y, sólo apliquemos y respetemos las normas jurídicas internacionales*

**PALABRAS CLAVE:** Contratación Internacional, Derecho, Buena fe, Ética, Abogado.

## INTERNATIONAL CONTRACTS: CONTRACTUAL LIABILITY

### ABSTRACT

*The globalization of market relations has necessitated the adoption of legal rules governing international transactions regardless of the nationality of the parties. The current private law, linked to the regulatory framework of each country, is seen as a legal system that is fully applicable to the territorial jurisdiction of each of these, however, in a world with limited boundaries well (like ours), it seems that this approach is acceptable. However, with the increase in international trade transactions between countries and the opening of borders in order to contain the flow (or increase) in trade, private law (limited to a territory and state) is insufficient. This is so, because the contractual scope exceeds too much the internal regulations of each country and / or contracting entities, therefore, the contractual liability is now a key figure in the law. Its use is widespread and its scope has evolved with the new needs emerging from recent events and realities. Given the above, this paper only seek to point out to all participants in the legal "work" Responsibility, ethical, moral and contractual deposited in our hands, so that subject ourselves to regulatory bodies governing international business and just apply and respect international legal norms.*

**JEL:** K22, K23

**KEYWORDS:** International Contracts, Law, Good Faith, Ethics, Lawyer

¿Qué es un Contrato Comercial Internacional?

Ahora bien, bajo éste orden de ideas, podríamos iniciar con la explicación de qué se entiende por contrato “internacional”, para luego aterrizar la idea de la responsabilidad contractual de los partícipes de los contratos. Sin embargo, “contratación internacional” y “responsabilidad social” para algunos significarían polos jurídicos opuestos, ya que el común denominador de los contratantes internacionales, no siempre velan por los intereses colectivos, sino que velan por los intereses personales, los cuales, no siempre van ligados a la responsabilidad contractual a la cual se hacen acreedores por el simple consentimiento del instrumento.

A manera de aclarar lo antes comentado, pudiéramos entender por “contratación internacional” cualquier contrato que no sea estrictamente nacional (a *contrario sensu*) y, que haga que los criterios de nacionalidad de las partes, lugar de residencia o de establecimiento, afecte el comercio internacional o, en su caso, planteé un conflicto de leyes nacionales aplicables, siendo considerado como un contrato internacional (acorde a los PICC). Por otro lado, es necesario referirnos a éstos Principios y, concluir: ¿Qué es un contrato “comercial”?, refiriendo que es cualquier contrato que no haya sido hecho para fines de consumo inmediato, sin considerar si las partes son o no “comerciantes”, acorde a las categorías de Derecho Mercantil de cada uno de los estados contratantes.

Pero a todo esto, ni los comentarios ni mucho menos las reglas contenidas en los Principios, explican que debe entenderse por “contrato”, limitándose a explicar los adjetivos “internacional” y “comercial”, sin que se remita al sustantivo “contrato”, lo cual, nos limita a resolver nuestro cuestionamiento en la Teoría General del Contrato, sin embargo, no existe una teoría general del contrato universalmente admitida y, por consiguiente, no existe una noción común o general de Contrato (al menos no a nivel internacional). Por consiguiente, si bien es cierto que todo jurista (o estudioso del Derecho) sabe lo que es un contrato, también es cierto que hay diferentes conceptos de contrato en las diferentes tradiciones jurídicas contemporáneas.

Pero a todo esto, en ¿Dónde queda la responsabilidad contractual de cada uno de éstos instrumentos?, ya que podríamos seguir notando diferencias en el concepto de contrato con el mero expediente de reunir información sobre otros derechos nacionales de la tradición civilística y, complicar aún más el concepto de contrato si lo contrastáramos contra otro tipo de tradiciones jurídicas como la islámica, rusa, china o, incluso la hindú, sin embargo es de considerarse abordar en primer instancia, un concepto internacional de contrato, concluyendo así que la responsabilidad contractual sería más fácil de explicar, ya que ha sido en un mayor número de temas de conversación la responsabilidad contractual y la buena fe de los instrumentos a nivel internacional.

Sin embargo, concluimos que NO es meramente académico la intención de conceptualizar la definición de contrato, ya que éste depende de los actos jurídicos que sean regulados por cada cuerpo normativo y, aquellos que no los sean, podríamos señalar que no cumplen con el requisito de responsabilidad contractual que cada uno de éstos debería de tener. Sin embargo, cuestiono si seríamos capaces de imaginar que cada jurista de cada país interpretara la palabra contrato y responsabilidad contractual conforme a su propia tradición.

Hasta este momento, nos ha quedado un poco más claro que connotación se le da a “comercial” e “internacional” (hablando de contratos), así como la importancia de generar un concepto general

del mismo, sin embargo, a lo largo de éste trabajo analizaremos que en los PICC no existe expresamente la definición de “contrato”, por el contrario, existe un significado implícito de la palabra “contrato”, el cual, aparece un sinnúmero de ocasiones en el documento de referencia, visto desde esta forma, existe un problema de interpretación de éstos principios, debiéndose resolver conforme a las reglas de interpretación que se prevén en su artículo 1.6 (Interpretación e integración de los principios), el cual, en su párrafo primero señala que la interpretación debe hacerse tomando en cuenta “su carácter internacional, así como sus propósitos, incluyendo la necesidad de promover la uniformidad en su aplicación”.

Por todo lo anterior, se infiere que el contrato se produce por el libre consentimiento de las partes, sin necesidad de ningún requisito formal o causal. Pero el consentimiento no es el contrato, como lo demuestra la distinción que se hace en los mismos Principios entre el momento de perfeccionamiento del contrato y el momento de cumplimiento de las obligaciones; el contrato nace en cuanto se produce el consentimiento, se extingue cuando se cumplen las obligaciones y, como su vida se da entre estos dos momentos, no puede el contrato ser el puro consentimiento, como tampoco una persona es su puro nacimiento. Lo que perdura una vez que se integra el consentimiento y hasta que se da el cumplimiento son las obligaciones. El contrato subsiste como obligación, es decir, siguiendo los conceptos de los Principios, como un deber judicialmente exigible de proporcionar un resultado o de poner los medios necesarios para conseguirlo.

#### El Contenido del Contrato. El Concepto de Buena Fe

Concatenando lo anterior, con el perfeccionamiento de un negocio jurídico las partes contratantes buscan satisfacer una determinada necesidad de tipo práctico y establecer las principales reglas de conducta que habrán de regir en el futuro su particular relación. El negocio jurídico se celebra con el fin de producir unos determinados efectos que son intencionalmente queridos por las partes. Dicha regulación, por regla general, entrará en vigor inmediatamente se perfeccione el consentimiento o, excepcionalmente, lo hará en un momento posterior, al vencerse el plazo convenido o acaecer la condición suspensiva acordada. Lo convenido entre las partes será una “ley” para ellas, en el sentido de que las partes estarán constreñidas al cumplimiento, más no en cuanto a una pretendida generalidad que sólo tiene la ley en sentido material, pues como sabemos, la regulación contractual sólo afecta, en principio, el reducido círculo de las partes contratantes.

La regulación establecida por las partes en los contratos, es una regulación que se puede llamar “autónoma”, en el sentido de que son las partes quienes en ejercicio del poder autorregulador que el ordenamiento les brinda determinan el contenido que en principio deben tener las reglas contractuales. Sin embargo, la citada regulación contractual realizada por las partes no tiene la aptitud para contemplar todos los aspectos y detalles de su futura relación (de ahí la importancia de la existencia de diversos cuerpos normativos –incluso internacionales-). Ninguna capacidad de previsión podría contemplar la totalidad de eventos que se pueden presentar en la ejecución de una relación contractual, ni establecer, de antemano, las soluciones a toda posible controversia.

Pero a través de ésta operación mental que hemos realizado, pudiéramos indicar que hemos hecho una interpretación del negocio jurídico o integración del contenido contractual, distinguiéndose una y otra actividad, toda vez que mientras la interpretación atiende al contenido de la declaración de voluntad, la integración va dirigida a completar los efectos jurídicos del negocio, sin embargo, la integración tiene como presupuesto que se haya verificado la interpretación y que ésta se muestre suficiente o completa.

Pero a todo esto, se entiende que en la interpretación e integración del negocio jurídico y/o contenido contractual, la buena fe debe guiar la celebración y cumplimiento de los Contratos Internacionales, independientemente que, el concepto de buena fe sea uno de los más difíciles de precisar en el derecho, pues se trata de una de las nociones que mayor amplitud y alcance que ha adquirido desde que fue concebida y desarrollada por los juristas de Roma. No obstante su complejidad, es menester reconocer de antemano que la importancia de la buena fe es hoy en día de tal magnitud que ella es la base de un principio general de derecho, que incluso se ha llegado a calificar por la doctrina como “supremo” y “absoluto”, máxime que el principio de buena fe es utilizado como eje del sistema de obligaciones y contratos en la regulación de los contratos internacionales y en los proyectos de armonización legislativa que se han propuesto a lo largo del mundo, tal y como sucede en los PICC (art. 1.7). Ahora bien, estos principios, contribuyen a integrar el contenido contractual, con fundamento en que la confianza que debe presidir las relaciones jurídicas, le da legitimidad a las expectativas que cada parte se forma respecto del comportamiento de su contraparte durante la vida de una particular relación contractual.

Teniendo en cuenta el panorama que se ofrece al jurista sobre las distintas aplicaciones que en los PICC se realizan sobre la buena fe, y que nos indicarían que ésta, en todo caso, tiene su fundamento en la actitud o comportamiento honesto y recto del sujeto, resulta importante señalar que el orden jurídico y, particularmente, el orden jurídico privado, no está fundamentado en el “personalismo ético” sino que es imprescindible contar con un elemento ético-social, el cual se logra incorporar al ordenamiento por la vía de la buena fe.

Siguiendo a Karl Larenz en este punto, podemos señalar que la buena fe descansa en la consideración de que la convivencia social se conseguirá cuando la confianza que se deben dispensar las partes en una relación, no será defraudada sino, por el contrario, confirmada.

En todo caso, es conveniente reiterar que, por lo general, el concepto de buena fe no hace referencia a una percepción íntima que deba ser desentrañada de la conciencia de cada sujeto, sino que, por el contrario, la buena fe es susceptible de ser objetivada, de tal manera que el modelo de conducta ideal corresponda a unos parámetros socialmente aceptados.

La función del Abogado en la celebración de contratos internacionales –Responsabilidad Contractual-

En una sociedad basada en el respeto al Estado de Derecho, el Abogado cumple un papel esencial. Sus obligaciones no se limitan al fiel cumplimiento de lo encomendado por su cliente, entendiéndose que el mismo debe servir los intereses de la Justicia así como los derechos y libertades que se le han confiado para defenderlos y hacerlos valer. Su deber no consiste únicamente en abogar por la causa de su cliente sino igualmente, en ser su asesor; sin embargo, el abogado se encuentra sometido en su actuación profesional a diversos catálogos de conducta, entre los que se encuentra inicialmente su deontología jurídica que estudia en este caso, la debida actuación profesional del abogado, que deviene justa, obligatoria y, adecuada por sí misma.

Entendemos entonces que, Moral, Ética y Deontología Jurídica fluctúan en la búsqueda del deber ser profesional, teniendo como norte la especial misión que cumple el actor y/o estudioso del derecho: el respeto por la Justicia, traducida en su actuación con apego a los cuerpos normativos, sujeto a principios y deberes que guían el ejercicio de la profesión, sin embargo, el abogado como parte toral en la celebración de Contratos Internacionales, deberá de vigilar y hacer cumplir los cuerpos normativos, lo anterior, en el ánimo de pensar y/o evitar cualquier tipo de controversia que se pudiera suscitar por la celebración del mismo.

Sin embargo, la buena conducta o, en su caso, la buena fe en los actos que realizamos como operadores del Derecho, se tendrán que ver integrados en diversos catálogos deontológico-normativos, que nos indiquen los límites de nuestras actuaciones, ya que bajo la máxima jurídica de “*PERMITTIUR QUOD NON PROHIBETUR*”, nos vemos en la penosa necesidad de consagrar una serie de disposiciones por medio de las cuales se inspira la conducta profesional del abogado y se perfilan los lineamientos que guían la naturaleza de la relación jurídica del abogado como representante de una persona (física o jurídica) con su cliente comercial.

Pero a todo esto, nosotros como abogados, nosotros como partícipes del quehacer jurídico tendríamos que tener entre otras, la función social de colaborar con las autoridades en la conservación y perfeccionamiento del orden jurídico de cada uno de nuestros países, en la realización de una recta y cumplida administración de justicia, afirmándose como principal misión del abogado la defensa justa de los derechos de la sociedad y de los particulares, asesorando, asistiendo, patrocinando la ordenación y desenvolvimiento de las relaciones jurídicas interpersonales y, con el Estado.

Sin embargo, la doctrina y legislación comparadas acogen como principios deontológicos del abogado pautas de conducta relacionadas con su dignidad profesional: la independencia, la libertad y el decoro profesional y, las exigencias de orden ético, deontológico y normativo propias de la prestación de los servicios de abogado se reflejan en códigos nacionales o internacionales de ética profesional, es decir, estos catálogos nutren el escenario del actuar profesional, dentro de esa órbita en la que el derecho valora al ser humano en torno a principios de libertad y responsabilidad. Ello nos conduce a una conclusión anticipada: la conducta de quienes ejercen la profesión está gobernada, en primer lugar, por una serie de cánones que la sociedad espera y exige como conducta mínima de operadores de la justicia, en adelante, se concreta el entramado normativo que se impone a su actuar profesional, de conformidad con la naturaleza de la relación jurídica y su contenido prestacional, en el caso del ejercicio profesional particular; y de acuerdo con el ámbito de sus competencias, en el caso de servidores públicos.

Pero, con este conjunto de valores, principios y normas se inspira el bloque normativo que regula el ejercicio profesional del abogado, hasta concretar la tipología de sus obligaciones, como prevalentemente de medios, que determinan para el profesional la ejecución óptima de la prestación debida, como corresponde en especialidad. Con esa finalidad, sin que se comprometa ni garantice el resultado predeterminado, es posible esperar legítimamente determinadas conductas, toda vez que son preordenadas por la ley y que las actuaciones en pos de la justicia están reguladas mediante especialidades y vías procesales.

Por tanto, los actores del Derecho hemos instruido diversos cuerpos normativos que necesariamente nos tiene que “recordar” que debemos de actuar con ética profesional; entendiéndose que, no somos capaces de actuar de forma voluntaria para respetar el Estado de Derecho, sino que tenemos que supeditar nuestra actuación a Códigos que nos recuerden la existencia de la buena fe en la actividad de los juristas y, que del cumplimiento de nuestra obligación persistirá una correcta funcionalidad de las leyes. ¿Curioso, no?

## CONCLUSIONES

Expuesta la reflexión que se propuso, planteamos a modo de conclusión que la conducta de quienes ejercen la profesión de abogado, como profesional independiente o como representante de una persona jurídica, está gobernada, en primer lugar, por una serie de cánones que la sociedad espera y exige como conducta mínima de operadores de la justicia. El principio general de buena

fe se ha convertido en la piedra angular del derecho privado (internacional) moderno. Sus aplicaciones son variadas e, importantes los efectos que de ellas se derivan para la vida de la comunidad.

En el campo pactado destacamos la importante función que la buena fe cumple en la integración del contenido contractual, enriqueciendo el programa de derechos y deberes establecido por las partes, con otros derivados de la necesaria corrección y lealtad que debe presidir las relaciones entre particulares.

Sin embargo, a estas alturas no podemos confundir la norma jurídica con el mandamiento moral, debiéndose hacer mención que tampoco tendría por qué existir una distancia entre una y otra, ya que entendemos que existe un punto de conexión o simpatía entre ambos polos, de ahí que se haya asociado, la validez del derecho a la moral que con él se favorece, se pretende o se hace posible, de tal forma que, si los individuos estuviesen capacitados para aplicar a su vida cotidiana los principios morales que suscriben, entonces tendrían una obligación de aplicar tales principios en todas sus acciones –cualesquiera que sean–.

Asimismo, no hay que olvidar que los individuos no pueden imaginar o contemplar todas las consecuencias distributivas de cada curso de acción que deciden realizar y, justo es ahí en donde los cuerpos normativos hacen su aparición y regulan el actuar de las partes, es decir, necesariamente tienen que existir Leyes que “nos recuerden” que tenemos que actuar de buena fe o, en su caso, que nos indiquen los lineamientos o consecuencias jurídicas suscitadas por el no cumplimiento de una obligación. Por tanto, justificamos así la existencia del derecho contractual y, de la participación de los abogados para el correcto cumplimiento del mismo.

Otra corta reflexión sobre la responsabilidad contractual de las partes, es asumir las consecuencias de sus decisiones en la medida en que causen perjuicios a terceros y, en su caso, repararlos; lo anterior, se desprende de la idea de compromiso con la sociedad, entendiéndose que dicho compromiso no es una construcción propia de la modernidad, es una reflexión que el hombre ha perfeccionado con el tiempo, presentándose en diferentes manifiestos que de una u otra forma conducen a proteger, defender o amparar a todos nosotros como integrantes de la sociedad.

Por todo lo señalado a lo largo de éste trabajo, concluimos que, la ética y buena fe del abogado, debe converger con rectitud, honradez, nobleza, honestidad, lealtad, respeto y fraternidad con todos los partícipes del Derecho. En tal sentido, ser abogado no es saber el Derecho, sino conocer la vida. El derecho positivo está en los libros, pero lo que la vida reclama no está escrito en ninguna parte. Quien tenga previsión, serenidad, amplitud de miras y de sentimientos para advertirlo, será Abogado; quien no tenga más inspiración ni más guía que las leyes, será un desventurado mandadero.

## **RECONOCIMIENTO**

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# **RUTA SEDUCTORA HACIA LA CONVERGENCIA DIVULGACIÓN: NIIF PARA PYMES**

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## **RESUMEN**

*Los esfuerzos por uniformar las normas de contabilidad han sido notables desde el 1973, con la creación del Comité Internacional de Normas Contables. En el 2001 se crea la Junta de Normas de Contabilidad Internacional (IASB, en inglés). Entidad que actualmente regula las Normas Internacionales de Información Financiera para las empresas públicas, NIIF completas. Estas, van dirigidas principalmente, a satisfacer las exigencias de los inversionistas en los mercados de valores internacionales. Sin embargo, existe otro sector que también exige divulgación estandarizada y de calidad. Los acreedores, gobierno y reguladores pertenecen al grupo de usuarios que necesitan información financiera uniforme, que les permita valorar las empresas, analizar la divulgación y tomar decisiones oportunamente. Para atender el reclamo de estos, en el 2009 la IASB, crea las NIIF para Pequeñas y Medianas Empresas (PYMES) o NIIF pequeñas. El principal atractivo para su adopción, es que poseen exigencias mínimas de implantación y divulgación. Es pertinente investigar si estos requisitos son un elemento seductor que motive a las empresas a adoptarlas. Se enfatiza en los requisitos de divulgación y se establece una comparación que evidencia la simplicidad en la aplicación de las NIIF pequeñas. La tendencia de adopción varía entre los continentes. Se abunda en las ventajas y desventajas de la adopción de las NIIF pequeñas. Se muestran estadísticas de adopción en los países. Se presentan ideas para futuras investigaciones y recomendaciones sobre la implantación de las normas.*

**PALABRAS CLAVES:** NIIF, PYMES, NIIF Completas, NIIF pequeñas, IASB

## **SEDUCTIVE ROUTE TOWARDS CONVERGENCE DISCLOSURE: IFRS FOR SMEs**

### **ABSTRACT**

*Efforts to standardize accounting standards have been relevant since 1973, with the creation of the International Accounting Standards Committee (IASC). International Accounting Standards Board (IASB) was created in 2001. This entity currently regulates the International Financial Reporting Standards for public companies or full IFRS. These are mainly aimed at satisfying the demands of investors in international stock markets. However, there is another sector that also requires standardized and quality reporting. Creditors, government and regulators belong to the group of users that need uniform financial information, enabling them to rating companies, analyze disclosure and make decisions. Addressing the claim of these, in 2009 the IASB, creates the IFRS for Small and Medium Enterprises (SMEs) or little IFRS. The main attraction for adoption is that they have minimum requirements for implementation and disclosure. It is pertinent to investigate whether these requirements are a seductive element that motivates companies to implement them. The study emphasized the disclosure requirements and a comparison that shows the simplicity in the application of the little IFRS. The trend of adoption varies between continents. The advantages and disadvantages of these rules are listed. The study presents statistics of adoption in the countries. In addition, are presented ideas for further academic research.*

**JEL:** M40

**KEYWORDS:** IFRS, IFRS for SMEs, Converge Route

## **INTRODUCCIÓN**

La globalización es un fenómeno que ha influido en todos los aspectos de una empresa. En términos contables esta, promueve la armonización de divulgación financiera, permitiendo brindar información comparable para facilitar su interpretación y análisis rápidamente. El flujo de información financiera es necesario para la integración de los países. El aumento de las empresas multinacionales (MNE, en inglés) ha generado un incremento en las transacciones comerciales internacionales. En el 2009 (United Nations World Investment Report, 2011) reportó alrededor de 82,000 MNE con más de 810,000 afiliadas en el exterior. Además, la Organización Mundial del Comercio (OMC) reportó 511 acuerdo, 319 están en vigor (World Trade Organization, 2013). Esto ha ocasionado un aumento en la cantidad de individuos que invierten local e internacionalmente que exigen información uniforme y oportuna (Del Valle et al., 2010). El intercambio de información es evidenciado en las distintas bolsas de valores alrededor del mundo, a junio de 2012, un promedio de 10,500 empresas domésticas y extranjeras habían cotizado en las bolsas de valores de América, 22,700 en Asia y 13,300 para el continente europeo y africano respectivamente (World Federation of Exchanges, 2012).

El intercambio de información lo generan principalmente las MNE, sin embargo, el sector de las PYMES es uno muy amplio, estas generan gran actividad comercial en los países (Pacter y Scott, 2012). La mayoría de las instituciones financieras hacen préstamos y operan en ámbito internacional. Las PYMES hacen uso de este servicio para adquirir capital. Las entidades financieras utilizan los informes contables para establecer los colaterales y las tasas de interés. Además las agencias de calificación crediticia internacionales, inversionistas y los proveedores buscan información financiera de las PYMES (IFRS, 2009). Los usuarios de los estados financieros de las PYMES han comenzado a demandar información más especializada. La IASB comenzó a atender este sector en el 2009 con la creación de las NIIF pequeñas, casi 4 décadas después que iniciara sus esfuerzos de uniformidad contable para las empresas que cotizan. La literatura contable dirige principalmente sus investigaciones a la divulgación que generan las empresas públicas. Por lo que la divulgación de las PYMES usando las NIIF no ha sido estudiada con amplitud. Este estudio presenta la divulgación requerida por la IASB a las PYMES y la compara con la requerida a empresas que cotizan, con el fin de presentar la simplicidad que representa la implantación y la divulgación de las NIIF pequeñas.

Los sistemas contables permiten el intercambio de información financiera entre los usuarios internacionales. El objetivo de estos es proveer una divulgación útil para la toma de decisiones. Las normas de contabilidad llevan más de un siglo generando información pertinente (AICPA, 2013). Esto le permite al usuario obtener información sobre una empresa. Mediante la identificación, medición y análisis, la empresa cumple con el objetivo de brindar información fidedigna y confiable. A través de los años, cada país ha establecido organismos contables que ha permitido establecer un sistema de comunicación efectivo entre las empresas y los usuarios. En el 1854 se crea el Instituto de Contadores de Escocia y en el 1880 el de Inglaterra, en Francia para el 1881, Austria en el 1885 y EE.UU en el 1887. Sin embargo, además de estos esfuerzos individuales ha sido necesaria una coordinación para la armonización contable global. La internacionalización de los mercados de valores, productos y servicios, además de los avances tecnológicos ha generado la necesidad de usar un sistema uniforme de contabilidad que permita

la divulgación financiera global. Con la creación de las NIIF pequeñas las PYMES se unen a los esfuerzos de convergencia contable a nivel mundial.

Los reclamos de armonización contable se han originado en distintos sectores. En el 1976 la Organización de las Naciones Unidas (ONU) propuso la creación de un grupo especialista en el tema de normas internacionales. Más adelante la Organización para la Cooperación y el Desarrollo Económico (OCDE), a través de un Grupo de Trabajo de Normas Contables publica en el 1979, prácticas contables en los países miembros que componían el grupo. La ley del 1996 (National Securities Markets Improvement Act - NSMIA) y la Organización Internacional de Comisiones de Valores (International Organization of Securities Commissions, IOSCO) promueven la convergencia, y su principal argumento es aumentar la eficiencia en el proceso de atraer capital (SEC, 2000). Las NIIF son utilizadas por más de 100 países en la actualidad (IFRS, 2012). Además, la IASB ha atendido las demandas de los acreedores y otros usuarios creando unas normas más simples y especializadas, dirigidas a atender las necesidades de los usuarios de la información de la PYMES.

Según Briciu, Groza y Ganfalean (2009) las PYMES se ven como el motor de la economía en diferentes países. Inglaterra posee 5 millones aproximadamente de las cuales el 99.6% poseen menos de 100 empleados, Brasil 6 millones. Chile posee 700,000 de las cuales el 1% posee ventas mayores de \$3 millones (Pacter y Scott, 2012). En el 2011, se estableció en EE.UU un récord de exportaciones con 302,000 empresas, de las cuales el 97% corresponde a las PYMES. Estas reportaron un 33% de las exportaciones en ese país (International Trade Administration, 2011). Para el 2010 del total del comercio en los países miembros de la Unión Europea (UE) el 55% (importaciones) y el 47% (exportaciones) corresponde a las PYMES, de 0 a 249 empleados, (European Commission, 2010). Para desarrollar un análisis adecuado, a continuación se presenta una revisión de la literatura relacionada a las NIIF completas y NIIF pequeñas.

## Fundamentos Teóricos y Revisión de Literatura

### Creación de las NIIF

Luego de la creación del IASC, más adelante en el 1977 se forman el Consejo del IASC con el propósito de aprobar las normas contables. En el 1981 surge el grupo consultor del IASC para proveer asesoramiento profesional. El comité tuvo vigencia hasta el 2001, para dar paso a la IASB cuya vigencia sigue actualmente. La IASC emitió las Normas Internacionales de Contabilidad, NIC y con la desaparición de este Comité, la IASB comienza a emitir las NIIF hasta el presente. Estas son un conjunto de normas basadas en principios que establecen guías generales y tratamientos en específico. Su composición es la siguiente: Normas Internacionales de Información Financiera (Normas después de 2001), Normas Internacionales de Contabilidad (Normas antes de 2001), Interpretaciones NIIF (Normas después de 2001), Interpretaciones de las NIC (Normas antes de 2001).

### Definición de las PYMES

Las PYMES difieren en tamaño, cantidad de ingresos, activos y número de empleados, principalmente. Estos pueden ser los indicadores para la definición de las PYMES, sin embargo, cada país define las PYMES de acuerdo a sus criterios ([http://pdf.usaid.gov/pdf\\_docs/PNADM845.pdf](http://pdf.usaid.gov/pdf_docs/PNADM845.pdf), Booklet for estadarized small and medium enterprise definition.). La IASB define las PYMES como entidades que no tienen responsabilidad pública y divulgan estados financieros de uso general. El objetivo de los estados

financieros con propósito de información general es brindar información sobre la posición financiera, el rendimiento y los flujos de efectivo que sea útil para la toma de decisiones a los usuarios que no exigen informes a la medida de sus necesidades específicas de información (IFRS, 2009).

### Aumento en PYMES

EE. UU. posee 27 millones de PYMES y en contraste solo 17,000 empresas están registradas en la Comisión de Valores e Intercambio (SEC, en inglés). Las PYMES representan el motor de la economía americana (Love, 2007). En la Unión Europea (UE) existen 21 millones de empresas públicas y privadas de las cuales solo 5 millones se les requieren el proceso de auditoría y la aplicación de las NIIF completas. Sin embargo, el 76% o 16 millones de empresas aplica las normas locales (Needles y Powers, 2013). De acuerdo con la IASB el 95% de las empresas de los países desarrollados y no desarrollados son elegibles para aplicar las NIIF pequeñas. Asimismo, en la actualidad algunas empresas han mostrado resistencia a la adopción, ya que entienden que estas normas exceden sus capacidades y necesidades. Además, de que no ayudan en el proceso de toma de decisiones de los acreedores. Sin embargo, la IASB expone que la simplicidad de las NIIF pequeñas en comparación con las NIIF completas y las US GAAP representan un atractivo para que los países le requieran a las empresas la aplicación de las NIIF pequeñas para propósitos estatutarios (Pacter y Scott, 2012).

### NIIF Para PYMES

La IASB atiende el reclamo de las PYMES y de los usuarios de su información. Estos exigen unas normas simples y de aplicación global (Vasek, 2011). En el 2007 la IASB emite un borrador o “Exposure Draft” luego de consultar a más de 100 PYMES en 20 países (Needles y Power, 2013). Más adelante en julio de 2009, cinco años más tarde de que comenzara el proceso en el 2004 con el “Discussion Paper” la IASB publicó la versión de las NIIF pequeñas. En el 2010 se crea el grupo de implantación de las NIIF para PYMES (SMEIG en inglés). En mayo de 2012 la Financial Accounting Foundation (FAF) de EE.UU. estableció el Private Company Council (PCC) con el objetivo de hacer recomendaciones a la FASB en el proceso de creación y revisión de las NIIF pequeñas. En la actualidad se han traducido a 26 idiomas. La IASB prohíbe a una entidad que cotiza la aplicación de las NIIF pequeñas. Además, lo prohíbe a las empresas que manejan activos de otra empresa en calidad de fiduciario, como los bancos, compañías de seguro y corretaje, fondos mutuos, entre otros.

Las NIIF pequeñas son una versión simplificada pero creada sobre la base y el marco conceptual de las NIIF completas. Están diseñadas específicamente para las PYMES y son de reconocimiento internacional. Para implantar las normas se le requiere a las empresas una declaración explícita de cumplimiento con las NIIF para PYMES. No obstante, según (Sanders et al., 2013) las empresas privadas en EE. UU. han sido lentas en el proceso de adopción, en gran parte debido a que todavía el Proyecto de Convergencia entre la IASB y la FASB no ha culminado. EE. UU. prohíbe el uso de las NIIF a empresas locales que cotizan, sin embargo, permite la aplicación de las NIIF pequeñas (PWC, 2012). La IASB desea fortalecer el ofrecimiento a los usuarios de las NIIF pequeñas y en junio de 2012 hace una consulta al público en busca de obtener la opinión de estos (IFRS, 2012). En junio 26 de 2012 la IASB publica “Request for Information Comprehensive Review of the IFRS for SME” como primer paso en la revisión desde que se emitieron en el 2009 (Mackenzie, et al., 2013).

### Objetivos de las NIIF Para PYMES

Los objetivos de la IASB al promover las NIIF pequeñas son: proveer unas normas simples que sean de utilidad solo a empresas privadas, crear uniformidad, hacer accesible normas de calidad a los distintos países, aumentar la calidad de la contabilidad en economías emergentes, permitir la movilidad de los profesionales de la contabilidad alrededor del mundo aplicando un solo formato contable, brindar estados financieros de uso general preparados a la medida para un sector en particular. Se resume la simplificación de las NIIF para PYMES en 2 categorías: eliminación y reducción de alternativas. La tabla 2 presenta una comparación de los temas que se requieren en la aplicación de las NIIF completas y NIIF pequeñas. De estas últimas, se excluye la divulgación de información, como lo es la divulgación de segmentos e información interina para las PYMES. Se reducen las opciones en métodos contables en la aplicación de las NIIF pequeñas. También se simplifica la medición y el reconocimiento de las transacciones contables y la presentación de los estados financieros en comparación con las NIIF completas.

### Debate Internacional

Para la IASB el tamaño de la empresa no es un factor determinante para aplicar las NIIF pequeñas. Todas las empresas que no cotizan, pueden adoptar las normas. Las subsidiarias pueden aplicar las NIIF pequeñas en sus estados financieros no consolidados. Además, la mayoría de las empresas registradas en las bolsas de valores internacionales poseen menos de 100 empleados (Sanders et al., 2013). El debate internacional dirige la discusión para que sea el gobierno de cada país y la entidad reguladora de normas local, quienes decidan qué empresa debe aplicar las NIIF pequeñas. Por otro lado, los usuarios de la información financiera de las PYMES argumentan que solo necesitan información a corto plazo sobre los flujos de efectivo y la solvencia. Por lo que aplicar las NIIF completas produce exceso de información que solo es de interés para los inversionistas de capital (Pacter, 2009). En Inglaterra hace una década que se aplican unas normas para las PYMES, Financial Reporting Standards for Smaller Entities (FRSSE), estas se han revisado en varias ocasiones, asimismo, en el 2009 se consideró adoptar las NIIF pequeñas, en la actualidad las normas locales es la opción más usada. (Mackenzie et al., 2013). Por otro lado, el estudio de Grant Thornton llevado a cabo en el 2009 en Australia, reflejó que el 83% de los encuestados se mostraron a favor de las NIIF pequeñas. Estos resultados no sorprenden ya que Australia fue uno de los primeros países en adoptar las NIIF completas.

Tabla 2: Comparación Parcial de Temas Entre NIIF Completas y NIIF Para PYMES

TEMA	NIIF COMPLETAS	NIIF PARA PYMES
Divulgación de Segmento	Requerido	Excluido
Divulgación Interina	Requerido	Excluido
Ganancia Por Acción	Requerido	Excluido
Activos para la venta	Requerido	Excluido
<b>OPCIONES: Elección en Método</b>		
Categorías de las Inversiones	Se mantiene igual	Se reducen
Inversiones: Opción de Valor en el Mercado	Se mantiene igual	Se elimina
Derivados	Se mantiene igual	Se elimina
Revaloraciones de Activos	Se permiten (varios métodos)	Se elimina
Subvenciones gubernamentales (algunas opciones)	Se mantiene igual	Se elimina
<b>SIMPLIFICACIÓN: Medición y Reconocimiento</b>		
Instrumentos Financieros:	Se mantiene igual	Se reducen las categorías
“HedgeAccounting” (cobertura)	Requerido	Se elimina
Menoscabo de Plusvalía (cuando aplique)	Se mantiene igual	Se simplifica
Investigación y Desarrollo	Una Porción se capitaliza	Se simplifica en gasto
Costos Iniciales “Borrowing	Capitalizables	Se simplifica en gasto

Planes de beneficio definido: no diferimiento	Se puede diferir	Se simplifica el cómputo de la obligación.
Adopción por primera vez	Se mantiene igual	Se reduce la información de años anteriores.
<b>PRESENTACION DE ESTADOS FINANCIEROS</b>		
Comparativos	Se permite formato interino	Un año de comparación
Divulgación	Todos los Estados Financieros	No existe el ingreso abarcador
Cambios en Patrimonio	Se mantiene igual	Se puede omitir

*Esta tabla presenta los temas, opciones, métodos y divulgación que se excluyen en las NIIF pequeñas. Se establece una comparación con los requisitos impuestos a las empresas públicas.*

### Motivaciones Para la Adopción

Las NIIF pequeñas mejoran la eficiencia de la distribución y el precio del capital. Esto beneficia a los proveedores de financiamiento a través de deuda y de capital y a los que buscan dicho capital. Esto porque se reducen los costos de cumplimiento y los riesgos asociados. Además, mejoran la coherencia en la calidad de las auditorías. Facilitan la educación contable y el adiestramiento profesional (IFRS, 2009).

Canadá ha expresado su positivismo de aceptar las NIIF pequeñas las cuales son unas normas de alta calidad (Seifert y Lindberg, 2010). Las NIIF pequeñas representan una opción más simple para sus usuarios. Las guías de las NIIF pequeñas contienen alrededor de 300 páginas en comparación con 3,700 de las NIIF completas (IFRS, 2013) y 15,000 páginas de codificación, 25,000 páginas de normas, interpretaciones, enmiendas y otros en comparación con los US GAAP (Miller 2010). Esto representa un elemento seductor para que las PYMES adopten las NIIF pequeñas por la simplicidad que estas representan. Para Neag, Masca y Pascan (2009) estas facilitan el proceso de evaluación de otras empresas. Pacter (2009) argumenta que las NIIF pequeñas mejoran la comparabilidad de la información financiera. Estas permiten además, que se generen sistemas informáticos estandarizados y consolidación de información simplificada. Para Meeks y Swann (2009) las normas uniformes reducen las barreras de entrada a otro país. Hail et al. (2010) concluye que los costos de evaluar las empresas con el propósito de invertir y hacer alianzas disminuyen. Needles y Powers (2013) concluyen que las ventajas de adopción incluyen que será más fácil para las empresas en crecimiento acceder a mercados internacionales en su búsqueda de oportunidades.

### Oposición Internacional

Love (2011) plantea que las empresas americanas no deben usar las NIIF pequeñas. Esto porque no se deben usar normas diferentes a las que utilizan las empresas que cotizan. Según el autor se generan problemas de aceptabilidad, comparabilidad y duplicidad de esfuerzos. Para (Sharp, 2009) las NIIF para PYMES no son la mejor opción en Inglaterra y otros países de Europa. El autor argumenta que en estos países, la intención es usar las NIIF pequeñas para las empresas grandes y medianas, (Non-publicly accountable entities) y mantener las empresas pequeñas usando las normas locales o los Financial Reporting Standards for Small Entities (FRSSE). Para Neag et al. (2009) la opción de utilizar las NIIF pequeñas no es nada simple ya que conlleva un proceso de adaptación. Heffes (2009) argumenta que la eliminación de ciertas alternativas que producen ventajas contributivas hace difícil la adopción por parte de las PYMES. En EE. UU. se plantea el hecho de que es necesario primero educar a los principales usuarios de los estados financieros y luego que se comiencen la aplicación de las NIIF pequeñas, Needles y Powers (2013). El proceso de adopción conlleva que las PYMES realicen cambios en la estructura del negocio y de estrategias. Además, de incurrir en costos iniciales de reconciliación de información y costos de adiestramiento. Estos cambios pueden resultar onerosos para las PYMES. Estas

deberán determinar cuál es el valor añadido que representan unirse a la convergencia de normas contables.

Globalmente 20 países le requieren a las PYMES que apliquen las NIIF. Venezuela ha impuesto algunas excepciones. En el Caribe 5 países requieren la aplicación. América Central y Sur 3 y 2 respectivamente. En el continente asiático 6 países. En Europa solo Serbia requiere su uso. En África se les requiere a 3 países, en Australia y Oceanía no se le requiere a ningún país. Además, a 30 países se les permite el uso de las NIIF pequeñas globalmente. De estos Costa Rica, Argentina, Bostwana y Kosovo han impuesto algunas excepciones. En América del Norte, Estado Unidos es el único país que permite el uso, en el Caribe 6 países, Centroamérica 3, y en América del Sur 3. En Europa 2 países. En el continente asiático 4 países permiten el uso, y las han adoptado sin excepciones. En África 11 países permiten el uso. Para el continente australiano y en Oceanía ningún país permite el uso.

Actualmente en América 20 países le requieren a las empresas la aplicación de las NIIF completas. El Salvador y Uruguay las requieren pero ciertas excepciones aplican. Permiten su uso Antigua y Barbuda, Bermuda e Islas Caimán. En Asia 23 países requieren el uso de las NIIF completas, *Uzbekistán* y Vietnam las requieren pero con excepciones. Hong Kong, India, Japón y Gaza permiten la aplicación. En África 16 países requieren la aplicación sin modificación alguna solo Libia y Marruecos permiten la aplicación. En Europa 39 países requieren la aplicación, Suiza ha impuesto algunas modificaciones, Isla de Man, Bosnia y Herzegovina permiten la aplicación. En el continente australiano y Oceanía solo 4 países lo requieren: Nueva Caledonia, Nueva Zelanda, Papúa Nueva Guinea y Australia.

## METODOLOGÍA

Según los directivos de la IASB, las NIIF pequeñas proveen beneficio a los usuarios, ya que estas proveen uniformidad y permiten mejor distribución de los recursos (IFRS, 2009). Asimismo, algunos países están experimentando con la aplicación de estas normas. Canadá es uno de los países que recientemente ha emigrado de las normas locales a las NIIF completas y pequeñas, esto porque le brindan mayor utilidad al usuario (Seifert y Lindberg, 2010). La IASB estima que existe un amplio mercado para la implantación de las NIIF pequeñas ya que la mayoría de las empresas de los países son elegibles para aplicarlas. Basado en estos planteamientos, se espera un aumento en la adopción de las NIIF pequeñas en los diferentes países alrededor del mundo.

*H1*: Ceteris paribus, los países que han adoptado las NIIF completas tienen una tendencia a adoptar las NIIF pequeñas en los distintos continentes. Para probar esta hipótesis se preparó la tabla 4, en la que resume las tendencias de los países a adoptar ambas normativas contables.

*H2*: Ceteris paribus, los requisitos de divulgación e implantación de las NIIF para PYMES son sustancialmente menor en comparación con las NIIF para empresas que cotizan. Para probar esta hipótesis se preparó la tabla 3, que compara los requisitos de aplicación y divulgación contable para las empresas públicas y las PYMES.

### Selección de la Muestra

El estudio consiste en revisar la literatura sobre la adopción de las NIIF y NIIF para PYMES en diferentes países. Además se utilizan las guías de implantación para las NIIF pequeñas creadas por la IASB. Se utiliza la *Lista de Comprobación de Información a Revelar y Presentar: NIIF para PYMES* y se preparará la tabla 3. La tabla compara diversos tópicos contables y su

aplicación usando las NIIF completas vs las NIIF pequeñas. Se presenta un análisis comparativo de los requerimientos de información a revelar. Además se explica porque las NIIF pequeñas representa una opción más sencilla que las NIIF completas. También, se prepara el Apéndice I, el mismo se preparó resumiendo el informe: *IFRS Adoption by Country, 2012* de la empresa de auditoría, PricewaterhouseCoopers (PWC). Se construyó el Apéndice en forma de tabla en donde se resume si los países de todos los continentes, le requieren (R) o le permiten (P) a sus empresas aplicar las NIIF completas y pequeñas. Se presentan los resultados en la tabla 4 por continentes. Además se generan estadísticas de los países que han adoptado ambas normativas.

### Estrategia de Recolección de Datos

La tabla 3 se preparó usando *Lista de Comprobación de Información a Revelar y Presentar: NIIF para PYMES*, publicada por la IASB. La lista es presentada en 35 secciones y provee información que comienzan con información relacionada a las PYMES y termina con la transición a las NIIF pequeñas.

La tabla 3 muestra como los requisitos entre ambos grupos de empresas difieren sustancialmente. La misma comienza definiendo ambos grupos de empresas. El contraste es significativo, la MNE deben someter estados financieros auditados, esperar por la aprobación de la Comisión de Valores e Intercambio Local, además, de mercadear sus acciones en las bolsas de valores internacionales, mientras que a las PYMES no les aplica. Los usuarios de las PYMES por lo general es un grupo local pequeño y especializado, mientras que para una MNE los usuarios son muchos e internacionales, la información que demandan estos varía de acuerdo a la empresa. Una empresa PYME someterá a las partes interesadas un grupo de estados directamente una vez al año o cuando sea solicitado. Sin embargo, los usuarios de una MNE exigen mayor cantidad de información constantemente. Además los usuarios de las empresas públicas cambian con regularidad. De igual forma las NIIF completas son actualizadas y modificadas constantemente. Es más fácil la adaptación de los usuarios de las NIIF pequeñas: contadores, gerencia, bancos y otros ya que estas normas se revisan de cada 3 años. En la presentación de los Estados Financieros una entidad cuyos estados cumplan con la *NIIF para las PYMES* efectuará en las notas, una declaración, sobre el cumplimiento con estas. Los estados financieros no deberán señalar que cumplen con la *NIIF para las PYMES* a menos que cumplan con todos los requerimientos. Luego de la adopción por primera vez de las NIIF para PYMES la empresa explicará cómo se afectó sus flujos de efectivo, su situación y rendimiento financiero al emigrar de su normativa contable a las NIIF para PYMES.

Tabla 3: Comprobación de Información a Presentar NIIF pequeñas vs NIIF completas

<b>NIIF: PYMES</b>	<b>NIIF: MNE</b>
<b><u>DEFINICIÓN</u></b> No hay obligación de rendir cuentas y publicar estados financieros de uso general. No es factible desarrollar pruebas de tamaño cuantificadas que sean aplicables y duraderas en muchos países.	<b><u>DEFINICIÓN</u></b> sus instrumentos de deuda o de patrimonio se negocian en un mercado público o están en proceso de emitir estos instrumentos para negociarse en un mercado de valores público. una de sus principales actividades es mantener activos en calidad de fiduciaria para un amplio grupo de terceros: bancos, las cooperativas de crédito, las compañías de seguros, los intermediarios de bolsa, los fondos de inversión y los bancos de inversión.
<b><u>USUARIOS</u></b> proveedores, banqueros y propietarios.	<b><u>USUARIOS</u></b> accionistas
<b><u>TIPO DE INFORMACIÓN SOLICITADA</u></b> Los usuarios de los estados financieros de las PYMES tienen interés en: los flujos de efectivo a corto plazo la liquidez y solvencia la cobertura de los intereses	<b><u>TIPO DE INFORMACIÓN SOLICITADA</u></b> Los usuarios de los estados financieros de las MNE públicas tienen interés en: los flujos de efectivo a largo plazo valor de la firma

<p><b><u>OBJETIVO DE LA DIVULGACIÓN</u></b> Proveer información general: los estados financieros se preparan sobre una base que está diseñada para brindar información útil a una amplia gama de usuarios que no están en condiciones de exigir informes a la medida de sus necesidades específicas de información.</p> <p><b><u>FORMA DE DIVULGAR</u></b> La entidad envía directamente sus estados financieros a los usuarios principales.</p> <p><b><u>GUIAS</u></b> 230 páginas aproximadamente</p> <p><b><u>REVISIONES DE LAS NORMAS</u></b> cada 3 años</p> <p><b><u>INFORMACION A REVELAR Y PRESENTAR</u></b> En la mayoría de los casos, la NIIF no especifica si la información a revelar debe incluirse dentro de los estados financieros o en las notas.</p> <p><b><u>Adopción por primera vez</u></b> La NIIF para las PYMES no requiere un estado de situación financiera al principio del primer periodo comparativo.</p> <p><b><u>Bases de elaboración y políticas contables</u></b> Los Estos estados financieros consolidados se han elaborado de acuerdo (NIIF para las PYMES) emitida por (IASB).</p> <p><b><u>PRESENTACIÓN, MEDICIÓN Y VALORACIÓN</u></b></p> <p><b><u>ACTIVOS</u></b> No existe la clasificación (separado para la venta)</p> <p><b><u>PROPIEDAD, PLANTA Y EQUIPO</u></b> Se anotan a costo menos la depreciación acumulada. No se permiten las revaloraciones.</p> <p><b><u>INTANGIBLES</u></b> Los activos de vida indefinida incluyendo la plusvalía se amortizan. (se utilizan 10 años si la empresa no tiene un estimado) No se permiten las revaloraciones de intangibles.</p>	<p><b><u>OBJETIVO DE LA DIVULGACIÓN</u></b> Proveer información que facilite la toma de decisiones. Además, permita estimar los flujos futuros de efectivo. Permita identificar los recursos y sus obligaciones y los cambios que estos sufren. Facilite el proceso de valorar la empresa.</p> <p><b><u>FORMA DE DIVULGAR</u></b> Publicación del Informe Anual.</p> <p><b><u>GUIAS</u></b> 2,500 páginas aproximadamente</p> <p><b><u>REVISIONES DE LAS NORMAS</u></b> anualmente</p> <p><b><u>INFORMACION A REVELAR Y PRESENTAR</u></b> NIC 1 Presentación de Estados NIC 24 Informaciones a Revelar sobre Partes Relacionadas NIC 32 Instrumentos Financieros: Presentación e Información a Revelar NIIF 7 Instrumentos Financieros: Información a Revelar</p> <p><b><u>Adopción por primera vez</u></b> NIIF 1 : Adopción, por Primera Vez, de las Normas Internacionales de Información Financiera</p> <p><b><u>Bases de elaboración y políticas contables</u></b> Los Estos estados financieros consolidados se han elaborado de acuerdo NIIF emitida por (IASB).</p> <p><b><u>PRESENTACIÓN, MEDICIÓN Y VALORACIÓN</u></b></p> <p><b><u>ACTIVOS</u></b> NIIF 5 Activos no Corrientes Mantenidos para la Venta y Operaciones Discontinuas medidos al menor entre el importe en libros y el valor razonable menos los costos de venta. La depreciación cesa cuando se clasifican como mantenidos para la venta.</p> <p><b><u>PROPIEDAD, PLANTA Y EQUIPO</u></b> NIC 16 Los activos se revaloran y las revaloraciones positivas se muestran en otro ingreso abarcador.</p> <p><b><u>INTANGIBLES</u></b> NIC 36 Deterioro del Valor de los Activos se permite la recuperación de las pérdidas por deterioro. NIC 38 Los activos intangibles de vida indefinida no se amortizan NIC 16 Los activos se revaloran y las revaloraciones positivas se muestran en otro ingreso abarcador.</p>
<p><b><u>NIIF: PYMES</u></b></p> <p><b><u>PROPIEDADES DE INVERSIÓN</u></b> Propiedades de inversión cuyo valor razonable se puede medir con fiabilidad sin costo o esfuerzo desproporcionado, se reconoce al valor razonable con cambios en el estado de ingresos y gastos.</p> <p><b><u>ACTIVOS BILÓGICOS</u></b> Se miden al valor razonable con cambios en el estado de ingresos y gastos, solo si el valor razonable se determina fácilmente sin costo o esfuerzo desproporcionado.</p> <p><b><u>BENEFICIOS A LOS EMPLEADOS</u></b> Costo de servicios pasados no consolidados de los planes por pensiones de beneficios definidos, reconocido inmediatamente en el estado de ingresos y gastos.</p> <p><b><u>VARIACIONES EN TASAS DE CAMBIO</u></b> Diferencias de cambio en partidas monetarias que forman parte de una inversión neta en un negocio en el extranjero, en estados financieros consolidados, se reconocen en otro resultado integral ("other comprehensive income") y no se reclasifican en resultados en la disposición de la inversión.</p> <p><b><u>PRUEBAS DE MENOSCABO</u></b> Se revisan los estimados de vida útil, valor residual y los métodos de depreciación solo si hay indicador de que el activo ha sufrido menoscabo.</p> <p><b><u>COSTOS POR PRÉSTAMOS</u></b> • Se reconocen como gastos.</p> <p><b><u>PARTICIPACIÓN NEGOCIOS CONJUNTOS</u></b></p>	<p><b><u>NIIF: MNE</u></b></p> <p><b><u>PROPIEDADES DE INVERSIÓN</u></b> NIC 40: Elección de política contable entre valor razonable con cambios en resultados o modelo de costo-depreciación-deterioro del valor</p> <p><b><u>ACTIVOS BILÓGICOS</u></b> NIC 41: Agricultura: Se supone que el valor razonable puede medirse de forma fiable.</p> <p><b><u>BENEFICIOS A LOS EMPLEADOS</u></b> NIC 19 Beneficios a los Empleados: Reconocido como un gasto de forma lineal durante el periodo medio hasta que los beneficios pasen a ser consolidados.</p> <p><b><u>VARIACIONES EN TASAS DE CAMBIO</u></b> NIC 21: Efectos de las Variaciones en las Tasas de Cambio de la Moneda Extranjera, se reclasifican en resultados (estado de ingresos y gastos) al realizar la disposición de la inversión.</p> <p><b><u>PRUEBAS DE MENOSCABO</u></b> NIC 36 Deterioro del Valor de los Activos se revisan los estimados de vida útil, valor residual y los métodos de depreciación anualmente como parte de las pruebas de menoscabo.</p> <p><b><u>COSTOS POR PRÉSTAMOS</u></b> NIC 23: Los costos directamente atribuibles a la adquisición, construcción o producción de un activo deben capitalizarse.</p> <p><b><u>PARTICIPACIÓN NEGOCIOS CONJUNTOS</u></b></p>

<p>Inversión en una entidad controlada de forma conjunta para la que hay un precio de cotización publicado, se reconoce al valor razonable con cambios en resultados (estado de ingresos y gastos).</p> <p><b><u>INVESTIGACION Y DESARROLLO</u></b> Se reconocen como gastos cuando se incurren</p> <p><b><u>IMPUESTO A LAS GANANCIAS</u></b> Cuando se aplica una tasa impositiva diferente de los ingresos distribuidos, se miden inicialmente los impuestos corrientes y diferidos a la tasa aplicable a las ganancias no distribuidas.</p> <p><b><u>CONSOLIDACIÓN</u></b> No se permite el método proporcional.</p> <p><b><u>PAGOS BASADOS EN ACCIONES</u></b> Por lo general se contabiliza la transacción como transacción con pagos basados en acciones liquidadas en efectivo.</p> <p><b><u>INVERSIONES EN ASOCIADAS</u></b> Inversión en una asociada para la que hay un precio de cotización publicado, se reconoce al valor razonable con cambios en resultados (estado de ingresos y gastos).</p> <p><b><u>INVERSIONES</u></b> Se eliminan las categorías. Los instrumentos de deudas se deben anotar a costo amortizado usando el método de interés efectivo.</p>	<p>NIC 31: Debe medirse con el método de la participación o consolidación proporcional.</p> <p><b><u>INVESTIGACION Y DESARROLLO</u></b> NIC 38 Activos Intangibles los desembolsos de investigación se reconocen como gastos cuando se incurren, y los de desarrollo se capitalizan. Deben cumplir con varios requisitos para que puedan capitalizarse.</p> <p><b><u>IMPUESTO A LAS GANANCIAS</u></b> NIC 12 Impuesto a las Ganancias Se miden inicialmente los impuestos corrientes y diferidos a la tasa que se espera aplicar cuando se distribuyan las ganancias.</p> <p><b><u>CONSOLIDACIÓN</u></b> NIIF 10 Estados Financieros Consolidados se permite el método proporcional.</p> <p><b><u>PAGOS BASADOS EN ACCIONES</u></b> NIIF 2 Pagos Basados en Acciones para las transacciones con pagos basados en acciones liquidadas con instrumentos de patrimonio, se requiere que la entidad mida los bienes o servicios recibidos y el correspondiente aumento del patrimonio directamente al valor razonable de los bienes o servicios recibidos para transacciones con los empleados y otros terceros que suministren servicios similares</p> <p><b><u>INVERSIONES EN ASOCIADAS</u></b> NIC 28: Debe medirse con el método de la participación. NIC 24 Informaciones a Revelar sobre Partes Relacionadas</p> <p><b><u>INVERSIONES</u></b> Se mantienen las categorías Mercadeables – “Trading” Disponibles para la venta Mantener hasta el vencimiento Las inversiones clasificadas hasta el vencimiento se reconocen a costo amortizado usando el método de interés efectivo. NIC 32 Instrumentos Financieros: Presentación e Información a Revelar NIC 39 Instrumentos Financieros: Reconocimiento y Medición</p>
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## RESULTADOS

*Metodología: Prueba de la H1:* La H1 sugiere que los países que han adoptado las NIIF completas tienen una tendencia a adoptar las NIIF pequeñas en los distintos continentes. La tabla 4 muestra los resultados del proceso de adopción por continente. Para analizar esta hipótesis se preparó una tabla 4, en la cual se presentan los países, clasificados por continente. Se recopiló la información mediante 3 preguntas las cuales se contestaron utilizando R= Requerido/ R\* = Requerido con algunas excepciones/ P= Permitido/ P\*= Permitido con algunas excepciones/ Pr= Prohibido/ N/A = No aplica.

*Hallazgos Para la Prueba H2:* En total 111 países aplican las NIIF completas, 50 países aplican las NIIF pequeñas ya sea porque se les requiere o se les permite. Cuando se comparan ambas cantidades resulta que cerca de la mitad de los países que le permiten el uso de las NIIF a las empresas que cotizan también le permiten lo mismo a las empresas privadas (50/11) 45%. El porcentaje de adopción es mayor en el continente americano 74%. De los 31 países en América 23 aplican las NIIF pequeñas. Por otro lado EE.UU. que aún se encuentra en el proceso de converger con las normas internacionales permite la aplicación de las NIIF pequeñas. En Asia de los 33 países en el estudio, 27 ó (81%) usan las NIIF completas y 10 usan las NIIF pequeñas, esto representa un 37% (10/27) cuando se compara con los países que aplican las NIIF completas. Prácticamente todos los países europeos usan las NIIF completas, y cerca del 100% prohíbe el uso de las NIIF pequeñas. Esta última tendencia se repite en Australia y Oceanía. En África 18 países de 33 (55%) usa las NIIF completas, el 78% (14/18) usa las NIIF pequeñas.

*Metodología: Prueba de la H2:* La H2 sugiere que los requisitos de divulgación e implantación de las NIIF para PYMES son sustancialmente menor en comparación con las NIIF para empresas que cotizan. La tabla 3 muestra la comparación de la aplicación contable de las NIIF para las MNE y las PYMES. Para analizar esta hipótesis se preparó la tabla 3 y se establece una comparación para ambos grupos de empresas. Las comparaciones incluyen: requisitos de divulgación, valoración de las diferentes partidas y tratamientos contables.

*Hallazgos para la Prueba H2:* Del análisis de la Tabla 3 se desprende que las alternativas para aplicar métodos se reducen significativamente. La NIIF 1 requiere que se reclasifiquen los componentes de los estados financieros reconocidos según las normas aplicadas anteriormente de acuerdo a las NIIF. La NIIF para PYMES no requiere un estado de situación financiera al principio del primer periodo comparativo. La NIIF 2 consiste en especificar la información financiera que ha de incluir una entidad cuando lleve a cabo una transacción con pagos basados en acciones, requiere que la entidad reconozca las transacciones con pagos basados en acciones en sus estados financieros. Se simplifica la alternativa para las PYMES ya que por lo general se contabiliza la transacción como transacción con pagos basados en acciones liquidadas en efectivo. La NIIF 5 adopta la clasificación de “mantenidos para la venta” e introduce el concepto de grupo de activos para su disposición. Se reducen las alternativas y en las NIIF pequeñas no existe la clasificación separados para la venta. NIIF 7 requiere a las entidades que, en sus estados financieros, revelen información que permita a los usuarios evaluar la relevancia de los instrumentos financieros en la situación financiera y en el rendimiento de la entidad y la naturaleza y alcance de los riesgos procedentes de los instrumentos financieros. La NIIF 10 establece los principios para la presentación y preparación de estados financieros consolidados cuando una entidad controla una o más entidades distintas. Otras normas han sido adaptadas para atender las necesidades de los usuarios de los estados financieros de las PYMES. Esto representa un atractivo para que los usuarios adopten las NIIF pequeñas. Esto concurre con Seifert y Lindberg (2010).

## IMPLICACIONES Y CONCLUSIONES

Esta investigación demostró que la ruta creada por la IASB parece seducir a los países para que requieran a las PYMES el uso de las NIIF pequeñas, el porcentaje de adopción se acerca a 50%. Esto es así cuando se comparan la aplicación de ambas normativas en los países del estudio. Los países de América, Asia y África muestran mayor inclinación a adoptar las normas. Se observa una tendencia de rechazo en los países europeos. El mercado potencial para las NIIF pequeñas es amplio especialmente en Europa el cual lleva 9 años aplicando las NIIF completas y en el cual todavía no se aplican las NIIF pequeñas.

Se desprende de la investigación que los métodos contables más complicados han sido eliminados para adaptarlos a las necesidades de los proveedores y evaluadores de crédito principalmente. La simplicidad que proveen estas normas les permite a los usuarios evaluar de una forma directa y los flujos de efectivo, la liquidez y solvencia de la empresa. A través de la investigación se concluye que las NIIF para PYMES representan un conjunto de normas de fácil aplicación. Además, su adopción conlleva menos requisitos de divulgación y aplicación contable que las NIIF para empresas públicas. Este estudio concuerda con Pacter y Scott (2012) que argumentan que el impacto y la acogida de las NIIF pequeñas es de gran importancia.

También las conclusiones de esta investigación son similares a las expresiones realizadas por los directivos de la IASB, los cuales concluyen que las NIIF pequeñas brindan uniformidad en la

divulgación. Los costos de educación y de implantación son elementos claves que las PYMES deben tener en consideración al implantar las NIIF. La uniformidad permitirá que se reduzcan las barreras de entrada a mercados internacionales lo que permitirá a las PYMES crear alianzas en otros países y obtener capital extranjero y otras oportunidades. El tema es amplio y genera implicaciones para los reguladores de normas ya que deberán tener en consideración múltiples exigencias globales. Los países deberán brindar apoyo a las empresas en la fase de adopción, lo que implica que deben contribuir con fondos y adiestramiento que ayude en la implantación. Con estos beneficios las PYMES enfrentan el cambio de una cultura local a una cultura globalizada. De esta manera comienza su verdadera ruta hacia la convergencia.

*Contribuciones:* Esta investigación contribuye a la literatura de la contabilidad realizando una comparación en la divulgación de las NIIF pequeñas y las NIIF completas. Además, provee estadísticas de los países que han adoptado ambas normas. El estudio sirve de referencia a las PYMES que desean aplicar las NIIF. Se les resumen los requisitos de implantación contable y se les brinda una explicación pertinente que sirve de guía. El estudio es útil a la academia ya que mediante la comparación de los requisitos de ambas normativas se puede estudiar las ventajas y desventajas de estas. Además permite generar discusiones entre profesores y alumnos con el fin de analizar las implicaciones económicas de la aplicación de las NIIF en diferentes países. Para los profesionales de la contabilidad y otros sectores el estudio le permite actualizar los temas sobre este particular.

*Sugerencias para investigaciones futuras:* En estudios futuros se pueden analizar el impacto socioeconómico de la adopción de las NIIF pequeñas en diferentes países. El estudio puede realizarse a nivel país “country level” y determinar cuántas PYMES han adoptado las normas. Se sugiere hacer el estudio a nivel de empresa “firm level” y medir las implicaciones de la implantación en el ingreso neto. También se puede estudiar los costos asociados a la adopción. Una comparación entre las normas locales de los países y las NIIF para PYMES permitirá comparar las cifras en los estados financieros. Mediante una muestra en diversos países y la aplicación de un instrumento se puede investigar cuántas empresas se han internacionalizado o tiene planes luego de la adopción de las NIIF pequeñas.

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University of Southampton  
University of St. Thomas Houston  
University of Sydney  
University of the Free State  
University of the South Pacific  
University of Toronto  
University of Toyama  
University of Tunis  
University of Zagreb  
Univ. of Zagreb & Nottingham Trent University  
University West  
USAID  
Utica College  
Victoria Teachers Mutual Bank  
Wagner College  
Wake Forest University  
Walden University  
Yonsei University  
Zhejiang University of Finance & Economics

## Countries Represented

Argentina  
Australia  
Austria  
Bangladesh  
Belgium  
Brazil  
Canada  
Chile  
China  
Colombia  
Costa Rica  
Croatia  
Czech Republic  
ECUADOR  
Egypt  
Spain  
Fiji  
GHANA  
India  
Indonesia  
Iraq  
Italia  
Japan

Kenya  
South Korea  
Liberia  
Malaysia  
México  
New Zealand  
Nigeria  
Pakistan  
Perú  
Philippines  
Puerto Rico  
Rowan  
Russian Federation  
Saudi Arabia  
South Africa  
South Korea  
Taiwan, R.O.C.  
Thailand  
Tunisia  
Turkey  
United Kingdom  
United States

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## PUBLICATION OPPORTUNITIES

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*The International Journal of*  
**R**Business *and* Finance  
**RESEARCH**

**The International Journal of Business and Finance Research ISSN 1931-0269**

The International Journal of Business and Finance Research (IJBFR) publishes high-quality articles in all areas of finance, accounting and economics. Theoretical, empirical and applied manuscripts are welcome for publication consideration.

All papers submitted to the Journal are double-blind reviewed. The IJBFR is listed in Cabell's, Ulrich's Periodicals Directory and The American Economic Association's *Econlit*, *e-JEL* and *JEL on CD*. The Journal is distributed in print, through EBSCOHost, ProQuest ABI/Inform and SSRN

The IJBFR acceptance rate is between 5 and 10 percent.

# IJMMR

INTERNATIONAL JOURNAL OF MANAGEMENT AND MARKETING RESEARCH

**International Journal of Management and Marketing Research ISSN 1933-3153**

The International Journal of Management and Marketing Research (IJMMR) publishes high-quality articles in all areas of management and marketing. Theoretical, empirical and applied manuscripts are welcome for publication consideration.

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The IJMMR acceptance rate is between 5 and 10 percent.

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*Global Journal of*  
**R**Business  
**Research**

**Global Journal of Business Research  
ISSN 1931-0277**

The Global Journal of Business Research (GJBR) publishes high-quality articles in all areas of business. Theoretical, empirical and applied manuscripts are welcome for publication consideration.

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The GJBR acceptance rate is 20 percent.



Revista Internacional  
**ADMINISTRACION  
& FINANZAS**

**Revista Internacional Administración y Finanzas ISSN 1933-608X**

Revista Internacional Administracion y Finanzas (RIAF), a Spanish language Journal, publishes high-quality articles in all areas of business. Theoretical, empirical and applied manuscripts are welcome for publication consideration.

All papers submitted to the Journal are double-blind reviewed. RIAF is listed in The American Economic Association's *Econlit*, *e-JEL* and *JEL on CD*, and Ulrich's Periodicals Directory. The Journal is distributed in print, through EBSCOHost, ProQuest ABI/Inform and SSRN

The Journal acceptance rate is between 5 and 15 percent.

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## PUBLICATION OPPORTUNITIES

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### REVIEW of BUSINESS & FINANCE STUDIES

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#### Review of Business & Finance Studies

Review of Business & Finance Studies (ISSN: 2150-3338 print and 2156-8081 online) publishes high-quality studies in all areas of business, finance and related fields. Empirical, and theoretical papers as well as case studies are welcome. Cases can be based on real-world or hypothetical situations.

All papers submitted to the Journal are double-blind reviewed. The Journal is listed in Cabell's, Ulrich's Periodicals Directory. The Journal is distributed in print, through EBSCO*Host*, ProQuest ABI/Inform and SSRN.

The journal acceptance rate is between 15 and 25 percent

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### Business Education & Accreditation

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#### Business Education and Accreditation (BEA)

Business Education & Accreditation publishes high-quality articles in all areas of business education, curriculum, educational methods, educational administration, advances in educational technology and accreditation. Theoretical, empirical and applied manuscripts are welcome for publication consideration.

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The journal acceptance rate is between 15 and 25 percent.

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### Accounting & Taxation

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#### Accounting and Taxation (AT)

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### REVISTA GLOBAL de NEGOCIOS

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#### Revista Global de Negocios

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The Journal acceptance rate is 20 percent.

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