

# **The Institute for Business and Finance Research**

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**Global Conference on Business and  
Finance**

## **PROCEEDINGS**

**JANUARY 2007**

**Sheraton South Padre Island**

**January 3- January 6, 2007  
South Padre Island, Texas**

**Global**  
IBFR

**Vol 2, No 1  
ISSN 1931-0285**

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## Letter from the Editor

On behalf of the Staff and the IBFR, I welcome you to South Padre Island and the 2007 Global Conference on Business and Finance. We hope you have a productive conference and enjoy your time in Texas. If we can be of any assistance to you during your time in South Padre Island please do not hesitate to contact us.

We all know that college professors must balance their teaching, research, and service obligations. Finding the right forum to share and obtain feedback on our research, new teaching techniques, and innovative administrative processes can be challenging at times. The Institute for Business and Finance Research was created to facilitate your work by providing an environment conducive to knowledge and experience sharing. We encourage the academic community to come and share their work at our conferences and Journals. We welcome articles which are of interest to scholars and practitioners in all the fields of business, economics and related fields.

The 2007 South Padre Island GCBF represents a long term commitment to bring individuals from around the world together to share their ideas and promote research on business and finance. The response to the conference has been outstanding. We wish to thank you for selecting the GCBF as your research outlet. We also wish to thank the many people that have contributed to making the conference a success. We are delighted to report that the conference is truly a global conference. We have participants from all corners of the globe at this Academic Conference. These individuals come from a variety of high quality institutions and will present work on a broad mix of academic issues.

We are proud to announce two upcoming conferences. Our next conference we will be held in Costa Rica. Our second GCBF Costa Rica will be held at the newly remodeled Ramada Plaza Herradura Hotel and Convention Center, May 23-26 2007. The dates and location of the second GCBF United States conference will be announced in the near future. We hope that you are able to join us at these future conferences.

We hope you take the time to enjoy the hotel facilities as well as to take in the South Padre Island. South Padre Island is truly a splendid area with much to offer. We recognize that in addition to presenting research and participating in the conference activities, it is also important to relax and rejuvenate yourself. Have some fun! You deserve it! We hope that you will go home refreshed and with a sense of accomplishment.

Warmest Regards,

*Mercedes Galbert*

Managing Editor



## Carta del Editor

El Instituto y su personal les da la bienvenidos a South Padre y al *2007 South Padre Global Conference on Business and Finance*. Esperamos que su participación sea productiva y que disfruten South Padre Island.

Todo profesor de educación superior debe encontrar un balance entre su rol como educador, investigador y como servidor a su comunidad y su universidad. Encontrar un foro donde podamos compartir y obtener retroalimentación sobre nuestra investigación, nuevas técnicas de educación, procesos administrativos innovadores es retador. El *Institute for Business and Finance Research (IBFR)* fue creado para facilitar el trabajo del profesional en educación superior, profesional del sector públicos y profesional del sector privado al crear una plataforma global conducente al enriquecimiento de nuestro conocimiento a través de:

1. La exposición de trabajos investigativos en todas las áreas académicas de las ciencias administrativas, ciencias económicas, financieras, etc.;
2. La exploración de nuevos avances tecnológicos, teóricos, pedagógicos;
3. El intercambio de conocimiento en una plataforma verdaderamente global.

El Congreso South Padre 2007 GCBF representa un compromiso a larga plazo para unir a nuestros colegas de todos los continentes en nuestros congresos y compartir nuestras ideas, investigación y cultura en una plataforma bilingüe. Deseamos agradecer su participar, la cual hace realidad nuestro objetivos; el realizar un Congreso realmente Global con participación de educadores de todos partes del mundo.

Con gran alegría anunciamos nuestros próximos Congresos en el Hotel Ramada Plaza Herradura y Centro de Convenciones, San Jose Costa Rica del 23 al 26 de Mayo, 2007. Nuestro Evento Académico para los Estados Unidos en el 2008 será anunciado próximamente. Será un placer el contar con su participación nuevamente.

Deseamos que disfruten su estancia en el Hotel Sheraton South Padre y que tengan la oportunidad de explorar South Padre. Sabemos que además de exponer sus trabajos, es también importante tomar tiempo para relajarse, rejuvenecerse y conocer sobre otras culturas, tradiciones, etc. Diviértase, disfrute, usted lo merece. Esperamos que al regresar a sus hogares e Instituciones se sientan rejuvenecidos y satisfechos con sus alcances y aprendizaje durante el Congreso. Estamos para asistir durante el congreso y el futuro.

Saludos Cordiales

*Mercedes Jalbert*

Managing Editor

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# **ENGLISH PROCEEDINGS**

Global Conference on Business and Finance Proceedings

Volume 2, Number 1

January 2007

# ASSESSING LABOR MARKET INEFFICIENCY IN POLAND: PRELIMINARY RESULTS FROM THE STOCHASTIC WAGE FRONTIER ANALYSIS

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Arthur King, Lehigh University-Bethlehem

## ABSTRACT

*In this paper we apply a stochastic frontier approach in order to analyze labor market inefficiency in a transition economy and a new entrant to the EU -- Poland. Our findings indicate that the degree of underpayment among the full-time hired Polish workers was about 14 percent. The fact that, on average, workers realize 86 percent of their potential earnings implies inefficiency in acquiring and processing job market information and results in a loss of output. Our attempt to identify the determinants of wage inefficiencies in Poland produced mixed results. An international comparison shows that the degree of wage inefficiency in Poland is similar or even lower than in other developed countries.*

## INTRODUCTION

The transition process to a market economy in the countries of Central and Eastern Europe has been accompanied by a wide spectrum of adjustments in labor markets. A significant body of research has focused on labor market developments in Poland, which is widely regarded as one of the most successful transition economies in Central and Eastern Europe. One of the most active areas has been analyzing the impact of different factors on individual earnings. A frequently used approach is the Mincerian earnings function which assesses the impact of different factors on the *average* level of earnings. However, it does not identify if the maximum possible earnings level has been achieved (given a worker's characteristics) and how these characteristics contribute to achieving the potential wage. In this study, we apply the stochastic frontier approach in order to analyze the degree of wage inefficiency in the Polish labor market in 2001. To our knowledge, no such research has been done for Poland so far. Wage inefficiency is defined as a gap between a worker's actual and potential (maximum) wage, given their demographic and socio-economic characteristics. We analyze what factors affect the potential wage, and our special attention focuses on the degree of wage inefficiency ("underpayment") and its determinants. Wage inefficiency mainly arises from incomplete labor market information and inefficient job matches and results in the loss of output (GDP). Thus, understanding the causes and extent of wage inefficiency in a country will help develop more appropriate labor market policies and institutions as well as increase national output.

## METHODOLOGY

In a labor market, a worker with a given set of demographic and socio-economic characteristics faces a wage offer distribution varying from the lowest wage ( $w_{\min}$ ) to the highest potential wage ( $w_{\max}$ ). Workers whose actual wage ( $w$ ) is less than their potential maximum wage are said to be suffering from some kind of "wage inefficiency." Inefficiency may be attributed to different factors: imperfect information on part of both workers and employers, discrimination, the market power of the employer, or the negotiating power of the worker. The earnings frontier approach describes the maximum potential wage for a worker with a specific set of characteristics. All

workers are assumed to be located either on this frontier (a fully efficient position when  $w = w_{\max}$ ) or below this frontier (an inefficient position when  $w < w_{\max}$ ). The estimated model is

$$\ln w_i = \alpha + \beta' \mathbf{x}_i + \varepsilon_i = \alpha + \beta' \mathbf{x}_i + v_i - u_i,$$

where  $\ln w_i$  is the logarithm of the observed wage of the  $i$ -th individual,  $\mathbf{x}_i$  is a vector of socio-economic characteristics,  $\alpha$  and  $\beta$ s are parameters to be estimated,  $\varepsilon_i$  is an error term split into two parts – a white noise variable  $v_i \sim N(0, \sigma_v^2)$  and a non-negative inefficiency term  $u_i \geq 0$ . In this study, we assume a half-normal distribution for  $u_i \sim N^+(0, \sigma_u^2)$ . In the equation above,  $\alpha + \beta' \mathbf{x}_i$  represents a deterministic wage frontier,  $\alpha + \beta' \mathbf{x}_i + v_i$  represents a stochastic wage frontier, and  $\alpha + \beta' \mathbf{x}_i + v_i - u_i$  represents the observed wage. The degree of wage inefficiency for each worker is measured by  $u_i$ , that is, by the difference between the actual wage and the stochastic wage frontier. The  $u_i$ -values are used to calculate individual efficiency (EFF) and inefficiency (INEFF) ratios:  $\text{INEFF}_i = 1 - \text{EFF}_i = 1 - \exp(-u_i)$ .

## DATA

The Labor Force Survey conducted by the Polish Central Statistical Office in May, 2001, constitutes the data source for this paper. We restricted our attention to full-time hired employees because only this category of workers was required to report their net earnings at their main workplace during the preceding month. Part-time hired workers, self-employed individuals, and assisting members in family businesses were not required to report their earnings. We further narrowed our sample of full-time hired workers, deleting those individuals who were full-time students, or handicapped, or younger than 18, or older than 65 (men) and 60 (women). These age restrictions correspond to the different retirement ages for men and women, as well as comply with the Polish Central Statistical Office definition of the working-age population (women 18-59; men 18-64). Furthermore, because wages were defined in terms of monthly earnings, for consistency we controlled for an employee who worked 40 and more hours per week on a regular basis. After all these adjustments, we had a sample of 9,380 full-time hired employees, of which 5,208 were males and 4,172 were females.

## ESTIMATES OF THE STOCHASTIC WAGE FRONTIER

In addition to the conventional human capital characteristics (education, potential experience, gender), our wage frontier equation includes additional personal characteristics (marital status, head of the household) as well as dummy variables that capture regional labor market conditions (region, city/town size or village). We also include current job characteristics such as tenure, which reflects years of work experience with the current employer, controls for thirteen industries, eight occupational indicators, four firm sizes, and an indicator for the sector of work (public versus private). Similar to other studies in this area, we use potential experience as a proxy for actual experience. The results show that the potential wages of Polish workers were closely related to their demographic and socio-economic characteristics. It is notable that all but a few variables are significant at the 5-percent or less level and have the anticipated signs. For instance, the coefficients on the gender, education, and potential experience variables are statistically significant and positive and indicate that the potential wages were higher for men, workers with more education and potential experience. Further, such factors as living in a more economically developed Central region (that includes Warsaw) or in a big city, being a top

manager, working in a firm with more than 100 employees indicate a larger potential wage. Workers in the public sector appear to face a lower potential wage than their similarly endowed counterparts from the private sector. These results are quite consistent with the economic theory and with similar studies that estimated the wage frontier for different countries.

## ESTIMATES OF WAGE INEFFICIENCY

The estimate of  $\lambda = \sigma_u / \sigma_v$ , which is a measure of the degree of asymmetry of the disturbance term, is statistically significant, but its low magnitude of 0.701 indicates that the inefficiency component in the data is rather small. We further decompose the variance of the composite error  $\varepsilon_i$  and calculate the contribution of the variance of  $u_i$  to the total variance. We find that about 22 percent of the variance of  $\varepsilon_i$  results from wage inefficiency, and the remaining 78 percent are due to other unexplained variability factors. This finding reinforces our conclusion above that wage inefficiency plays quite limited role of in our estimates.

We now turn to the analysis of the (in)efficiency ratios. For the entire sample, the efficiency ratio is 86.03 percent, that is, on average, workers realize 86 percent of their potential earnings and are only 14 percent below their potential. It means that an average worker could increase his or her wage by about 16 percent ( $1/0.8603 - 1 = 0.1624$ ) without any additional investment into his or her human capital endowment. The efficiency ratio of 86 percent for Poland is quite consistent with the reported results for other countries. Our next step is to analyze if wage inefficiency varies for different socio-demographic groups. Typical expectations are that men, married workers, prime age workers, workers with more education, workers in urban areas, and natives have less underpayment as compared to women, single workers, young workers, less educated workers, workers in rural areas, and migrants. The common rationale is that higher costs of job search, weak labor market attachment, environment with limited public knowledge, etc. lead to higher incomplete information and, consequently, to higher wage inefficiency. For instance, greater market attachment of men is believed to result in their better labor market information and higher wage efficiency as compared to women. Residing in rural areas increases information costs and is likely to result in higher wage inefficiency as compared to the areas with dense population. Because migrants in the labor market usually possess less information than native population, they are expected to experience higher wage inefficiency. Contrary to these expectations, we fail to detect any significant difference in wage efficiency for the above-mentioned and other population groups. While surprising, such results are not rare and already have been reported for other countries.

At the final step of our analysis we look for a set of selected macroeconomic demographic, socio-economic, and institutional characteristics that could provide a significant explanation for the variation of the inefficiency measures. In particular, focusing on the 16 Polish administrative regions (voivodships), we collected specific macroeconomic indicators – population density, rural population, industrial employment, public sector employment, and the inflow of workers (both internal and immigration) – that we believed could affect an individual's incentives to search for a higher wage and influence his/her acquisition of additional labor market information. We then regress the logarithms of these variables on the logarithm of the average regional wage inefficiency ratio (INEFF). Coefficients for population density and public employment are both negative (although only the 'population density' coefficient is statistically significant), which is consistent with economic theory. In the former case, a more dense population implies better access to information as well as more concentrated job opportunities. In the latter case, it is believed that workers in the public sector possess more market information than workers in the

private sector. Our estimation results confirm that these two factors – population density and public sector employment – prolong search by lowering its costs, which in turn leads to gathering more information and lowering wage inefficiency. On the other hand, the estimation results for the rest of the variables in the model seem to contradict economic theory. The fact that we do not find strong supporting evidence to the theoretical predictions implies that more research needs to be done in this direction.

## INTERNATIONAL COMPARISONS

In this section we provide a more detailed cross-country analysis of wage (in)efficiency in order to assess how Poland fits into a group of eleven OECD countries for which a recent study is available (S. Polachek and J. Xiang. *The Effects of Incomplete Employee Wage Information: A Cross-Country Analysis*, IZA Discussion Paper No. 1735, 2005). To do so, we estimated a wage frontier specification similar to that for the OECD countries, which has a much smaller set of independent variables: years of education, potential experience, potential experience squared, and a dummy for gender (woman). The mean number of years of schooling for our sample is 11.985, which is very similar to the means reported for the majority of the OECD countries with the maximum value of 13.288 for Canada and the minimum value of 9.492 for Ireland. The average potential experience for Poland is 20.750 years, which again is consistent with the OECD range, between Ireland's maximum 29.905 and Canada's minimum value of 18.450. On average, the proportion of women in our sample is 44.5 percent, which is slightly lower than the 46-52 percent range for the OECD countries but close.

The estimated frontier coefficients for Poland are all significant at quite robust *p*-value levels and in strong agreement with those for the OECD countries. *Ceteris paribus*, one additional year of education increases the wage frontier by 8.5 percent in Poland and by 6.5-16.1 percent in the OECD countries. Polish women face a 23.1 percent lower potential wage than men with the same characteristics. Among the OECD countries, the lowest female disadvantage of 5.8 percent is reported for the Netherlands and the largest one of 51.4 percent is reported for Israel. Finally, potential experience exhibits a common concave shape: the positive impact of each additional year of experience on the wage frontier is initially increasing (but at a decreasing rate) and then decreasing. One additional year of experience shifts the wage frontier up by 1.8 percent in Poland and by 1.8-4.3 percent in the OECD countries. While the estimated wage frontier for Poland is very similar to that reported for the OECD countries, the average (in)efficiency ratios differ quite a bit. For Poland, the EFF ratio is 89.1 percent, while for the OECD countries it is in the range from 43.7 percent (Finland) to 79.6 (UK). Consequently, the INEFF ratio is 10.9 percent for Poland, lower than those for the 11 OECD countries. However, we should treat the OECD high wage inefficiency results with caution, since they are rather on a high end of the reported wage inefficiencies, and many other studies find much lower wage inefficiencies - about 15-20 percent - which are more consistent with our findings.

## CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH

In this paper, we applied the stochastic frontier approach in order to analyze the degree of wage inefficiency in the Polish labor market in 2001. Our results call for further research in this direction and lead us to the next steps in our study where we will focus on several years of Polish wage inefficiencies and particular characteristics of transition economies.

## BIOGRAPHY

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# ACTIVITY BASED COSTING – EFFECTS OF SUPPLIER-BUYER RELATIONSHIPS

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## ABSTRACT

*This paper examines the use of activity based costing (ABC) in the context of deepening seller-buyer relationships, a topic largely ignored in the costing literature. A case study of a firm employing modern supplier relationship management indicates four main areas where ABC thinking requires development: (1) allocation of investments in supplier relationship management, (2) allocation of costs to specific time periods, (3) difficulties in identifying cost drivers, and (4) allocation of costs when considering multiple purposes of transactional episodes.*

## INTRODUCTION AND PURPOSE

Firms are constantly under pressure to generate higher profits. Currently, a lot of emphasis is placed on cutting costs, not only in operations, but also in spend on goods and services. Therefore, a lot of interest is directed towards the purchasing function, focusing on how it operates internally as well as on how it interacts with the supply base. This has also been recognized in the cost management (e.g. Cooper & Yoshikawa, 1994; Cooper & Slagmulder, 1999; Cooper & Slagmulder, 2004) and management control literature (e.g. Dekker, 2003; Dekker, 2004; Seal et al., 2004; Mouritsen et al., 2001). However, extant literature tends to focus on how the supply chain can be coordinated and controlled, rather than what consequences changing practices might have for the allocation of purchasing costs.

Given the increasing importance of purchasing, the importance of correctly allocating purchasing costs is obvious. The perhaps most popular costing technique is activity-based costing (ABC). ABC aims at arriving at as relevant costs as possible for a cost object. The overall logic is that all cost objects consume activities, which in turn consume resources. In conventional product costing, overhead costs are typically assigned as a standard percentage to more easily calculable costs, such as spend on direct materials. ABC strives to trace the specific costs of various activities carried out for each product or category. The most fundamental advance of activity-based costing over traditional costing approaches is, thus, that the cost driver is clearly related to specific cost objects. ABC is, therefore, especially relevant to use in situations of great overheads, great product diversity, and strong competition.

One characteristic of ABC is that it implicitly regards purchases as unique transactions. This transactional approach typically fails to take into account the co-dependence and coordination between buyers and sellers that form in the context of deepening mutually committed relationships, increasingly recognized as an important part of business exchange. With the latter perspective, it becomes clear that individual transactions form part of ongoing interaction, where buyers do not necessarily consider suppliers as interchangeable. This means that cost-drivers, while assumed to be relatively well defined in the transactional approach, become less apparent. The aim of this paper is to address a gap in the costing literature by complementing the traditional transactional view on activity-based costing with an interorganizational perspective to generate further insights into activity-based costing practices.

## AN INTERORGANIZATIONAL PERSPECTIVE

When new perspectives on business interaction grounded in organizational sociology took hold in the 1970s and 1980s, the importance of interorganizational relationships for firms became apparent. It was noted that interaction between firms creates bonds between organizational actors, ties between organizational resources and links between organizational activities (Håkansson and Snehota, 1995). As firms interact they become mutually committed to doing business, since interaction requires investments in time and money, and requires adaptations of business processes. Contrary to micro economic assumptions concerning substitutability of suppliers, relations formed between firms imply a less flexible market structure. Established business relationships often take precedence over market playing practices.

With this view on business, a single purchase is no longer an isolated transaction. Rather, each transactional exchange should be regarded in the context of an ongoing, developing relationship where previous transactions influence the way future transactions are carried out (Johanson and Mattsson, 1987). Two interrelated concepts are important to consider in this context, namely supplier relationship management (SRM) and supplier development (SD). SRM relates to activities aimed at optimizing relationships with suppliers, e.g. though efficient and accurate exchange of information, performance monitoring, implementation of purchasing systems, cost reduction programs, and joint development programs (see e.g. Cox et al., 2005). SRM is, thus, carried out together with the supplier, and can be seen as an investment. SD refers primarily to helping more or less deficient suppliers add technical and commercial competencies, and to help suppliers develop into systems suppliers (see e.g. Wagner, 2006).

Some of these advances have been recognized by management accounting, e.g. in interorganizational cost management and strategic cost management. Nonetheless, the area remains largely transactional in nature (Armstrong, 2001). We therefore ask ourselves which new problems can be identified in allocating indirect purchasing costs when complementing the transactional view with an interorganizational view.

## METHOD

To achieve some understanding of organizations' struggle with applying ABC in the context of SRM, an empirical case study has been undertaken, where Yin (1989) and Eisenhardt (1989) have served as inspiration. A firm was selected that works with implementing costing techniques and where SRM is on the agenda. This may be described as a case where the phenomenon is "transparently observable".

The main method of data collection is interviews with key informants at different levels and in different functions of the firm, although written material from and about the firm was used to supplement and substantiate verbal accounts. A total of 22 interviews were carried out at three points in time separated by approximately four years, in which may be described as semi-standardized manner aided by a semi-structured interview guide. Transcribed interview data were transferred into written accounts and tables concerning firm functions and costing practices were constructed, allowing for comparisons within and across firm functions. To ensure quality in data collection and analysis, attempts were consistently made to interview several respondents about similar issues. A few key respondents were also presented with the empirical material and were given opportunity to make comments.

## CASE STUDY

The case firm (“THE FIRM”) was founded in the 1940s, currently employs 350 people, and has an annual turnover of US\$65 million. Approximately 75 percent of turnover comes from consumer products intended for various outdoor sports activities. The rest of its sales THE FIRM achieves to automobile manufacturers, where THE FIRM acts as original equipment manufacturer of products intended for the transportation of outdoor sports products, e.g. racks and rails. Marketing, distribution and selling procedures vary between the two markets, and THE FIRM has two separate marketing departments.

The purchasing department at THE FIRM employs six people full time. Different members of purchasing staff specialize on different tasks. The purchasing manager, for example, works primarily with sheet metal, pipes and locks, while another person is responsible for aluminum, zinc and lights, etc. The main role of purchasing department is to ensure that other departments in the firm can access appropriate supplies when needed. This means that the purchasing department has three main tasks. First, the purchasing department identifies potential new suppliers and selects those most suited. Needs are discussed at the product development stage, frequently in collaboration with customers. If existing suppliers cannot deliver the required products, other venues are tried, e.g. the Internet, trade fairs, exhibitions, and inactive suppliers. Potential suppliers are then visited and evaluated. To achieve economies of scale, the firm attempts to buy or partake in development of components that can be used in several products. Attempts are also made to keep the number of suppliers at an optimum, to minimize investments in relationship building and maintenance, but also to avoid heavy reliance on single suppliers. Second, the purchasing department further develops existing supplier relationships. E.g., THE FIRM’s purchasers together with engineering staff visit suppliers to work out technical or quality process issues, or suppliers are supported by THE FIRM in their negotiations with sub-suppliers. Third, the purchasing department maintains relationships with existing suppliers. Unlike specific SD programs, SRM primarily focuses on sustaining well-functioning relationships, and to make sure that continuous improvements in quality are implemented and that information about future plans or potential problems is exchanged.

The purchasing function is a broader concept than the purchasing department. While the latter includes purchasing specialists dealing specifically and only with purchasing issues, the purchasing function includes all those involved in the purchasing process. At THE FIRM, while the purchasing department, in a sense, creates conditions that facilitate purchasing, components are typically ordered by people at other departments in the firm. Members of other departments are involved in most stages of the purchasing process, and in the three main tasks of the purchasing department. The development of new products is typically initiated by the marketing department, and discussions of function and design are held together with the purchasing department. New product development projects follow a given method, although is in large parts not very formal. Nonetheless, a great deal of time is spent in meetings that many functions in the firm attend. E.g., production planning and production technology are involved in establishing product specifications needed to identify suitable suppliers, and may be involved in pre-contracting negotiations.

Other departments are involved in other aspects of purchasing, e.g. quality control (which monitors performance of suppliers and alerts the purchasing department when problems arise) and the stock and goods receiving office. Production technology staff participate in SD programs, and in the maintenance of existing relationships. The purchasing department collects data from other departments to ensure that, e.g., quality improvement projects proceed according to plan. The finance and accounting department is involved in data collection as well as in making

payments. Interviews with staff at THE FIRM indicate that in addition to the six full-time employees of the purchasing department, the equivalent of 6.5 full-time employees at other departments are involved in purchasing activities.

## DISCUSSION AND CONCLUSION

The purchasing department at THE FIRM is not involved in many of the transactional activities traditionally associated with purchasing, such as receiving internal requisitions, writing and sending orders, receiving ordered articles, checking quality and quantity at delivery against purchase orders, unpacking items, transporting and disbursing items or paying suppliers. Rather, the purchasing department focuses on relational activities rarely mentioned in the management accounting literature, such as establishing, developing and maintaining relations. Other departments perform transactional purchasing activities. In fact, of the approximately 12 full-time employees involved in purchasing, only three are concerned with transactional activities. It is far from obvious that the relational activities, corresponding to three-quarters of the purchasing-related activities at THE FIRM, can be classified as cost drivers according to typical activity-based costing schemes. Investments in SRM and SD, e.g., are typically not covered by ABC schemes, and firms struggle to accurately allocate such costs. In conclusion, we identify four important issues relating to this.

(1) *Relationships cause costs that are difficult to allocate.* This is obvious to THE FIRM, where significant efforts are spent to manage and develop relationships with suppliers. Some of these investments, typically tangible ones, are consciously implemented, while others are made without being considered as investments. Nonetheless, they all consume resources. An activity driver must cause the activity, be measurable and be related to the cost object. An obvious problem with relational activity costs is that the cost driver does not meet this third criterion. Usually one supplier delivers more than one type of article, which may also be used in different products. Accordingly, joint costs are difficult to assign to individual products. When reducing the supply base of THE FIRM, managers actually risk accentuating this problem; fewer suppliers each provide more products. Simultaneously, two other strategies offset this. Efforts aimed at buying systems means that fewer components are purchased. Costs, thus, have to be allocated to fewer components. THE FIRM also strives for dual suppliers for critical components, meaning that there is a minimum number of suppliers. The proportion of joint purchasing costs expands, though, and complexities in cost allocation increase.

(2) *Allocation of costs to specific time periods.* According to the activity-based costing model, costs of SRM activities should be assigned to cost objects to the extent possible. However, many supplier relation activities will not affect purchases during the actual year. As seen in the case, THE FIRM makes significant investments aimed at establishing closer relationships, which take place and bear fruit over time. It would, thus, seem reasonable to adjust for this time lag, assigning today's costs to future products.

(3) *Less apparent cost drivers.* When building and managing relationships with suppliers, different levels and functions are involved. Some of these are actually considered cost drivers, but some are not, indicating that indirect costs for some products may be underestimated while overestimated for others (since, in the end, all costs are allocated to costs drivers, even if arbitrarily so). To achieve better fit between costing procedures and actual cost drivers, some imagination may be required.

(4) *Multiple purposes of transactional episodes.* There are many examples of relational activities in THE FIRM, e.g. the establishment of contacts with potential new suppliers, joint development

programs, searching for new logistics solutions and developing information systems. Examples of more transactional activities are ordering, receiving, unpacking, checking, transporting and paying for goods. This implies that transactions may give rise to indirect purchasing costs specific to a transaction but *also* general to the relationship. Balancing costs for activities that serve more than purpose is clearly complex.

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## BIOGRAPHY

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# **CHINA'S LITTLE EMPERORS AND EMPRESSES: PARENTS' PERCEPTION OF CHILDREN'S INFLUENCE ON PURCHASE DECISIONS**

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## **ABSTRACT**

*The overall objective of the research study is to investigate children's influence on purchase decisions and to provide an insight into the impact of socialization agents on children's consumer behaviour. A qualitative method of data analysis was conducted based on interviews with parents based in Beijing, China. Children are perceived by their parents as exerting significant influence on purchasing decisions. The extent of this influence is not limited to so-called child products but was recorded for non-child products. Parents, peers and media were identified as important agents in influencing children's consumer behaviour. A significant development is the role of new media in shaping children's attitudes and behaviours. The results of the study can guide marketing professionals to develop and implement effective marketing communication strategies in order to connect with the children's target segment. Further research is recommended in order to evaluate the interaction and relative importance of the influence of socializing agents.*

## **BIOGRAPHY**

Glyn Atwal embarked a professional career in the communications industry. He worked for the advertising agencies, Saatchi & Saatchi, Young & Rubicam and Publicis. He is currently Assistant Professor for Marketing at Rennes School of Business, France.

# EXPLORING CUSTOMER PREFERENCES ON MOBILE INTERFACES

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## ABSTRACT

Designing mobile interfaces is fundamentally different from designing online interfaces. Not only are there differences in underlying technologies, but also in the way people use mobile interfaces. If these differences are not taken into account in designing mobile interfaces, mobile services are likely to fail. If mobile services do not deliver what people want, these services will fail no matter how excellent the underlying technology is. The user interface design commonly used in mobile services is based on multi-layered approach, which is not very user-friendly. A well designed single layered user interface will be more user friendly than the conventional one and it will be having edge over others. However, it is quite difficult to provide a single layered user interface in a small screen. This study aims at examining how design attributes of mobile interfaces affect customer preferences. In order to explore customer preferences to each design attribute of mobile interfaces, we measure and analyze customer's WTP (Willingness To Pay) toward their different interface designs.

## INTRODUCTION

Wireless Application Protocol (WAP) phones are a growing relevant part of the mobile market, and the number of WAP services offered is rapidly increasing. However, usability is crucial for these services which must be easily operated on small screens and keyboards. One of the reasons that many WAP sites have failed is that many service providers simply tried to carry their websites over to the mobile Internet. This shows that little thought has been given to the characteristics of mobile Internet and to the specific needs of people who use their mobile devices in real life. Understanding the fundamental differences between mobile and the web is essential for the success of mobile services. Using the web site, users view all relevant information in one page. Whereas, accessing the services from WAP-based phones, users require a lot of clicking in a pre-defined sequence, due to the division of information into a large number of sub-pages. By following sequential menus, users can find specific mobile services. Generally, interfaces of WAP-based mobile services require minimal attentions and interactions. The usability of mobile services consequently suffers from interfaces being very compact and cluttered information. It is crucial to design the menus which can get the user's full attention, remaining simple and the required interaction minimal. This study aims at examining how user interface design attributes of mobile services affect customer preferences.

## RESEARCH METHODOLOGY

This study aims at examining how user interface design attributes of mobile services affect customer preference. In order to analyze the impacts of specific attributes on customers' preferences, this study employs conjoint analysis. A conjoint analysis is one of the most widely-used methods which are designed to analyze consumer needs. This method shows 1) relative importance of various utilities considered by consumers when they purchase service and 2) a service that consists of the most ideal combination of those utilities.



Conjoint analysis originates from mathematical psychology. The basic goal lies in analyzing how much influence two or more independent variables (in this study, interface attributes) exert on determination of orders or values with regard to dependent variables (in this study, customer's WTP). It is used to understand how consumers develop preferences for products or services, which encompass, as usual, multi-attributes and multi-attribute levels.

WTP (Willingness To Pay) is defined as the maximum monetary amount that an individual would pay to obtain goods or service. Mostly, WTP has been used in the fields of psychology, economics, and marketing. It is crucial in estimating the demand curves and determining optimal pricing schedules. These studies have focused on cognitive structure of customer to specific tangible or intangible goods under experimental environment. It is widely used to provide information to policy makers, regarding the economic value of non-market or non-pecuniary environmental assets. In this study, by measuring WTP for various interface designs, we try to investigate what features of interface design attributes affect customers' WTP.

## ANALYSIS

In this study, we examine the relative impacts of menu design attributes of mobile services on customer's WTP. We try to find an optimal menu design of mobile services that high-valued by users. [Table 1] reports the means of the part-worth and relative importance for 116 subjects. The greater the relative importance, the more an attribute influences your preferences for mobile services. If the information about mobile service types is shown in menu, there is the highest possibility that customers purchase mobile services (27.51%). In other words, customers utilize information about mobile service types as critical information in purchasing of mobile services. The second influential menu design attribute is the payment information of mobile services shown in menu, (26.53%), the third is the positions of mobile services within menu (23.21%), and the last is recommendation information (22.75%). Based on the result, we can say that the understanding customers are the most important factor in terms of menu design. Many companies pay a lot of money to locate their services in higher positions in the menu, or use recommendation information to sell their services. Based on our study, we found that mobile customers tend to be more sensitive to services themselves, rather than the artificial information, such as recommendation information or menu positions,

In terms of part-worth for the mobile service types, customers prefer entertainment mobile services to other services. This result proves the actual usages of mobile Internet. Many users tend to use entertainment services, rather than other types of mobile services. In terms of payment information, customers prefer the mobiles service shown its cash discount information in the menu. When they use a specific mobile service, their decisions heavily depend on the payment information, especially on cash discount information. Regarding to recommendation information about mobile services, customers prefer the mobile service marked "Strongly Recommended" in the menu. Normally, service operators mark specific mobile services as "Strongly Recommended", when the services are popular and new. "Hit" marks are less attractive for customers than "No Information". In terms of menu position, customers are likely to purchase a mobile service in the middle line, rather than the second line or the first line. The relative importance of design attributes will guide the menu design of mobile services. The result shows that, for identical services, their different menu designs affect customer's purchasing power.

## CONCLUSION

One often meets the argument that, due to the complexity of the service model and the convergence of technologies and services expected in mobile services, it is very little relevant

research available to help us understand the mobile services and their users. The main purpose of the study is to explore attributes that influence customers' preferences to mobile interfaces. To explore the relative importance of the design attributes of mobile interfaces, the study uses conjoint analysis. It finds that the most influential attribute is the mobile service types. This finding supports the current phenomenon that the main usage of mobile services is concentrated on entertainment services. Although this study tries to understand customers of mobile services empirically, it has very limited contributions to theoretical development. In addition, regarding to the relationships between attributes of mobile services and customers' preferences, it does not provide a theoretical explanation. However, the study helps us to understand mobile customers.

Table 1: Part-Worth and Relative Importance

Attribute	Part-Worth			Relative Importance (%)
	1	2	3	
Mobile Service Type	Entertainment 1.74	Information /Communication 0.32	No Information 0.94	27.51
Payment Information of Mobile Services	Discount 1.54	Coupon 0.96	No Information 0.50	26.53
Menu Position of Mobile Services	First Line 1.20	Second Line 0.48	Middle Line 1.33	23.21
Recommendation Information of Mobile Services	Log Data Based Recommendation 0.85	User Evaluation Based Recommendation 1.16	No Information 0.99	22.75

# LEADERSHIP LEARNING FROM FOLLOWERS

John Brinkman, Liverpool Hope University

## ABSTRACT

*This paper will consider how contribution of followers positively affected the leadership process in the design of a new online degree. The degree, an E-Learning version of an existing BA Nursery Management honours degree, was launched at the end of February 2003. Total online learning was a new concept for Liverpool Hope University and this presented different operational issues to the relevant leader of the project team, the Head of Department of the Business School (HOD). The success of the new programme hinged on a key moment when the HOD yielded to the project team members' viewpoint. Thus, the paper is a case study of the development of subordinates needs and leader flexibility, in a situational leadership sense (Grief, 1983; York, 1989) and also a Leader Member Exchange (LMX) sense (Dasereau et al, 1975).*

*Implications for situational leadership from the case study are that the leader, the HOD, changed from a directive to a supportive style as the need arose. This would probably not have been the case without the In-group having to make strong representations; in other words, adapting the leader's style appropriate to the subordinates needs. The quality of debate turned the Out-group into an In-group. This leadership making (Graen & Uhi-Bien, 1991) is recognised as such; when the level of quality exchanges are permitted by a leader, Out-group members can become In-group members. Low quality exchanges are likely to be for self-interested reasons rather than for the team good. This was indeed the case here with some team members, part of the original programme team, reluctant to contemplate additional work. The mature partnership of the relationship between what was initially an Out-group led to better quality exchanges and these were crucial in persuading the HOD to adapt his style to a less directive one and facilitate the requirements of the majority of team members.*

## BIOGRAPHY

Dr John Brinkman is the Vice Dean of Business & Computer Sciences at Liverpool Hope University. In addition to his role as Vice Dean, John is also Vice Chair of academic & quality standards throughout the University. He has two main current research interests in leadership. The first of these concerns transferring leadership knowledge to small to medium sized business enterprises, the second is investigating clinical team leadership in hospitals.

# VALUE RELEVANCE OF FAIR VALUE INFORMATION FROM EQUITY METHOD INVESTMENT

Narongrit Chansuwan, Chulalongkorn University

## ABSTRACT

*In this study, the value relevance of fair value information from equity method investment is examined. A sample of 83 firms was analyzed with OLS regression. The results show that the fair value information of invested companies can not incrementally explained the firm value of investors companies with all equity method samples. When the sample was split into two groups, associated group and subsidiary group, the fair value information of the subsidiary companies can marginally explain the firm value but the associated companies can not explain the firm value of investor companies. For the sensitivity test, the time period for the data collected was changed from three months to two months after the end of the fiscal year. The results show that the fair value information has more value relevance of the investor companies. Results suggest that requiring recognition of the fair values of equity method investments, at least for publicly-traded firms, should use proper accounting practice of accounting for subsidiary companies.*

# IS THERE A LINK BETWEEN FIEs' CHARACTERISTICS AND THE CREATION OF THEIR LOCAL SUPPLY LINKAGES?

Fei Jia, University of Surrey-Guildford U.K

## ABSTRACT

*Using a new set of firm-level panel data in China from 2003-2005, this paper examines the factors that could impact the creation of FIEs' local supply linkages from the aspect of FIE's self characteristics. Current paper argues that the ambiguous findings of previous research may be due to the usage of bias leading measures of FIEs' local supply linkages and the heterogeneity across firms. The unique features of this study include the application of a better alternative measure of FIEs' local supply linkages and so-call "two-step fixed effect procedure" in the analysis, as well as the examination on the issue of linkage quality which is seldom touched in previous empirical literature. The results indicate some crucial determinant factors to the creation of FIEs' local supply linkages, i.e. market orientation, maturity, size, entry mode, and industry characteristics of FIEs. Respectively, host market orientated FIEs are more likely than exported orientated ones to source locally; mature or bigger ones are more likely to source locally; joint ventures are more likely to source locally than FIEs by green field investment; firms in the primary industries have less scope for linkages with indigenous suppliers than those in the manufacturing or tertiary industries. These findings have important managerial and policy implications.*

## INTRODUCTION

Creating local supply linkages between foreign invest enterprises (FIEs) and their local suppliers has been widely accepted as a salient way for host countries to reap the benefit from FDI (Rodriguez-Clare, 1996; Markusen and Venables, 1999). In retrospect, linkage promotion is not a new policy issue for developing countries (see, for example, Lall, 1980; UNCTC, 1981), but it deserves renewed attention. Because some frequently used measures to promote linkages, like local content requirements, are no longer permissible in the context of the WTO or other international agreements. It is still possible to promote linkages, but tools would be different from those used in the past. Therefore this subject re-attracts considerable attention in these days.

This paper focuses on analysing the factors that could impact the creation of FIEs' local supply linkages, using a unique firm level panel data set covering the entire manufacturing industries in China from 2003-2005. Current paper extends the existing findings by focusing on four issues that are likely to play an important role but neglected previously in the investigation of the determinants of FIEs' local supply linkages, namely measure bias of the local supply linkage, firm heterogeneity, linkage quality, and appropriate methodology. Firstly both two types of normally used measure for FIE's local supply linkages may not accurately reflect the magnitude of a FIE' local supply linkages with domestic suppliers.

We argue that the findings through applying these traditional measures could be misleading. Therefore the main body of the empirical analysis will employ a new better measure of local supply linkage. Secondly our data set, which includes panel information of 527 manufacturing FIEs from 2003 to 2005, allows us to reap the advantages of panel data analysis such as more accurate inference of estimation, dynamical individual study, and controlling for individual unobserved heterogeneity etc. Thirdly we involve the empirical study on the analysis of linkage quality. To the best of our knowledge, it is the first time for empirical work to touch the issue of FDI quality. Finally the application of so-call "two-step fixed effect procedure" makes the

estimation of time-constant variables practicable while still benefits from the merits of panel fixed effect analysis.

## EMPIRICAL RESULTS

Through the estimation comparison between our measure and the two traditional ones, we can find that the differences among the results by employing different measures are big. They are not just in magnitude, but imply opposite findings in some cases. And in general, the measure by *local content* leads more bias. Thus we appeal the cautious application of previous findings based on those traditional measures of FIEs' local supply linkages.

Generally say, by employing our bias-corrected measure of FIEs' local supply linkages, unique data set, and better performed "two-step fixed effect procedure" panel data analysis technique, the results confirm some usually held expectations but also highlight some innovative and less commonly explored aspects. We believe the results are more convincing than previous empirical studies'.

### Market Orientation.

It is found that the more export out of the sales of FIEs', the less local sourcing from indigenous suppliers. The findings statistically proved the relationship between market orientation of FIEs in China and their local sourcing decisions. Host market orientation would make FIEs have higher intention to purchase inputs from domestically owned suppliers. Some researchers explained this phenomenon. Altenburg (2000) stated that when serving the local market, the foreign firms will need to adapt their production to the local conditions and tend to be more integrated in the local economy. On the other hand, export oriented affiliates are generally part of a global sourcing and distribution network managed by the parent company and have higher quality requirements which can be difficult for the local suppliers to meet (Mucchielli & Jabbour, 2001). Specified on Chinese market, this trend may also attribute to the government policy on indigenization of business. Chinese government, which pursue more export-generating development rather than import-substituting development in the past years, may impose less control on the import of intermediate goods. That is possible because policy makers may perceive that unless FIEs are free to obtain intermediate products on the best possible ways their ability to export will be adversely affected. Hence, it seems natural that export-oriented firms need less cooperation with local firms, to the extent that they can import intermediate goods.

### Maturity in the Host Economy

Both "familiar effect" and "vintage effect" mentioned above are supported by our study. We find positive and statistically significant relationship between the local supply linkages and a FIE's maturity in China. This suggests that FIEs may procure more from Chinese owned suppliers along with their increasing maturity in China. But there is no quadratic relationship found given the non-significance of  $Maturity_{it}^2$ . As far as "vintage effect", our empirical results show that newly established FIEs have lower linkage potential though it will increase together with maturity in the host economy as well. Another key fact behind this phenomenon is that this kind of linkage may enhance with a firm's maturity at an increasing rate.

### Entry Mode

FIEs established through M&As is proved to have a higher level of local sourcing than those established through Greenfield investment. As explained by Barkley and McNamara (1994) as well as Scott-Kennel and Enderwick (2001), a possible reason is that a regional purchasing network is already established in the former case. Correspondingly, wholly owned firms may initially rely on familiar sources of inputs rather than develop local supply linkages with domestic firms.

### Size

A FIE's size measured by employment is confirmed negatively correlated with its extent of local supply linkages. This may be due to that large firms normally are able to internalize their operations better, and local suppliers may find it difficult to supply very large volumes. While for the small firms, they are generally more adaptive than large firms which may have difficulty in finding a niche in highly internationalized networks.

While large FIEs might be less beneficial to the host country by creating less local supply linkages, they might on the hand bring more benefits in terms of developing domestically owned suppliers' capabilities. As discussed above, this involves the issue of linkage quality. In order to explore this further, we analysed the relationship between a FIE's strength and its local sourcing decision. To the best of our knowledge, current paper is the first to involve the issue of linkage quality in the relevant empirical study. We proxy the strength of a firm as the ratio of its intangible assets to gross profit. Because there may exist co-linearity between variables *strength* and *size*, we do not include *size* in the regression. As can be seen in column (iii) of table 2, we find no relationship between the strength of FIEs' and their local sourcing decisions due to the low level significance.

### Autonomy of Sourcing

The autonomy level of sourcing is predicted to be another factor related to the procurement of FIEs. Our study supports this point. We find that firms which have thorough autonomy over input purchasing source more of their inputs from Chinese indigenous suppliers than firms that have less or no autonomy. Crone and Watts (2003) argued a possible explanation. Some firms will centralise some or all of their input purchasing at one location so as to achieve economics of bulk buying (Dunning, 1993) and many plants will have little autonomy in making purchasing decisions. In such circumstances, individual FIE plants may be the optimal supplier for a single plant.

### Originality

The results highlight the significant local sourcing propensities of FIEs whose originality is Hong Kong or Taiwan. However the results for other originalities are not statistically significant.

### Industry Characteristics

Food processing & manufacturing, Transport equipment manufacturing, and Ordinary machinery manufacturing are linked with higher local sourcing propensity of FIEs' based on our analysis. While FIEs that are belong to Electronics or Pharmaceuticals have lower propensity of local procurement. Tests for other industries are not statistically significant in our estimation results. Generally say, the results are in conformity with previous research with one exception of Transport equipment manufacturing. Food processing & manufacturing usually involves extensive local supply linkages between FIEs and domestic suppliers of raw and packaging materials; Ordinary machinery manufacturing normally have lower value-to-weight ratio of technologically complex inputs; both Electronics and Pharmaceuticals are high tech industries, which need higher value-to-weight ratio of inputs. The exceptional higher local procurement propensity of Transport equipment manufacturing industry may be attributed to the 40 to 50 percent of "localization" policy by Chinese government aiming at automobile industry (Xia and Lu, 2001).

To shed more insights into what common characters of an industry affect the FIEs' local sourcing decision, based on an OECD sectoral classification (see Klette and Forre, 1995), we aggregate the 36 2-digit sectors into four groups, i.e. *high-tech*, *medium-high-tech*, *medium-low-tech* and *low tech*. Tavares and Young (2001) use the different classification in their analogous study by

grouping the manufacturing sectors into “global industries” and “non-global industries”. Those “global industries” are actually encompassed by our higher-tech groups (high-tech and medium-high-tech). Thus our classification more or less is also supported by theirs. Lower local supply linkage potential of higher-tech industry and higher potential of lower-tech industry are clearly performed in our estimation results.

## CONCLUSIONS AND POLICY IMPLICATIONS

Using unbalanced firm-level panel data for China and two-step fixed effect procedure, we believe our results are more effective and creditable than analyses normally based on cross sectional data and other estimation method. Along with confirming some existing findings, current paper not only develops them in depth, but challenge previous notions as well. In the other direction, there are a series of important policy implications of this work for FDI linkage promotion activity. These implications could be two fold based on the two principal roles of FDI linkage. First, aiming at filtering valuable FDI (high linkage potential); second, relating to provide aftercare for existing investment in favour of local embeddedness.

From the angle of helping the development of indigenous firms, targeting foreign investors with higher local linkage potential is an effective way to replace some frequently used measures for linkage promotion, because most of them like local content requirements are no longer permissible in the context of the WTO or other international agreements. According to our estimation results, following factors could be considered for Chinese government to filter foreign investors with high local linkage potentials.

1. FIEs with host market orientation: import-substituting investment is more beneficial to promoting linkage than those export-generating. Net export contribution could also be a more appropriate measure than solely export as suggested by Tavares and Young (2002).
2. There is no different local procurement potential between newly established FIEs and old ones.
3. Investment through joint ventures rather than green field.
4. FIEs with high strength other than big size: since larger FIEs are proved to hold lower local sourcing potential while higher strength ones do not, current research questions targeting strategies based on the size of a FIE's rather than strength in terms of linkage quality. Further more, if the priority is local embeddedness, small FIEs may need more attention.
5. Although FIEs from Hong Kong and Taiwan are proved to procure more, it can not be an evidence for country targeting. An evolving doubtful view from the researchers with IMF, World Bank and other international institutions is that about a quarter or more of China's officially-recorded FDI is actually mainland Chinese money originally (Geng Xiao, 2004). These monies may flow out to access better financial, regulatory and legal services and “round trip” by returning to China as apparent FDI to access the fiscal incentives and improved investor protection offered in China to foreign investors. Analysts also point to the numerical coincidence (and rising share) of China's FDI inflows from Hong Kong, the British Virgin Islands and other tax havens and the outflows recorded as “errors and omissions” in China's balance of payments. From this point of view, the findings in this study that FIEs from Hong Kong and Taiwan have high potential of local supply linkages may be resulted in by those “round-trip” monies through Hong Kong or Taiwan but originally from mainland China. If so this finding has nothing to do with the objective of this study. Although there is still no solid evidence for this doubt, at least we need to be cautious to deal with it.



6. FIE affiliates with sourcing autonomy: policies favouring attracting FIE affiliates with sourcing autonomy can be advocated.

Nevertheless, when considering the 6 factors mentioned above for local linkage promotion, governments still need to carefully balance their promotion strategies in terms of potential competition from host market orientated FIEs and benefits of employment from large FIEs. Our results also show that high tech FIEs normally have lower local sourcing intention due to the weak local supply base, and the same situation may happen on large FIEs since that their high demands are hard to be satisfied locally. Thus to promote attracting high tech FDI and stimulate the embeddedness of existing investment, policies that favour strengthen local supplier base (availability, capacity and competitiveness) are advocated. These policies may include information and matchmaking; technology upgrading of local firms; human resource development programmes with local suppliers and other forms of training support; financial assistance; and cluster-oriented programmes (UNCTAD, 2001)

# **A WOMEN-CENTERED GRASSROOTS APPROACH TO TOBACCO CONTROL: THE CASE OF CHINA**

Zhihong Gao, Rider University

## **ABSTRACT**

*The effectiveness of tobacco policy is conditioned by the specifics of local political economy. The current paper examines and evaluates Chinese tobacco control in its political, economic, and cultural context. China is the biggest tobacco market in the world and a major center of the tobacco epidemic, suffering from nearly one million tobacco-related deaths per year (Liu et al., 1998). At the same time, the country is home to the world's largest producer of tobacco products, China National Tobacco Corporations, a monopoly owned by an authoritarian government. It argues that, in the Chinese context characterized by state tobacco monopoly, fragmented politics, and weak civil society, the existing government-dominated top-down approach to tobacco control is ineffective and inadequate. As a solution, it proposes a women-centered grassroots approach as a more effective alternative to raise the Chinese population's consciousness about tobacco harm and rights to clean air.*

# **HIV/AIDS: A MANAGEMENT CONCERN FOR INTERNATIONAL BUSINESS**

Susan Baxter, Bethune-Cookman College

## **ABSTRACT**

Economies of global scope afford businesses a competitive advantage. One way to utilize this advantage is to coordinate the leveraging of resources – especially labor. Businesses have attempted to minimize labor costs and risks in an effort to maintain or increase competitive advantage. There is a risk to the global workforce: HIV/AIDS. This disease is striking at the heart of low cost labor pools. The impact on business is being felt now and will be for years to come. How large the impact is depends on the level of involvement of multinational businesses in the fight against HIV/AIDS. This paper will look at the HIV/AIDS issue in regards to the impact on employees and businesses, as well as the use of business diplomacy management as a tool to enhance effective communication between NGOs and business in regards to HIV/AIDS interventions (Saner, Yiu, and Sondergaard, 2000).

# OIL AND ETHANOL IN LATIN AMERICA AND PACIFIC ASIA

Jorge Torres-Zorrilla, CENTRUM, Pontificia Universidad Catolica del Peru

## ABSTRACT

*Oil prices and import value have increased dramatically in recent years. The high price of oil is the main reason that we consider the issue of why to produce ethanol now. Experts have been predicting that petroleum reserves would be exhausted soon and the new price of \$70 barrel confirms that prediction. Already there is consensus of the urgency to search for oil-substitutes and one of them is ethanol. Additionally, environmentalists suggest that bio-fuels are an acceptable alternative of renewable energy.*

*This study concludes that the uncontrolled growth of oil prices and value of imports has the same critical importance for Latin America as for Pacific Asia. The study presents the potentialities to substitute ethanol for petroleum in selected countries of Latin America and Pacific Asia. The conclusion is that only Colombia, Peru, Malaysia, and Thailand have potentialities because they cultivate sugarcane; Chile and South Korea do not have cane production.*

*The country with greater potentialities to replace petroleum imports is Colombia, with a potential ethanol output greater than the equivalent fuel imports. The countries with medium potentialities to replace imports of crude are Thailand and Peru and the country with smaller potentialities is Malaysia. Korea and Chile do not have potentialities to replace imports of crude, because they are located in temperate regions of the world. Korea and Chile must look for alternatives, in other agricultural raw materials or in foreign trade with their neighbors.*

*Another issue is the situation of comparative advantage in ethanol with respect to other countries. Why the great producers of sugarcane such as Brazil, Cuba, Mexico, Indonesia, Nigeria could not also make a re-engineering towards ethanol? The answer is that the fuel market at the present time is incommensurable. If all these countries produced ethanol instead of sugar, it would only cover a part of the world-wide gasoline market. The conclusion is that eventual competition, to ethanol from Colombia-Peru-Thailand, coming from countries in the rest of the world will be minimal.*

# THE NEUTRALITY OF FUEL SURCHARGE

Qiang Gong, Peking University  
Xingli Fan, General Administration of Civil Aviation of China

## ABSTRACT

*When fuel price surges, in order to cover the profit loss, airline companies usually collect fuel surcharge instead of increasing air fares. However, this kind of policy always incurred public complexion. This paper initiates a theoretical model to analyze the properties of fuel surcharge. We show that the role of fuel surcharge is neutral under the present fee collection scheme, which means that the fuel surcharge policy cannot help the airline industry improve its profits. In addition, the equilibrium results of the air fares with fuel surcharge policy are identical to that of the fuel-cost-driven air fares without it. Therefore, the effects on social welfare are the same. We also offer an analysis to clear up the common misunderstanding in which the fuel surcharge policy was in favor of the airline companies at the expense of the consumer welfare. Moreover, our theoretical findings are consistent with following empirical facts.*

## INTRODUCTION

The growing market demand of Chinese airline transportation (the second largest in the world) induces airline companies to increase their capacity considerably. Presently, Chinese airline companies are facing great challenges because of the increase in airline capacity and fuel price. The surging fuel cost is the largest component of the airline companies' operating cost, constituting from 30% in the beginning of 2004 to 40% in June, 2006. The refined oil price in China is controlled by the government and the airline companies are mostly state-owned. In order to release some financial pressure from the fuel cost for airline companies, fuel surcharge policy is implemented, which has aroused violent public complexion and academic debates in China. The key controversies are: why there is co-existence of fuel surcharge and discounted airline tickets in the market; whether fuel surcharge policy is fiscal subsidy in favor of the airline companies at the expense of the consumer welfare.

Douglas and Miller (1974) showed that when the CAB (Civil Aeronautics Board) implements the regulation policy on the airline market, the regulators can indirectly control the quality by the selection of the price parameter. Borenstein and Rose (1994) first studied the relation between price discrimination and market structure, especially market concentration. Alam, Ross and Sickles (2001) showed that dynamic and competitive pricing policies do exist based on different structures of air fares.

None of the existing related literature considered the strategic reactions of airline companies faced with surging fuel price. In the present airline market, with the oil price rising ever higher, the fuel cost has become a key factor in airline industry. We theoretically analyze the fuel cost fluctuation in our framework to support further discussion about the impact of fuel surcharge policy on the air fares and social welfare. We also provide some empirical facts of the Chinese fuel surcharge policy based on the model, which are consistent with our theoretical conclusions. In addition, we propose some policy suggestions at the end.

## BASIC FRAMEWORK

There are  $n$  airline companies in the airline market.  $q_i$  is the transportation quantity of the airline company  $i$ , and  $Q = \sum_{i=1}^n q_i$  is the total transportation quantity of the airline market,  $p$  is the market clearing air fares. The inverse-demand function of the market is  $p(Q) = a - bQ$ . Each airline company has the same cost function  $C_i(q_i) = K + (c_0 + c_1)q_i$ ,  $K$  is the entry cost for airline companies, the constant marginal cost  $(c_0 + c_1)$  is composed of the unit fuel cost  $c_1$  and all other unit variable cost  $c_0$ . At first, we study the model when there is no fuel surcharge. The profit maximization problem for company  $i$  is as follows:  $\max_{q_i} \pi_i = pq_i - (c_0 + c_1)q_i - K$  such that  $p(Q) = a - bQ$ .

When there is fuel surcharge, let  $p'$  be the nominal ticket price of the airline companies, and let  $A$  be the fuel surcharge on each passenger, thus the air fares in the market are composed of two parts:  $p = p' + A$ , where  $p$  is the total payment of consumers. The inverse demand function for ticket price  $p'$  in the market becomes  $p'(Q) = a - A - bQ$ . The airline companies maximize their profit considering fuel surcharge income:  $\max_{q_i} \pi_i = p'q_i - (c_0 + c_1)q_i + Aq_i - K$ , such that  $p'(Q) = a - bQ - A$ .

## MAIN RESULTS

1. In a competitive market, the equilibrium ticket price  $p^*_o$  (the total payment of consumers) depends on four variables: market demand, number of airline companies in the transportation market, variable costs except for the fuel cost  $c_0$  and the fuel cost  $c_1$ . Hence when the fuel cost  $c_1$  rises, the equilibrium air fares in the airline market will go up and consumers will have to pay more. However, the profit of airline companies will decrease because of less customers and higher fuel cost.
2. The equilibrium results of the air fares with fuel surcharge policy are identical to that of the fuel-cost-driven air fares without it. The social welfare and the profits of the airline company are the same. That is called the neutrality of fuel surcharge.

3. In a competitive market with free entry, the equilibrium number of airline companies existing in the market is  $n^*_s = \frac{a - c_0 - c_1}{\sqrt{bK}} - 1$ , and the market equilibrium price is

$$\bar{p}^*_s = a - b\bar{Q}^*_s = \sqrt{bK} + c_0 + c_1$$

## A COMMON MISUNDERSTANDING

Public opinions usually regard fuel surcharge policy as governmental intervention which is in favor of the airline companies at the expense of the consumer welfare. People usually consider

fuel surcharge collected by airline companies as fuel taxation. We show theoretically that if fuel surcharge is collected as tax transfer payment, then consumers pay more air fares than that without fuel surcharge policy, at the same time, the airline companies' profits increase, yet consumer surplus and social welfare is damaged. This is a misunderstanding coming from the mechanism of fuel surcharge collection. In fact, the fuel surcharge goes directly into the income of airline companies instead of tax transfer payment. As we have shown, fuel surcharge is neutral. Hence the fuel surcharge policy will not do any harm to consumer interests.

## EMPIRICAL ANALYSIS

We show that the rising fuel cost will drive up the total air fares. Because fuel surcharge is neutral, whether to charge fuel surcharge has no effects on the Revenue Passenger Miles of the airline companies. Whereas if the fuel surcharge is a way of "fuel tax", airline companies will profit from that, and the fuel surcharge will change the passenger kilometer income level. We use the financial data of some big domestic airline company to conduct the empirical analysis. Since August, 2005, General Administration of Civil Aviation of China has started to collect fuel surcharge. Our data show that the rising fuel cost increases average airfare. The Revenue Passenger Miles (RPMs) decreased excluding fuel surcharge, which means that the nominal ticket price decreased, yet the total payment of consumers increased. These results are consistent with our theoretical analysis.

## CONCLUSIONS

We show in this paper that when airline market is competitive, surging fuel cost will drive up the air fares. The role of fuel surcharge is neutral. The same equilibrium will be achieved with or without fuel surcharge policy. The social welfare results are the same. We also offer an analysis to clear up the common misunderstanding in which the fuel surcharge policy is assumed to be in favor of the airline companies at the expense of the consumer welfare.

### Policy Implication

Chinese government use fuel surcharge policy to subsidy the airline companies. If the fuel surcharge is taxed the same as ticket income of airline companies, due to the neutrality of fuel surcharge, the results with fuel surcharge policy are equivalent to those without fuel surcharge policy in equilibrium. Therefore, fuel surcharge policy will have no effect of subsidizing airline companies but will incur lots of institutional cost and public complexion. In conclusion, in order to reduce the risk of fuel price fluctuation, the corporate income tax on the fuel surcharge should be exempted.

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#### BIOGRAPHY AND ACKNOWLEDGEMENT

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We would like to thank Yin He, Justin Lin, Min Lu, Yan Shen, Hao Wang, Jun Wang, Sheng Xu and Maiojie Yu for their very helpful comments. I am also grateful to Jing Tao for her excellent RA work.



# MONOPOLY OR COMPETITION: MARKET STRUCTURE OF CHINESE AIRLINE INDUSTRY

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## ABSTRACT

*Chinese Airline industry is in the process of marketization. After nearly twenty years of marketization in airline industry, not only the government but also the investors and consumers show great concern for the present market structure of Chinese airline industry. This paper initiates a theoretical model for airline market structure, combining with Chinese airline industry data to study the equilibrium quantity and air fares. Hence we can identify Chinese airline industry market structure by considering the entry barrier and the costs of the airline companies. Our analysis shows that instead of monopoly, the present Chinese airline industry structure is competitive. Our theoretical findings are consistent with empirical facts.*

## INTRODUCTION

The total transportation volume of Chinese airline industry has come up to the second largest in the world, right after the United States. The annual growth rate is around 14% in recent years. The Chinese airline industry is in the process of marketization, and government regulation becomes the key factor in market structure. In spite of nearly twenty-year marketization, most airline companies are still state-owned. Not only the government but also the investors and consumers show great concern for the present airline market structure.

De Vany (1975) investigated the impact of the airline market structure on regulation efficiency. Douglas and Miller (1974) showed that when the CAB (Civil Aeronautics Board) implements the regulation policy on the airline market, the regulators can indirectly control the quality by the selection of the price parameter. Borenstein and Rose (1994) first studied the relation between price discrimination and market structure, especially market concentration. Alam, Ross and Sickles (2001) showed that dynamic and competitive pricing policies do exist based on different structures of air fares.

All big Chinese airline companies are state-owned. People usually believe that the regulation of government will facilitate airline companies' collusion to improve their profitability. Therefore, the market behaves as a monopoly. Actually, we showed in this paper that instead of monopoly, the Chinese airline market is competitive, and the marketization of Chinese airline industry works well.

## BASIC FRAMEWORK

There are  $n$  airline companies in the airline market.  $q_i$  is the transportation quantity of the airline company  $i$ , and  $Q = \sum_{i=1}^n q_i$  is the total transportation quantity of the airline market,  $p$  is the market clearing price. The inverse-demand function of the market is  $p(Q) = a - bQ$ . Each airline company has the same cost function  $C_i(q_i) = K_i + cq_i$ ,  $K_i$  is the entry cost for airline companies and the marginal cost  $c$  is constant.

If the market is monopoly, which means the government plays a coordinative role for collusion among the state-owned companies, the airline companies will maximize their total profit. That is,

$$\max_Q \pi = pQ - cQ - \sum_{i=1}^n K_i = (a - bQ)Q - cQ - \sum_{i=1}^n K_i$$

If the market is competitive, each airline company will maximize their own profit. The profit maximization problem becomes:  $\max_{q_i} \pi_i = pq_i - cq_i - K_i = (a - bQ)q_i - cq_i - K_i$ . In addition, the airline companies' number in market is endogenous and will reach the largest number of companies consistent with nonnegative profits.

## MAIN RESULTS

1. If the market is monopoly, when costs go up, market supply will decrease and the price will increase in equilibrium; when market demand increases, both market supply and market price will increase. That is,  $\partial Q^* / \partial c < 0$ ,  $\partial p^* / \partial c > 0$ ,  $\partial Q^* / \partial a < 0$ ,  $\partial p^* / \partial a > 0$ .

2. If the market is competitive, when costs go up, market supply will decrease and the price will increase in equilibrium; when market demand increases, total market supply will increase, but the equilibrium market price will not change. That is,

$$\partial Q^* / \partial c < 0, \quad \partial p^* / \partial c = 1, \quad \partial Q^* / \partial a < 0, \quad \partial p^* / \partial a = 0.$$

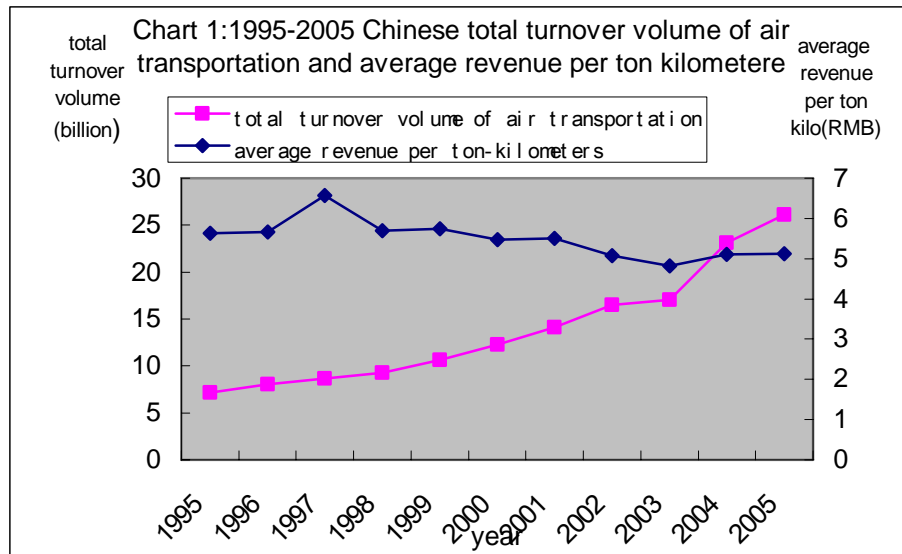
3. In the competitive market, the equilibrium total number of airline companies in the market is

$$n^* = \frac{a - c}{\sqrt{bK}} - 1, \text{ the market supply is } Q^* = \frac{a - c}{b} - \frac{\sqrt{K}}{\sqrt{b}} \text{ and the equilibrium market price is } \tilde{p}^* = a - bQ^* = \sqrt{bK} + c.$$

4. When the market demand increases, the equilibrium market price will increase in a monopoly market and will not increase in a competitive market.

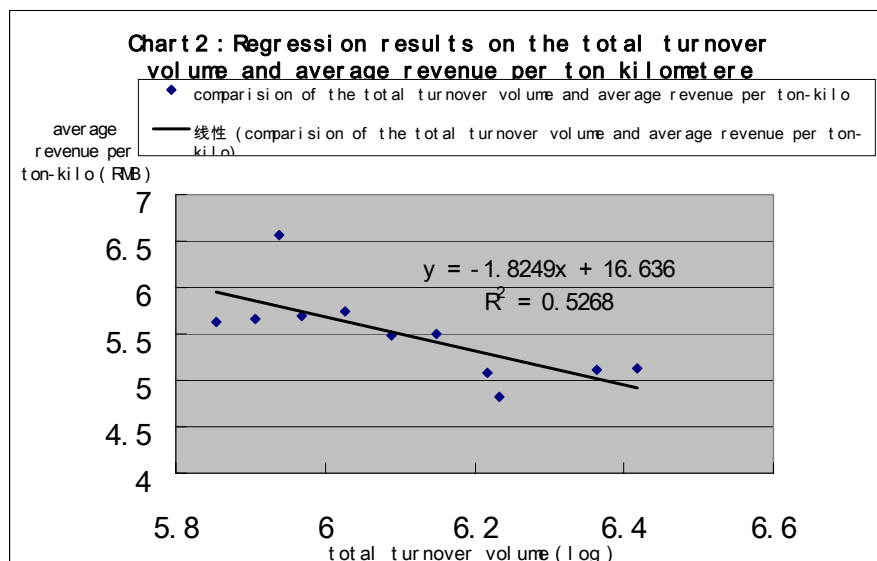
## EMPIRICAL ANALYSIS

From 1995 to 2005, with the steady macro-economic development, the Chinese airline industry has kept growing rapidly. At an annual growth rate of 13.8%, the total transportation volume went up to 26.1 billion in 2005, which is the second largest one in the world right after the United States. Meanwhile, the revenue per ton kilometer, which represents the market price, has been declining continuously, which decreased by 8.8% from RMB\$5.63 per ton kilometer in 1995 to RMB\$ 5.13 per ton kilometer. (as shown in chart 1).



Data Source: Statistical Data on Civil Aviation of China, 2006

When market demand increases, the equilibrium price will rise in a monopoly market. Therefore we can identify the market structure by the relation of market price and quantity in equilibrium. The regression results are:  $\log Q = 16.636 - 1.8249p$  with  $R^2 = 0.5268$ . That is, when market demand increases, market price decreases. The results suggest the hypothesis that the Chinese airline market behaves as a monopoly should be strongly rejected. Even though the airline companies are state-owned, the whole Chinese airline market is competitive.



Data Source: Statistical Data on Civil Aviation of China, 2006

## CONCLUSIONS

This paper studied the change of the Chinese airline market structure in the process of its marketization. We clear up the misunderstanding that the Chinese airline market behaves as a monopoly because most airline companies are state-owned. In fact, the recent deregulations in Chinese airline industry do encourage the market competition. Our empirical results show that

the transportation volume in airline industry grows rapidly yet the price of air fares decrease, which means that the Chinese airline market is becoming more and more competitive.

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We are grateful to Zhiwei Wang for his valuable comments and precious encouragement. We also thank Qing Zhang and Huaqing Hu for very helpful comments.

# **CAN A SOCIOLINGUISTIC INTERPRETATION METHOD SUCH AS LEXIMANCER TEXT MINING SOFTWARE BE USED TO INTERPRET THE MEANS-END CHAIN THEORY**

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## **ABSTRACT**

*This conceptual paper proposes a new approach to the analysis of the means-end chain by incorporating a sociolinguistic interpretation using the text-mining software of Leximancer. Interpretation of results of studies in Marketing involving the means-end chain theory has often been restricted to a small variety of methods such as content analysis, Laddermapper computer software or the Associated Pattern Technique. The purpose of this paper is to compare and contrast the methods used to analyze the means-end chain and to discuss how Leximancer would best fit this theory.*

*Firstly the means-end chain is examined along with the methods used to extract information and analyse Means-end studies. In the means-end chain model, concrete knowledge about product attributes are connected to more abstract ideas about psychological and social consequences of the attributes, and the psychosocial consequences are then in turn associated with even more abstract values. Content analysis was the most prominent method found to be used in most of the analyses of this theory. Arising from ontological relativity and social linguistics, content analysis which elicits associations into one of a number of chosen categories, is defined and discussed in detail. Other methodologies that were found to be used with the Means-end chain theory and or content analysis were: the hard and soft laddering approach; the associated pattern technique; the constrained clustering approach; the Ladder Map software; and the hierarchy value map. All of these methodologies were examined. Next, the Leximancer text analysis was discussed by firstly looking at the nine processes of text mining, and later the eight processes of this new text mining software system that can be used for coding the answers to written or verbal open-ended questions that have been asked in surveys or interviews. Finally, the relevance of the new Leximancer program, and the Laddermapper program, which has been used extensively with means-end studies, is discussed and comparisons made. For example Leximancer is a more recent and more advanced program than Laddermapper as the Laddermapper program runs on DOS 3.3, where as Leximancer operates on Windows 98 or above.*

*It is concluded that that the Leximancer program would be a much more reliable and valid method of analysis when used on larger means-end chain studies than some methods currently used to analyze this theory. Using mathematical and scientific calculations this program offers both conceptual and relational analysis. The conceptual map produced by Leximancer, was found to be more comprehensive than the Hierarchy Value Map because it includes not only the main concepts in the text and their relative importance, strengths, relationships and frequency, but also the similarities in the context which they occur. The proposal of this new methodology for means-end chain studies should enable future studies to be carried out with less human error, and in the process, extend the results to larger more comprehensive analyses. Thus the theoretical and practical contribution of this paper provides a more efficient and accurate method of analysis for larger means-end studies.*

# OPTIMAL BUY-BACK CONTRACTS WITH ASYMMETRIC INFORMATION

Qiang Gong, Peking University

## ABSTRACT

*When demand is uncertain and it is costly for the retailer to forecast demand information more accurately, the supplier faces moral hazard problem to induce the retailer to forecast more accurate information which will improve the total profit of the supply chain. This paper provides a theoretical analysis on the optimal buy-back contract to solve this problem, in which the supplier chooses the wholesale and buy-back price to maximize his profits given that the retailer's inventory order level and private information acquisition decision are both chosen to maximize the retailer's profits. In contrast to the standard buy-back contract model in which the first best of the system can always be implemented, our model suggests that the supplier pays not only the cost of acquiring information, but also the information rent to induce the retailer to invest in acquiring information. Consequently, the first best of the system cannot be always implemented. Our model explains that the Vendor Managed Inventory systems are prevalent while the retailer is better informed than the supplier. Nevertheless, the standard buy-back contract theory is inconsistent with the empirical facts.*

## INTRODUCTION

We consider a vertical system consisting of an upstream firm that sells through a downstream firm facing uncertain demand. Suppose the upstream firm is the supplier, the downstream firm the retailer. As is standard in the literature (see especially Pasternack, 1985), the supplier is limited to a uniform wholesale and a uniform buy-back price, the retailer's quantity level (inventory level) is not contractible, and the retailer faces an exogenous retail price. To avoid the double marginalization of the decentralized system, return for full or partial credit is offered to the downstream firm. The first best can be implemented if the buy-back contract is well designed.

In many situations, the retailer is better informed about demand information than the supplier. Kulp (2002) considers the precision and reliability of information and the retailer's willingness and ability to share information, and how that will affect the way manufacturers and retailers structure their relationship. Since she uses a price-only contract, double marginal cost is generated when the retailer makes a decision, despite the fact that the retailer has more precise information. This situation differs from that when the supplier makes a decision to overcome double marginal cost based on less precise information. But if we allow a return policy, the supplier can give adequate wholesale prices and buy-back rates, and the first best can be implemented in case the retailer makes a quantity decision when he is better informed. This means the traditional buy-back system dominates the VMI (Vendor Managed Inventory) system, which is not optimal in this situation. As a result, these findings contradict with the empirical results of Kulp (2002). In contrast, our theoretical findings in this paper are consistent with these empirical results.

We go beyond this basic framework by considering moral hazard problem for the retailer to forecast more accurate demand information. Whether the retailer obtains information more accurately is unobservable. The supplier chooses the wholesale and buy-back price to maximize his profits, given that the retailer's inventory order level and information acquisition decision are both chosen to maximize the retailer's profit. This optimal buy-back contract remains a

challenging problem. The approach in Pasternack (1985) to solve optimal buy-back contract does not work here. As shown in our paper, the first best outcome of the system can not always be implemented, therefore a necessary condition for this approach fails. Lariviere (1999) shows that the standard first order condition method which is used in solving standard optimal contract does not work in buy-back contract problem because the Hessian of the supplier's profit is positive. We explore in our paper for a method to study this problem.

## BASIC MODEL

In our paper, the supplier and the retailer have common priors on the likelihood that demand will be high or low, but the retailer can improve on these priors by investing in information acquisition. The additional information shifts the probability up or down, yet does not eliminate the uncertainty. We assume the retailer's effort is also a discrete distribution: the retailer either invests to retrieve information or does not.

The timing is as follow:

1. The supplier offers a buy-back contract  $(w, b)$  where  $w$  is the wholesale price and  $b$  is the buy-back price. We suppose both  $w$  and  $b$  are constant.
2. The retailer decides to accept or reject the contract.
3. If the retailer accepts the contract, he will decide whether to invest in acquiring information. It costs him  $e$  to retrieve the information. If he does not invest in acquiring information, the cost is 0. If the retailer rejects the contract, the game is over and the profits of both the supplier and the retailer are 0.
4. If the retailer invests in acquiring information, he obtains the information  $I \in \{1, 2\}$ , where  $I=1$  means he received good news, which means the probability of high demand is high; and  $I=2$  means he received bad news, which means the probability of high demand is low. If he did not invest in acquiring information, the information he has is  $I=0$ .
5. Based on the information  $I$ , the retailer decides the quantity  $q$  to order to maximize his expected profit.
6. Uncertainty is realized. The retailer returns the remaining inventory to the supplier at price  $b$ .

## OPTIMAL CONTRACTS UNDER ASYMMETRIC INFORMATION: INCENTIVES FOR INFORMATION ACQUISITION

We assume that the supplier does not know whether the retailer has invested in acquiring the information or what kind of information he holds. Denote  $\pi_r(w, b, I)$ ,  $\pi_s(I)$ , and  $\Pi(I)$  as the profits of the retailer, the supplier and the system conditional on the information  $I$  respectively. When  $I=0$ , the symmetric information situation occurs.

The information is generated as follows: When the real demand is high, the probability of generating good news is  $\gamma$  and the probability for the bad news is  $1-\gamma$ , that is,  $\Pr ob(I = 1 | h) = \gamma$ . On the other hand, when the real demand is low, the probability of generating bad news is  $\gamma$  and the probability of generating good news is  $1-\gamma$ , that is,  $\Pr ob(I = 0 | l) = \gamma$ . Given the contract the supplier offered, the retailer will decide whether or not to invest in acquiring information. The retailer would like to retrieve information only if he is

better off when he does so. The incentive compatibility constraints should be satisfied. The supplier's problem can be stated as follows:

$$\begin{aligned} & \max_{w,b} \frac{1}{2} \pi_s(w,b,1) + \frac{1}{2} \pi_s(w,b,2) \\ \text{(P1)} \\ & \text{subject to} \\ & \frac{1}{2} \pi_r(w,b,1) + \frac{1}{2} \pi_r(w,b,2) - e \geq \pi_r(w,b,0) \quad \text{(IC-1)} \\ & \text{and} \\ & q(w,b,I) = \arg \max_q E\{p \min(D,q) - wq + b \max(0, q - D) \mid I\} \quad \text{(IC-2)} \end{aligned}$$

We can solve this problem and get the following results:

## MAIN RESULTS

1. If the supplier chooses a contract that does not induce the retailer to invest in acquiring information in equilibrium, the contract is  $w_v = b_v = p$ . In this case, the supplier gets the first best profit of the whole system conditional on not knowing additional information. The retailer's profit is zero.

2. If in equilibrium the supplier chooses a contract which induces the retailer to exert effort, the retailer will choose a high level of inventory if he has received good news and a low level of inventory if he has received bad news.

3. If in equilibrium, the supplier chooses a contract that induces the retailer to invest in acquiring information, then the contract  $(w,b)$  satisfies  $w = \frac{p+b}{2}$ . In addition, we have the optimal buy-

back contract:  $b = p - \frac{2e}{(\theta - \frac{1}{2})(h-l)}$  and  $w = p - \frac{e}{(\theta - \frac{1}{2})(h-l)}$ .

4. In equilibrium, the optimal contract is  $w = p - \frac{e}{(\theta - \frac{1}{2})(h-l)}$  and  $b = p - \frac{2e}{(\theta - \frac{1}{2})(h-l)}$

if and only if the cost of effort is  $e \leq e^*$ . Where  $\pi_s(e^*) = \pi_s^N$ .

5. Even if the cost of retrieving information is very low relative to the benefit improvement of the system, the supplier might not always induce the retailer to invest in acquiring information because of the information rent.

6. We define  $\frac{e}{(\theta - \frac{1}{2})(h-l)} [l + \frac{2\theta-1}{2}(h-l)]$  to be the **virtual cost**. That is, the cost the

supplier will pay to induce the retailer to invest in acquiring information. And we define  $\frac{el}{(\theta - \frac{1}{2})(h-l)}$  to be the **information rent**, which is the benefit the retailer extracts from the system because of his information advantage.



## CONCLUSIONS

The standard buy-back contract model is not consistent with the empirical findings of Kulp (2002) that VMI systems are prevalent when the retailer is better informed than the supplier. We analyze the optimal buy-back contract for a supplier selling to a retailer when demand is uncertain, while the retailer can take a costly unobservable action to forecast demand more accurately. We show when it is costly for the retailer to obtain a better forecast of demand, the first best outcome cannot always be implemented by an optimal buy-back contract. If the retailer invests in acquiring information in equilibrium, the total revenue of the supplier covers not only the cost of investing in acquiring information, but also a positive information rent. Hence, the fact that VMI systems are prevalent can be well explained in our model. In addition, we offer in our model many testable results for which we look forward to having empirical application. Our model is appropriate for analyzing vertical systems when a downstream firm has private information in acquiring more accurate information of uncertain demand. The model is technically tractable while it captures most properties we are interested in, and the explicit solution is available as well.

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I would like to express my gratitude to James D. Dana Jr. for his valuable comments and precious encouragement. I am also grateful to Ronald Dye, Sidartha Gordon, Xinyu Hua, Martin Lariviere, Justin Lin, Qihong Liu and Charles Zheng for very helpful comments.

# COMPANY DISCLOSURE SCORING ON INTANGIBLES AND THE INFLUENCE FACTORS: CASE STUDY IN THAILAND LISTED COMPANY

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Campus

## ABSTRACT

*In recent years, there are many papers present several models and methodologies to measure intangibles assets and disclose them in many ways. This study aims to survey the level of disclosure information of 354 Thailand Listed Companies (2004-2005), except for the company under rehabilitation and financial groups, in quantitative by using radar diagram and the influence factors on disclosure scoring: industry group, firm size, audit firm, number of analyst forecast, amount of independence audit and committee, level of channel disclosure, and changed in EBIT (%). The information on intangibles disclosed are both mandatory and voluntary (annual report, form SEC 56-1, company website, and security analyst report) which have shown in six dimensions: I) Customers & market, II) Human resources, III) Organization, IV) Innovation & IPR, V) Strategy, and VI) Corporate Governance. Disclosure scoring in this study I comply with the Ferrara Methodology and use regression analysis. This paper find evidences: I) only three factors are strongly significant associate with disclosure score (AREA): security analyst report, industry group, and firm size. II) The results ( $R^2 = 0.336$  and adjusted  $R^2 = 0.323$ ) show that other factors are associate with disclosure score (that is the restriction of this study). III) The average area of disclosure scoring on intangible asset in Thailand Listed Company between industry group are cover area of level 2 (reasoned information) and nearly closed to level 3 (extended information). The information of disclosure scoring has shown basically same format in mandatory, but different in voluntary disclosure of each group.*

# **PRIVACY RIGHTS, PROPERTY RIGHTS AND COMMON SENSE: ACCESS TO EMAIL AND OTHER ENCRYPTED MEDIA – IMPLICATIONS FOR SMALL BUSINESS AND BEYOND**

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ABSTRACT

*As digital property “wealth” amasses, access to such valuable property may be temporarily or permanently cut off as the result of the owner’s death, thereby causing in some cases severe hardship for others. However, such digital property is presumably entitled to be protected under privacy laws, yet does such privacy continue once a person has died? And, are the existing laws adequate to deal with the digital age?*

*Numerous examples of this access dilemma have occurred as poets, soldiers, and others have died and access to their e-mail accounts have been blocked until access was granted by a court or other time-consuming methods. In some cases, data may have been lost due to inactivity of the accounts. Loss of access due to password lockout to critical data and applications in a non-network environment (and even there) potentially cause even worse problems.*

*While such delays in access (if achieved) to the underlying materials may have been emotionally numbing for family members, similar situations involving business owners could have catastrophic effect upon the surviving parties of the business. While most everyone takes for granted the concept of password security, little thought is put into succession issues or even access to such data or media in the event that the originating party is unable to provide the password or other access.*

*Conversely, privacy rights of the originator must be considered, even in death or disability. Invariably, some materials contained in the inaccessible media may not have been meant for others to be privy to. But the fundamental question still remains, who owns the digital media? And, precisely who should have access to such data and under what methods should such access be granted, if any? Finally, what, if any, protections against fraudulent attempts to access the digital property are available?*

*This paper analyzes the background and current legal status of the controlling issues, poises scenarios for individual and business owner concerns, and offers suggestions and possible methods of dealing with these matters, including fraudulent access concerns.*

# THE BROKEN PROMISE OF PENSION FUNDS

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Anne B. Fosbre, Georgian Court University  
Nelcy M. Davila-Aponte, Georgian Court University

## ABSTRACT

*It's 2007, do you know where our pension is? It was part of the American Dream, a pledge made by corporations to their workers for their decades of hard work, that they would be assured of retirement benefits such as pension and health care. Now more and more companies are rescinding their promise, leaving millions of Americans at risk. Unfortunately, many companies have already been struggling with underfunding their employees' pension funds and as a result many employees are losing their pensions. The Pension Protection Act of 2006 was passed by Congress and signed by President Bush with a broad overhaul of rules. The Law gives private companies seven years to shore up funding of their traditional pensions. Special rules for seriously underfunded companies require them to pay higher premiums to eliminate their shortfall. A gradual disappearance of pensions is occurring in favor of saving accounts such as 401(k)s that require workers create their own retirement plans.*

## INTRODUCTION

Pensions and health care benefits were a part of the American dream. A guarantee was made to American workers by corporations that their retirement benefits would be available for them to enjoy a financially secure future when they retire. Now many companies are reducing or eliminating programs leaving millions of American workers at risk financially.

## HISTORY

After the Civil War, the federal government formulated the first large pension plan. It included both Union Army war veterans and war widows (Lowenstein, 2005). In 1890 Congress approved a plan to extend pensions to include all veterans 65 or over. States and cities followed giving pensions to police officers and firefighters (Lowenstein, 2005). By World War I teachers were given pensions as well. A form of social welfare, Governments were able to offer stability through pensions while keeping salaries low. The first private company pension was offered in 1875 by American Express, a stagecoach delivery service (Lowenstein, 2005). Soon after railroads followed instituting pension plans. To qualify, workers were required to complete thirty years of work in order to collect a pension (Lowenstein, 2005). Management regarded pensions as a tool to retain workers rather than an employee benefit.

World War II provided an opportunity to further encourage pensions. Combined with the creation of tax plans pensions became an attractive way to limit taxation. The overall effect presented a tremendous opportunity for unions to force employers to give pensions to their workers. Back in the 1940's, Alfred P. Sloan, Jr. of General Motors, warned that pensions and other benefits would be extravagant beyond reason for the auto industry to provide (Lowenstein, 2005). Nevertheless, John L Lewis, the well known labor leader, led a strike and won a pension for miners. In 1949, Ford Motor Company surrendered to the demands of the United Auto Workers UAW union by granting pensions to workers. In 1950 a reluctant Alfred P. Sloan, Jr. allowed the creation of a pension plan for General Motors (Lowenstein, 2005). A frenzied rush into the creation of plans occurred. By 1960, 40% of private sector workers were given pensions (Lowenstein, 2005).

## IT'S 2007 DO YOU KNOW WHERE YOUR PENSION IS?

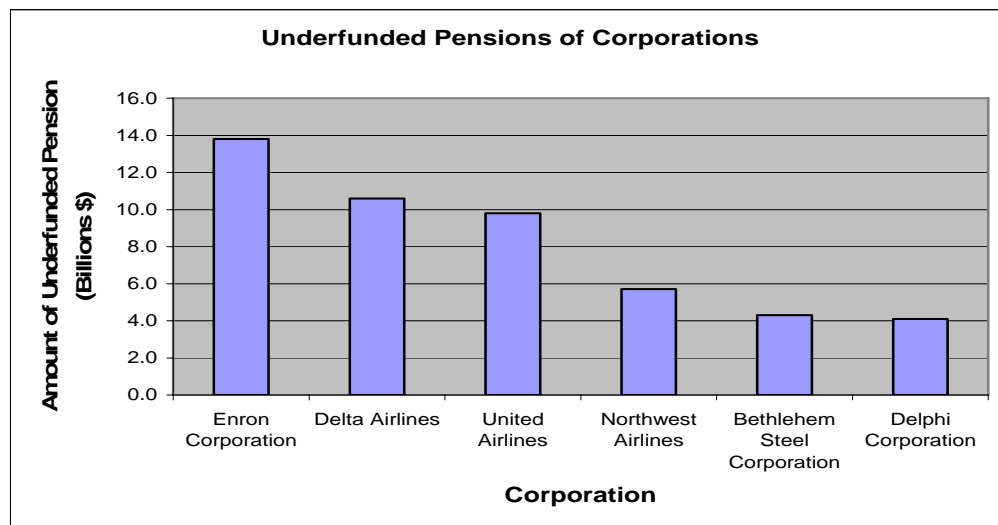
Since the United States Bankruptcy Court in 2005 approved United Airlines' request to terminate its employees' pension plans, the once secure road to retirement took a turn for the worst (Randall, 2002). This is not the first time pension plans have been in the spotlight; years ago the Steel industry cut benefits as a way to avoid bankruptcy. It is apparent that the auto industry is following the same route. In 2005 United Airlines was the largest pension default in airline history (Randall, 2002). It indicated the possible formation of a future trend towards ending employer support for retirement pensions. Unfortunately, many companies have already been struggling with a big deficit in their employees' pension funds. As a result many employees are losing their pensions. The promises that have been made to them for ten, twenty, and thirty years are now being broken by some of the largest corporations. Table 1 lists the time line for bankruptcy for several major corporations that have broken their pension promises including Enron, World Com, Bethlehem Steel, United Airlines, Delta Airlines, Northwest Airlines, Delphi, and Dana Corporations. Figure 1 is a graph of the amount of underfunding in billions of dollars that these corporate pensions are short according to the Pension Benefit Guaranty Corporation ([www.pbgc.gov](http://www.pbgc.gov), 2006).

Table 1: Timeline of Bankruptcy of Major Corporations

Date	10/15/01	12/2/01	7/21/02	12/9/02	9/14/05	9/14/05	10/8/05	3/3/06
Corporation	Bethlehem Steel	Enron	Worldcom	United Airlines	Delta Airlines	Northwest Airways	Delphi	Dana

Source: New Generation Research, Inc. ([www.BankruptcyData.com](http://www.BankruptcyData.com), 2006)

Figure 1: Underfunded Pensions of Corporations



Source: Pension Benefit Guaranty Corporation ([www.pbgc.gov](http://www.pbgc.gov), 2006)

The trend of filing for bankruptcy has escalated since 2001 as the airline industry suffered losses from the September 11 terrorist attacks. For example, in the attack United airlines lost two airplanes. Enron and Worldcom were forced to file for bankruptcy after their accounting scandals erupted. Declining car sales have caused Dana Corporation and Delphi Corporation to suffer. The underfunding of pensions is tied to the downfall of the stock market beginning in 2000, lower interest rates, and insufficient funding of post retirement benefits.

## PENSION PROTECTION ACT OF 2006

On August 16, 2006 President Bush and Congress signed into law the most extensive revision of the nation's pension law in three decades (Baker, 2006). The new law is aimed at restoring stability to company pensions. The Pension Benefit Guarantee Corporation, (PBGC) a federal insurance program created by Congress steps in to support underfunded private sector pension plans. Presently PBGC has an estimated \$23 to \$30 billion deficit (Baker, 2006). The law requires private sector companies to fully fund defined benefit plans over seven years (Baker, 2006). The law attempts to close loopholes by forcing companies to pay higher premiums to PBGC if underfunding occurs. Funding provisions of the new law will not take effect for two years. (Baker, 2006) The airline industry and certain government contractors were given a break by allowing extension of time for the repayment of any underfunding in their pension plans. It appears that the funding requirements will tend to push companies toward dropping traditional pensions in favor of employee financed 401k and IRA plans. The new law allows companies to automatically enroll workers in 401k programs which could help to increase workers savings for retirement.

## PUBLIC PENSION PLANS

Public pension plans include state and local pension plans. These plans are not like the private sector pensions plans covered by the recently enacted Pension Protection Act of 2006. State and local plans, known as public pension plans, are facing an estimated huge funding gap of \$300 billion to \$700 billion (McKeon, 2006). Pension plans of state and locals are not held to the same federal standards as private sector plans. The federal government is not responsible for the regulation of public pension state and local plans. The crisis in public pensions underfunding is real, but state and local funding is not covered or protected by the Pension Protection Act of 2006, a law enacted to protect private sector funding only. Public pensions of state and local funds is an issue that has not yet been addressed.

## PBGC PENSION BENEFIT GUARANTY CORPORATION

PBGC is a Federal Corporation created under ERISA the Employee Retirement Income Security Act of 1974 (Congressional Budget Office, 2006). It guarantees payment of basic pension benefits of millions of American workers and retirees participating in private sector benefit defined benefit plans. The agency receives no funds from general tax revenues. Operations are financed largely by insurance premiums paid by companies that sponsor pension plans and PBGC investment returns (Government Media News Archive, 2002). Until 2001 PBGC had a surplus and was able to cover any deficiency in underfunded plans. However, as the Federal Reserve reduced interest rates to low levels equities or stock values of companies fell (Baker, 2006). Combined with a lack of fully funding post retirement benefits by employers, the value of fund assets fell below liabilities resulting in underfunding of pension and post retirement benefit plans. Although underfunding was disclosed in footnotes to financial statements, it was not fully recorded or included in the figures reported on financial statements. Now it will be required by the new FASB Financial Accounting Standard requirement No. 158 issued September 29, 2006 (FASB, 2006).

## FASB FINANCIAL ACCOUNTING STANDARDS BOARD

The FASB, Financial Accounting Standards Board is the rule making body for financial accounting reporting to the Securities and Exchange Commission. The FASB Financial Accounting Standards Board sets the US accounting rules (Chasan, 2006). FASB has issued

statement No.158 employers accounting for defined benefit pensions and other post retirement benefits amending previous statements #87,88,106, and 132R, (FASB, 2006). The rules will apply to certain not for profit organizations as well. The new rule requires a recognition on the statement of financial position (balance sheet) of an asset for a plan's overfunded status or a liability for a plan's underfunded status (FASB, 2006). The requirement will be effective for fiscal years ending after December 15, 2006 (FASB, 2006). Thus, companies following a calendar year must report the change in the 2006 financial statements (Chasan, 2006).

Analysts predict some companies will have to increase recorded liabilities greatly, and some may have shareholders equity or net worth wiped out (Chasan, 2006). Some of the biggest changes in balance sheets of companies like General Motors, Ford Motor Company, Goodyear Tire and Rubber Co., and Exxon Mobil Corporation which have some of the largest US pension and other post-retirement benefit plans is likely to occur (Chasan, 2006). The new accounting standard FASB No.158 requirements and the Pension Protection Act of 2006 are likely to result in major changes in defined benefit pension fund and post retirement accounting.

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# A PUZZLE FOR TEACHING THE CONSTANT GROWTH STOCK PRICING MODEL

Lynda S. Livingston, University of Puget Sound

## ABSTRACT

*The constant growth stock pricing model is an important component of introductory corporate finance courses, and an important step on the way to understanding the general two-stage model. In this paper, I present a relatively fun puzzle based on the relationships implied by the constant growth model. When solving this puzzle, students are forced to look beyond the apparent simplicity of the model, ensuring that they are ready to incorporate its concepts into more general situations. However, the most satisfying part of the exercise is the enthusiasm with which students approach the exercise, since, after all, it is a puzzle!*

## INTRODUCTION

The constant growth model is a straightforward approach to quantifying the “art” of stock pricing. It is more intuitively appealing and apparently realistic than its simplest version, the constant dollar dividend model, but it still looks deceptively simple. These features make it the model to which we appeal most often when a stock price is needed within the context of a larger problem (for example, when we value convertible bonds). Yet it is often misused, misunderstood, or underestimated, even by those of us who teach it. In this paper, I present a “puzzle” that has helped my students master the relationships implied by the constant growth model. By the time they are able to complete this puzzle, which many of them actually think is fun, they have demonstrated their appreciation for the requirements of the model (e.g., the growth rate must be “small”) and their facility with its calculations. They are also prepared to quickly and easily grasp the general two-stage model.

## AN EXCERPT FROM THE PUZZLE

The puzzle requires students to sort through a series of statements, assigning each statement to one of three constant-growth stocks. There are usually around twenty-four total statements, and two of these are already assigned. In this section, I will give several examples of these statements, and demonstrate how they are assigned to their stocks. Say, for example, that we have the statements shown in Table 1. For simplicity, all of these statements belong to stock C. (Remember that these would be mixed in with statements belonging to the other two stocks.)

Table 1: Excerpt from the Puzzle

Stock	Statement
C	$P_3 = \$92.7495$
	$[D_{10}/D_4]^{1/6} - 1 = .0275$
	fundamental price = \$85.50
	$D_7/P_6 = D_{12}/P_{11} = .1225$
	$i = 15.00\%$
	$D_6 = \$11.9953$

The second statement links two dividends together, so it tells us that, for one of our stocks, the constant growth rate (g) is 2.75%. We can now use this g to try to link two prices (or two other



dividends, or two EPS values) together. For example, if we calculate  $\$92.7495/(1.0275)^3$ , we find \$85.50; this “match” allows us to assign the second and third statements to stock C.

Some of the puzzle requires simple trial and error. For example, do the 2.75% growth rate and the 12.25% dividend yield belong to a single stock? If so, they would imply a required return of 15%, which we have. Tentatively associating this dividend yield with C, then, we note that it implies a first-period dividend of  $(\$85.50) \times (.1225) = \$10.4738$ , which then implies that  $D_6 = (\$10.4738) \times (1.0275)^5 = \$11.9953$ . This gives us the last statement.

There are four general types of statements that I use in the puzzle. First, there are straightforward rate equalities (such as “ $i = 15\%$ ” or “ $dy = 12.25\%$ ”). Students usually start with these, trying to propose consistent sets of  $i$ ,  $g$ , and  $dy$  values. Then there are algebraic manipulations of the rate relationships, which are often much more challenging. For example, for stock C above, we may have  $D_{12}/P_{17} = .1040987$ ; to solve this, students need to manipulate C’s  $dy$  and growth rate as  $dy/(1+g)^6$  (or actually solve for  $D_{12}$  and  $P_{17}$ ). Third, there are cash-flow statements giving amounts for various dividends or prices. These require students to test whether two dividends or prices can be linked with a specific growth rate, or whether a dividend and a price generate one of the known dividend yields. Finally, there are conceptual statements such as “this stock is overvalued if the market price is \$50.” These remind students about the whole point of stock pricing: we’re drawing a distinction between the market price (what the price *is*) and the fundamental price (what the price *should be*), in order to identify trading opportunities.

## CONCLUSIONS

Understanding the constant growth model is a prerequisite to understanding the general two-stage case. However, many textbook end-of-chapter problems on basic stock pricing do not rigorously test the students’ knowledge of the relationships inherent in the constant growth case, so that students may be inadequately prepared for more difficult problems. In this paper, I present a puzzle that does force students to work more deeply with a few stocks, and to explicitly acknowledge the constant growth model’s implications for those stocks. This puzzle has prepared my students well for the relative rigors of the two-stage model. More importantly for them, students often actually enjoy working through these exercises.

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Lynda S. Livingston, Ph.D., is an associate professor at the School of Business and Leadership at the University of Puget Sound in Tacoma, Washington. She teaches introductory and advanced corporate finance, financial markets, investments, and personal finance. She continues to assert that students love this puzzle!

# ELIMINATING THE AUDIT EXPECTATIONS GAP: REALITY OR MYTH ?

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## ABSTRACT

*The audit expectations gap is of serious concern to the UK accounting profession with the Department of Trade and Industry proposing a new framework for independent regulation of the accounting profession. However the new Accounting Foundation has had its role placed under review following the Enron collapse and introduction of the Sarbanes-Oxley Act 2002. This resulted in responsibility for independent regulation of the accounting profession being transferred to the reconstituted Financial Reporting Council. High profile failure of financial services firms, commencing with the secondary banking crisis in the 1970s, followed by collapses of banks such as Johnson Matthey Bankers ( JMB), Bank of Credit and Commerce International (BCCI) and Barings, building societies such as Grays and insurers such as the recent problems at Equitable Life and Independent Insurance have given rise to further debate on the audit expectations gap. The debate surrounding the “expectations gap” often revolves around whether such a gap can be eliminated. Sikka, Puxty, Cooper and Wilmott argue that within a social context, the expectations gap will be difficult to eliminate due to social conflict and the fact that the meaning of social practices is always subject to challenges. It will however, be argued that even though the **whole** component definition of an audit may be subject to changes and challenges and therefore cannot be objective, elements within the definition of an audit and in particular, the fraud and error detection role of an audit can be relatively objective.*

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Marianne Ojo, School of Social Sciences and Law, Oxford Brookes University, usual disclaimers apply.

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# BELARUSIAN ECONOMICS: INVESTMENT POSSIBILITIES

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## ABSTRACT

*The priority of the state economic policy of Belarus is creation of a favorable investment climate for attraction and effective use of foreign investments. The Republic of Belarus is the only country among the CIS states which adopted the Investment Code – the fundamental document regulating foreign investments on the territory of the country. The state guarantees stability of the rights of subjects of investment activities. In order to attract foreign investors measures concerning improvement of relevant legislation, institutional and structural reforms, and state protection of foreign investors are being carried out. Commercial organizations involving foreign capital have certain advantages compared to national economic entities. Six Free Economic zones have been established in Belarus, where favorable economic conditions are provided through fiscal and customs preferences. Belarus has positive experience with foreign companies in implementing large and medium investment projects.*

## INTRODUCTION

Inflow of foreign portfolio investments in the Belarusian economy increases from year to year. This fact is confirmed by positive change in the amount of securities issued by the Belarusian joint stock companies and distributed outside the territory of the Republic of Belarus. Totally, over 40 billion of securities of 600 Belarusian issuers were distributed to foreign investors from 40 countries for the period from January 1, 1997 to April 1, 2006.

## INVESTMENT CONDITIONS IN THE REPUBLIC OF BELARUS

Belarus offers potential investors such advantages as favorable geographic position in the center of Europe, auspicious natural and climatic conditions, political and social stability, macroeconomic stabilization, a qualified and relatively inexpensive labor force, high scientific, technical and industrial potential, capacious domestic market, legal and organizational framework stimulating investment process.

The Republic of Belarus is at the crossroads of main rail and motor routes, oil, gas and product pipelines, communications systems between Western Europe and Russian regions as well as Asian countries. Belarus can therefore become a base for foreign investors seeking to acquire promising new markets in CIS countries. The economic situation in the country is characterized by a stable inflation level, predictability of exchange rates, availability of tax and customs advantages for foreign investors, growth of export potential, developed banking system, burgeoning market of financial and insurance services.

Highly developed scientific and research facilities make it possible to conduct fundamental and applied research and development. About 300 scientific organizations work in Belarus. Over 30 thousand people are engaged in scientific research and development, including 805 Doctors of Science and 3400 Candidates of Science. The activities of Belarusian scientists in the fields of laser and nuclear physics, nuclear technology, powder metallurgy, optics, software tools, biotechnology have received world recognition.

There are facilities for manufacturing goods and services that are competitive on domestic and foreign markets in Belarus. Belarus specializes in production of machinery, chemical, petrochemical, light industries, livestock breeding, flax production and potato farming. Belarus exports over 90% of its automobiles and tractors, about 90% of television sets and potash fertilizers, and about 80% of machine-tools.

Belarus is a part of a common customs area with Russia. For a potential investor investing in Belarusian economy he offers access not only to the Belarusian territory, but also to a very capacious Russian market. Conducive to the expansion of investment opportunities are the positive dynamics of negotiation process on the accession of Belarus to the World Trade Organization, improvement of relations with international financial organizations (International Monetary Fund, International Financial Corporation, and European Bank of Reconstruction and Development).

Six Free Economic zones have been established in Belarus, where favorable economic conditions are provided through fiscal and customs preferences. Income tax and value-added tax for the residents of Free Economic Zones are two times lower than elsewhere in the country. The income of the residents of Free Economic Zones for their own production is tax exempt for 5 years from the moment of the declaration of the income.

The Republic of Belarus is the only country among the CIS states which adopted the Investment Code – the fundamental document regulating not only domestic, but also foreign investments on the territory of the country. The Investment Code protects property rights of foreign investors, secures for them business environment as favorable as for national producers, as well as sets for them special stimulating advantages in fiscal, customs and currency areas.

The Coordination Council on Foreign Investments headed by the Prime Minister has been active in Belarus. This body develops major objectives and measures to improve the investment climate in the country and also assists foreign investors in solving problems related to their activities in Belarus. The Standing Committee and working groups set up under the Council are perfecting investment legislation, developing free economic areas, improving tax and customs conditions of activities at the Belarusian market, etc. The Council includes from the Belarusian side: the prime minister of the Republic of Belarus (chairperson), the first deputy prime minister, representatives of the Presidential Administration, the National Assembly and other key Belarusian ministries and departments. The secretariat of the Coordination Council on Foreign Investments is the Ministry of Foreign Affairs.

Foreign members of the Coordination Council on Foreign Investments include: international organizations and large foreign investors operating in Belarus: the International Financial Corporation, Representation of the UNDP in Belarus, the German Economic Club, Ernst and Young, Slavneft, Coca Cola, MacDonald's, SJS, Maersk Medical, Bacco Bisov Svenska, Impek, Karl Zeis Stiftung, and Stots Agro-service.

By decision of the Government, foreign investors set up within the Council the working groups on the following lines: formation of a favorable investment image of Belarus abroad; financial and tax policy, reform of the Belarusian accountancy system; improvement of customs procedures and of the legislation on foreign investments. Foreign investors actively supported the initiative of the Ministry of Foreign Affairs and held several meetings of the working groups; the results will help to present to the Government proposals on how to improve conditions of work for foreign investors in Belarus and a plan of their practical implementation.

Governmental institutions are working on the realization of the National Program on Attracting Investments to the Economy of the Republic of Belarus until 2010, adopted in 2001. Along with development of the Belarusian investment potential, the Program has provisions for further improvement of frame conditions (financial, political and social, as well as in the fields of administration, management), which would secure the increase of foreign investments.

## PRIVILEGES AND GUARANTEES FOR FOREIGN INVESTORS

Foreign investors in Belarus enjoy equal treatment with local ones under the Investment Code of the Republic of Belarus which was adopted in 2001 and replaced the Foreign Investment Law of 1991. The Government guarantees equal rights to all investors regardless of the form of ownership, as well as equal, discrimination-free protection of the rights and lawful interests of investors. Together with the Investment Code the foreign commercial and investment activities are regulated by the Law on Enterprises and Joint-Stock Companies. Belarus offers potential foreign investors a wide range of opportunities for investments into the national economy. Relative legislation provides for the following forms of investments activities: foundation of enterprise with 100% foreign capital; creation of joint ventures; redemption of share of an enterprise.

The state guarantees stability of the rights of subjects of investment activities. According to the Investment Code in case Belarusian legislation adopted subsequent to the creation of a commercial organization with foreign investment impairs the situation and business conditions for foreign investors and commercial organizations with foreign investment established with their participation (i.e. in case additional or increased obligations are imposed thereupon or in case of a limitation or suppression of their rights), for a period of five years the legislation in effect at the date of registration of the commercial organization with foreign investment shall be applied to the foreign investor, commercial organization with foreign investment, and/or foreign investments.

Investments in Belarus are immune from nationalization without consideration, requisition, and measures equivalent to nationalization and requisition in terms of their consequences. Nationalization and requisitioning shall only be possible subject to the timely and full compensation of the cost of the nationalized or requisitioned investment assets and other damages caused as a result of nationalization or requisition. Compensation payments with regard to nationalized or requisitioned investment assets shall be equivalent to the real value of said assets at the moment immediately preceding the earlier of the nationalization or requisition, or the date of the public announcement on the nationalization or requisition. Moreover, compensation payments to domestic investors shall include interest calculated on the basis of the appropriate currency as quoted by the National Bank of the Republic of Belarus, and compensation payments to foreign investors shall include interest payments calculated on the basis of the LIBOR rate, with respect to the period between the date of nationalization or requisition or the date of the public announcement to that effect, and the date of remittance of the compensation amount.

As of November 2001 Belarus has concluded 42 bilateral investment agreements with following countries: Poland, Vietnam, Finland, China, Germany, Switzerland, France, United States, Great Britain, Sweden, Netherlands, Romania, Iran, Italy, Turkey, Ukraine, Bulgaria, Yugoslavia, Czech Republic, Pakistan, Egypt, Korea, Latvia, Syria, Cyprus, Tadjikistan, Lithuania, Kyrgyz Republic, Moldova, UAE, Israel, Singapore, Cuba, Libya, Qatar, Austria, Armenia, Mongolia, Lebanon, Macedonia, Croatia and Kuwait. Investors enjoy the right to appeal in court against actions (inaction) of government bodies or their officials and local self-governance bodies or their officials, as well as regulations issued by the government bodies of the Republic of Belarus or

local self-governance bodies, in the event that the said actions or regulations infringe upon the investors' rights or cause them losses or other damages. Damages, including losses incurred as a result of actions by government bodies or their officials and local self-governance bodies or their officials, or as a result of regulations issued by government bodies of the Republic of Belarus or local self-governance bodies, shall be compensated from the appropriate treasury by court order.

Foreign investors are guaranteed the right, following the payment of all taxes and other mandatory charges as established by the legislation of the Republic of Belarus, to repatriate to locations outside the Republic of Belarus any profits (earnings) received in the Republic of Belarus as a result of investment activity, as well as any proceeds from the full or partial sale of invested assets upon the termination of investment activity. The Law on Property allows foreign legal entities to have in Belarus production and related enterprises, buildings and constructions, and other property necessary for business activities. Property of foreign owners and their right of property are guaranteed.

#### ACTIVITIES OF JOINT VENTURES AND FOREIGN ENTERPRISES IN THE REPUBLIC OF BELARUS

According to the official data on January 1, 2005 3457 enterprises with foreign capital (1841 joint ventures and 1616 foreign enterprises) were registered with declared authorized fund capital of US\$ 742.1 million, out of these US\$ 382.7 million belong to foreign investors. The major investors according to the number of the JV and FE founded for the beginning of 2005 are: Russia (730 or 21.1% out of the total number of working JV and FE), USA (523 or 15.1%), Germany (375 or 10.8%), Poland (350 or 10.1%), Lithuania (255 or 7.4%), Great Britain (201 or 5.8%), Latvia (176 or 5.1%), Cyprus (144 or 4.2%), Czech Republic (82 or 2.4%) and Italy (82 or 2.4%).

The division of investments by countries of origin provides the following – the USA (US\$ 123.8 million or 17.1%), Russia (106.2 million or 14.7%), the Netherlands (101.6 million or 14.0%), Germany (77.2 million or 10.7%), Great Britain (62.0 million or 8.6%), Cyprus (47.2 million or 6.5%), Austria (27.9 million or 3.9%), Poland (26.6 million or 3.7%) and Latvia (21.2 million or 2.9%).

Belarus has accumulated positive experience of the activities of foreign companies in implementing large and medium investment projects. Belarus has been successfully cooperating with internationally known multinational corporations. For instance, joint ventures and foreign enterprises have been set up with such corporations as German “MAN”(production of light and heavy automobiles), Dutch “Coca-Cola”, American “MacDonald's” (production of refreshment beverages and catering), Danish “Maersk Medical”, Swiss “SB Telecom”, German “Alcatel SEL” (mobile systems of GSM standard and production of commutation equipment), German “Fresenius” (production of medical instruments), Russian “MTS” (Mobile TeleSystems) and German “Carl Zeiss” (production of optical and mechanics equipment).

The distribution of the enterprises by the fields of activities is as follows: industry (US\$ 423.5 million or 30.6%), trade and catering (US\$ 464.6 million or 30.6%) and communication (US\$ 226.6 million or 14.7%). Less than 1% of combined investments go to agriculture (0.8%). According to Ministry of Statistics and Analysis data of 2004 enterprises with foreign investments exported goods for more than US\$ 2582.3 million (US\$ 1 656.6 million JV and US\$ 925 million FE). The export of goods increased by 53.8% in comparison with 2003. The trade turnover in 2004 exceeded US\$ 6 287.4 million and increased by 58.6% in comparison with 2003.

## WAYS OF IMPROVEMENT OF INVESTMENT CLIMATE IN THE REPUBLIC OF BELARUS

After the Investment Code was adopted in 2001 in the Republic of Belarus, the legal situation for investment activity was greatly improved. Yet some draw-backs remain - inconsistency of normative legal acts, inconsistency and controversial character of some legal norms. It is necessary to finish up the formation of normative-legal base in the field of tax, credit, currency, custom regulation of investments and provide foreign investors with stable, favorable conditions for business.

The annual monitoring of investment climate in Republic of Belarus becomes a very actual task. The most suitable variant is to track the condition of investment climate in the country's economy without pointing out the separate management systems (branches, regions, economic zones). For this purpose Ministry of Economy and other ministries are to work out the methodology of evaluation of investment climate criteria and the methods of its monitoring as well as to organize cooperation with one of the leading specialized international agencies to define the investment rating of Belarus. In accordance with economic assessments, the demand for investments within the period 2000-2010 may constitute US\$39. The total amount of investments into the fixed capital in 2010 is to increase by 2,2-2,5 times in comparison with 2000 (in 2005 it is to increase by 1,6-1,7 times in comparison with 2000). The investment share into gross domestic product will be 26-28% in 2010 (19,8- in 2000). It will make possible to ensure the development of industrial sector, increase of competitiveness of ready-made products in the home and foreign markets and as a result.

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# **OVER(UNDER) PAY OF CASH-CEO COMPENSATION AFFECTING SHAREHOLDER RETURN IN THAI LISTED COMPANIES**

Issaraporn Pholnaruksa, Chulalongkorn University

## **ABSTRACT**

*The objective of this research is to investigate the association between over(under)payment of cash-CEO compensation and shareholder return. The result of research contributes to shareholder for realization to the result from over cash-CEO compensation payment. If firms have overpaid cash-CEO compensation, their payment will decrease future shareholder return. The cross-sectional analysis in this study, the cash compensation paid to CEOs of Thai listed companies have significant association with shareholder return in next period. The regression analyses in this study supports the hypothesis and implies that over(under)payment of cash-CEO compensation at the present period leads to decreased(increased) shareholder return in next period. However, industries are separated to 7 groups. Most industries are not found significant association between over(under)payment and shareholder return in next year. Except for consumer goods industry and other miscellaneous industry, their over(under)payment of cash-CEO compensation are found direct association with shareholder return in next year.*



# FOREIGN DIRECT INVESTMENT IN LATIN AMERICA: A PANEL REGRESSION STUDY

Rahim M. Quazi, Prairie View A&M University

## ABSTRACT

Since the early 1980s developing countries have generally experienced a heavy influx of foreign capital, and among the developing regions, Latin America has emerged as a prime destination of FDI. An extensive literature has evolved on the inflow of FDI in Latin America, which identifies a number of variables, such as market size, trade openness, etc., as the key determinants of FDI. Due to non-availability of reliable and consistent data, domestic investment climate as a determinant of FDI has been mostly excluded from the literature. This study seeks to fill that void by using the Economic Freedom Index, published since 1995 by The Heritage Foundation, as a proxy for domestic investment climate for a sample of 18 Latin American countries over 1995-2004. Employing panel regression methodologies, this study finds that economic freedom is a significant and robust determinant of FDI in Latin America.

## INTRODUCTION

Development economists generally concur that the inflow of foreign direct investment (FDI) can play a vital role in the growth dynamics of developing economies. The relevant literature holds that FDI can fill at least three “development gaps” in recipient countries. FDI can fill, first, the “investment gap” by providing the much-needed capital for domestic investment; secondly, the “foreign exchange gap” by providing foreign currency through initial investments and subsequent export earnings; and finally, the “tax revenue gap” by generating tax revenues through creation of additional economic activities (Smith 1997). FDI can also help generate domestic investment in matching funds, facilitate transfer of managerial skills and technological knowledge, increase local market competition, create modern job opportunities, increase global market access for locally produced export commodities, etc., all of which should ultimately contribute to economic growth in recipient countries.

Recognizing the manifold benefits of FDI, developing countries have generally eased restrictions on the inflow of foreign capital since the early 1980s. Furthermore, the end of the Cold War in the early 1990s brought about a new political era that not only witnessed the end of the foreign aid programs sponsored by the erstwhile Soviet Union in socialist LDCs (less developed countries), but also diminished strategic alliances between the US and the pro-US developing nations resulting in a sizable reduction in the US-sponsored foreign aid programs. The new political reality has forced LDCs, hitherto heavily dependent on foreign public aid regardless of their political ideological leanings, to seek out alternative sources of foreign private capital. As a result, the annual FDI inflow to developing countries has increased manifold from \$24 billion in 1990 to about \$228 billion in 2004 (World Bank 2006).

The vital role played by FDI in the growth dynamics of developing countries has created much research interest among development economists. Consequently, a sizeable empirical literature has evolved on the determinants of FDI. These studies have identified a number of variables, such as market size, openness, inflation, political instability, etc. as key determinants of FDI. However, due to non-availability of reliable and consistent set of quantitative data on investment climate, the literature has generally excluded the domestic investment climate in recipient countries as a

determinant of FDI. Two recent studies of the determinants of FDI, Quazi (2006) and Quazi and Mahmud (2006), have used the Index of Economic Freedom, an annual publication by The Heritage Foundation/The Wall Street Journal since 1995, as a reliable proxy for domestic investment climate in South Asia and East Asia.

The primary focus of this study is to investigate whether, in addition to the other variables routinely used in the literature, economic freedom is also a significant determinant of FDI in Latin America. Among the developing regions, this particular region receives a disproportionately high share of FDI, which is perhaps due to its geographical proximity to the U.S. and Japan – the two most significant source countries of FDI. One country in the sample that deserves special attention is Mexico, which is currently among the most popular destinations of FDI in the world. This study also investigates whether NAFTA has created significant locational advantage for Mexico vis-à-vis other countries in the region.

## METHODOLOGY, DATA AND RESULTS

This study analyses the determinants of FDI in 18 countries in Latin America - Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela. A general-to-specific modeling approach comprising the following equation is used to estimate a panel regression model (subscript  $i$  refers to countries and  $t$  refers to time).

$$\begin{aligned} \text{FDI}_{i,t} = & \alpha + \beta_1 \Delta \text{FDI}_{i,t-1} + \beta_2 \text{Economic Freedom}_{i,t} + \beta_3 \text{Trade Openness}_{i,t} + \beta_4 \text{Market Size}_{i,t} \\ & + \beta_5 \text{Human Capital}_{i,t} + \beta_6 \text{Quality of Infrastructure}_{i,t} + \beta_7 \text{Return on Investment}_{i,t} \\ & + \beta_8 \text{Dummy}_{\text{Mexico},t} + \varepsilon \end{aligned}$$

Selection of these explanatory variables has been guided by the empirical literature. The lagged change in FDI ( $\Delta \text{FDI}_{i,t-1}$ ) has been added following Noorbakhsh et al. (2001); return on investment has been added following Edwards (2000), Jaspersen et al. (2000) and Asiedu (2002); trade openness has been added following Jaspersen et al. (2000), Lipsey (1999), Loree and Guisinger (1995), Schneider and Frey (1985), and Wei (2000); human capital has been added following Hanson (1996) and Noorbakhsh et al. (2001); and quality of infrastructure has been added following Asiedu (2002), and Loree and Guisinger (1995).

Data on annual FDI inflow, trade openness (trade/GDP), market size (per capita income), quality of physical infrastructure (natural log of per capita electricity consumption), human capital (adult literacy rate), and return on investment (natural log of inverse of per capita income), are collected from the *World Development Indicators* (World Bank 2006), while data on economic freedom are collected from the *Index of Economic Freedom* (Heritage Foundation/Wall Street Journal 2006). This index is constructed on a scale of 1 to 5, where a score of 1 signifies a consistent set of policies most conducive to economic freedom, while a score of 5 signifies a set of policies least conducive to economic freedom. Therefore, countries with lower scores on the economic freedom index are likely to attract more FDI vis-à-vis countries with higher scores. The effect of NAFTA on FDI is measured by a dummy variable for Mexico. The time frame covered is 1995-2004, which is dictated by the availability of data (the EF index is available from 1995 and the *WDI 2006* reports annual FDI inflow until 2004).

To ensure robustness of the estimated results, panel regression models are estimated in both Generalized Least Squares (GLS) and Random Effects techniques. The estimated results are presented in Table 1 (next page). Among the explanatory variables included in the regression

equations, incremental lagged changes in FDI, economic freedom, trade openness, quality of infrastructure, and return on investment turn out highly significant with the correct *a priori* signs in both models. Only two explanatory variables – market size and human capital, fail to turn out statistically significant. It is plausible that their proxy variables – per capita income and adult literacy rates, perhaps inadequately capture their true effects on FDI. The overall diagnostic statistics are satisfactory for both models.

Table 1: Determinants of FDI in Latin America (1995-2004)

Explanatory Variables	GLS Model		Random Effects Model	
	Coefficient	z stat	Coefficient	z stat
Intercept	7.43	2.71	11.64	2.21
$\Delta FDI_{-1}$	0.26	3.15**	0.23	3.22**
Economic Freedom	-0.75	-1.77*	-1.41	-2.29**
Infrastructure	2.22	4.45**	1.79	1.67*
Trade Openness	0.01	2.99**	0.02	1.67*
Return on Investment	2.30	4.31**	2.18	1.96**
Diagnostic Statistics	Sample size = 162		Sample size = 162	
	Log likelihood = -329.09		R <sup>2</sup> Overall = 0.21	
	Wald X <sup>2</sup> <sub>5</sub> = 39.93 (P value = 0.00)		Wald X <sup>2</sup> <sub>5</sub> = 20.08 (P value = 0.00)	
** Coefficient statistically significant at 5%; * Coefficient statistically significant at 10%				

Table 2 below shows the effects of NAFTA on the FDI inflow in Latin America, which is captured by a dummy variable for Mexico. The estimated results suggest that, vis-à-vis other countries in Latin America, Mexico has not gained a significant advantage due to NAFTA. Although this result may at first appear inconsistent with the FDI literature, which holds that NAFTA has substantially boosted the FDI inflow to Mexico, a careful analysis reveals that the estimated models here in fact explore whether NAFTA has improved the locational advantage of Mexico over other Latin American countries. Since other Latin American countries already belonged to several trade blocks, such as Mercosur, Caricom, CBI, etc., they had been enjoying the fruits of free trade agreements long before Mexico was afforded the same by the creation of NAFTA. Therefore, it appears that NAFTA did not create additional benefits for Mexico; perhaps it allowed Mexico to catch up with other Latin American countries.

Table 2: Effects of NAFTA on the FDI Inflow in Latin America (1995-2004)

Explanatory Variables	GLS Model		Random Effects Model	
	Coefficient	z stat	Coefficient	z stat
Intercept	9.84	3.01	11.78	2.05
$\Delta FDI_{-1}$	0.26	3.22**	0.23	3.22**
Economic Freedom	-0.95	-2.08**	-1.41	-2.22**
Infrastructure	2.49	4.76**	1.77	1.60
Trade Openness	0.01	2.99**	0.02	1.62*
Return on Investment	2.77	4.50**	2.19	1.84*
NAFTA	0.63	1.57	0.33	0.20
Diagnostic Statistics	Sample size = 162		Sample size = 162	
	Log likelihood = -327.03		R <sup>2</sup> Overall = 0.21	
	Wald X <sup>2</sup> <sub>6</sub> = 43.99 (P value = 0.00)		Wald X <sup>2</sup> <sub>6</sub> = 19.43 (P value = 0.00)	

## CONCLUSIONS

The results estimated in this study suggest that better domestic investment climate, better quality of infrastructure, greater trade openness, higher return on investment, and higher incremental lagged changes in FDI boost the FDI inflow to Latin America, while lack of economic freedom causes the contrary. While these results are generally consistent with the current FDI literature, however the result that domestic investment climate is a significant and robust determinant of FDI is a noteworthy improvement over the current literature. This study finds that a domestic investment climate that is not conducive to economic freedom will likely negate the stimulating effects of other positive determinants of FDI. Therefore, strategies should be formulated to promote long-term economic freedom in the developing countries, which will likely foster a healthy economic environment that is not only ready to attract more FDI inflow, but also prepared to nurture the economic ingredients necessary for economic development.

The research focus of this study is worthwhile as it seeks to further our knowledge of the FDI dynamics in Latin America. Needless to say that a better knowledge of the determinants of FDI is crucial for devising strategies to promote long-term economic development -- a course that holds much at stake not only for Latin America, but also for developing countries in general.

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## BIOGRAPHY

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# RETENTION OF TALENT AND ENSURING LEADERSHIP CONTINUITY IN CHALLENGING ENVIRONMENT

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## ABSTRACT

*The key for business success is to select and retain top-notch people. People who are talented will continue to develop their skills and enhance their value in the organization. The basic element is to improve the staff quality, which can be attained only through identifying the outstanding employees and developing them. Meanwhile, organizations should also check the under performing employees. This necessitates identification of the role of every individual in the organization. A wrong job assigned to the employee is detrimental to the growth of the individual as well as the organization. The underlying issue here is identifying the performer and non-performer. A performer needs to be motivated and recognized in the organizational environment and improvement plans to help the non-performer to perform has to be implemented. The improvement plan will help the non-performers to know what you expect from them, the feedback of measurable goals and objectives to assist them in progression. If the employer has done his part in creating that positive environment in which the employee can become successful and still the employee does not succeed, it is good that the employer relieves the non-performer. It is better for organization and individual who can find opportunity elsewhere. These days star performers do not stay in the organizations. It is due to failure to understand the employee needs in the workplace. As a result, companies have to look in for new hire that can effectively take the place of previous one and put the business on the right track. Hence, a company must devise effective employee retention strategies that prevent employees from leaving the company. The paper elucidates on the reasons for employee attrition and the key strategies that can help in maximizing employee retention within organizations.*

*Achieving excellent performance in large, complex and rapidly changing organizations requires effective leadership. Modern leaders must continuously push their own boundaries in order to drive performance improvement across their organization. While ensuring a culture of accountability, while encouraging innovation and change they must also have the skills to motivate and inspire others by allowing them to grow confidently and improve productivity. Companies wrongly focus on leadership traits, styles and technical competence. They commit a major error when promoting successful individuals without acknowledging required skill set differences at different levels of leadership responsibilities. Leadership continuity (succession planning) is a crucial part of an organizational Human Resource strategy. In today's unpredictable business environment, leadership continuity is a lengthy process, which faces tensions and challenges including flexibility. To hire the people who make their career decisions and to increase the diversity of the talent pool and to ensure that the employees are properly developed has become a challenge to management. Though training helps to develop future leaders, the experience they require for the position of a future role as a leader is not delivered. Leadership continuity is a process, which helps the organizations to develop structure career development program or the most talented individuals and align this with the needs of the organization. Companies need to build leaders, not buy them. The more people achieve, the more they learn. Their willingness to tackle new challenges increases. To capitalize on potential, companies must define the true work requirements at each key leadership level. Leadership continuity systems must spell out what's needed to make a successful transition from one layer of leadership responsibility to the next. Leadership continuity is a process, which requires careful*

*thought planning and effort for which the payback is significant. Expected or not, leadership succession is inevitable for any surviving business but successful succession is a reality that must be planned. An increasingly important factor in this ever-changing economy is the imminent retirement of an entire generation of leaders. Consequently, succession planning is becoming an increasingly distinct strategic imperative. This paper discusses the strategies needed in the retention and development of talent and leadership continuity within organizations.*

*Keywords: Performer, attrition, employees, organizations, employer, leaders, Talent, career development, training.*

## INTRODUCTION

Effective recruitment and selection process in attracting the best work force thereby reducing the turnover of staff by improving the performance of employees are the imperative tasks of the present day organizations. The statement mentioned here could be divided into several sections.

- a) Effective recruitment and selection process
- b) Attracting the best work force
- c) Reducing the turnover
- d) Improving the performance
- e) Establishing best succession plan

Securing the services of the right people at the right time in the right place is a common adage. Retaining the services of the right people at the right time in the right place is the recent phrase that is emphasize to growing organizations. There are rare cases of employees working with a sense of passion. The employees look forward to progress within the company. Identifying their passion and encouraging them to pursue leadership roles would retain top talent in the organization. In this resource paper we would focus on employees on two major issues.

- a) Retention of talent
- b) Leadership continuity

### Retention of Talent

Spotting the right talent at the right time and placing them in the right job is an imperative task that needs to be addressed by challenging organizations. In today's business scenario we do not find the right person to do the right job eventually causing more of loss to the organizations.

### Leadership Continuity

The issue of leadership continuity or succession planning has been increasingly difficult to implement due to the shortage of leadership skills. Identifying leaders and developing them in their skills sets can happen only when talent is nurtured properly.

### Purpose of Study

Fast growing corporate world, challenging environment, high attrition rates, search for able leadership, deficiencies in HR Programs and policies are the present concern. This paper is an exploratory research work with questionnaires being administered to 200 employees from various organizations and varied work experience. The purpose of conducting this study is to know the reasons of attrition and have a strong talent retention strategy simultaneously focusing on leadership roles for Star performer. Attracting the top performers motivating them and retaining them is the biggest challenge. Star performers would prefer to work with star companies only.

This is because of the exemplary management practices, profile and excellent employee systems these top companies follow. If other companies are revamping, rebuilding or restructuring should be aware that top talent would come to them only when the vision is shown and offering them the opportunity to be a part of the dream. Top performers can only be turned on by challenge, change and results, as they are drivers who can realize the dreams of the organization. They thrive on recognition for their efforts in the form of flexible work timings, time off etc. Companies should give them projects that are challenging and stimulating. Pay them well so that they don't go looking elsewhere for better horizons. When employers fail to pay attention to them and their needs, there may be someone right under their nose scouting to take them away. A powerful leader is one who knows that his company would be successful only when quality people build it. People are the priority in organizations and increasing employee retention or reducing attrition is the biggest challenge.

We need to protect and build for the future, to attract and nurture the leaders of tomorrow who will deliver this long-term value. As the market for executive talent becomes increasingly fluid, as real and perceived loyalty of the employee to the employer reduces, companies without a clear strategy for finding and retaining talent will lose out. And that is even more so in a service-based industry where, fundamentally, our only source of sustainable competitive advantage is our people. The lack of talented people to develop new thinking and to challenge the status quo can be severely limiting factor to a company's growth ambitions – not just for the present, but also more importantly for the future. Without a Programme to identify talent, strengthen the capabilities of existing leaders and increase the number of people in the leadership pipeline, a business is more likely to fail. The focus we place on finding and retaining talent is core to the business. We believe that consistent growth in customer and shareholder value is primarily achieved through employees who understand how they contribute to the business as individuals, who have the capabilities and commitment to deliver to our customers, and who know how they can help and develop and then implement our strategy. The objective, of course, is to leverage the skills and capabilities of our people, to turn their talent into business success leading to sustained competitive advantage.

## METHODOLOGY

The survey asked respondents to rate the degree of importance or level of agreement with a number of statements related to:

- ❖ Benefits
- ❖ Retention Strategies
- ❖ Organizational culture
- ❖ Personal and job satisfaction

Table 1: Showing the Responses Stated by Respondents as a Common Reasons for Leaving Organizations

	REASONS	YES	NO
A	Monetary benefits or other rewards are insufficient	82%	18%
B	Feeling of not being considered important by their superiors	80%	20%
C	Too many rules and neglecting suggestions given by them	78%	22%
D	Culture of the company does not suit them	74%	26%
E	Promotion & growth opportunities are not bright	70%	30%
F	Leaving for personal or domestic reasons	15%	85%



Employees feel that they deserve more than what they actually get. A good reward system would not only motivate the employee but also others in the organization. A well-established reward system would experience excellent commitment from all the employees. Rewards and recognition are the best motivators to retain employees. Identifying employee of the month, giving gift voucher or even hosting a lunch are few suggestions. Employees look for some meaningful and motivational rewards. To attract them, simple moves like these would help the employers to create loyalty and rapport in the work place. In fact, organizations spend each year to equip their employees with the required qualities and skills to make them become more productive. To make an employee productive, the employer should have mastered the leadership skills to become trusted and well liked by his employee. Only in such case, where it is give and take from either side, the employee will go out of his way to exhibit higher levels of productivity and remain loyal to the company. Communication is a best tool, which the employer has to adopt to help the employee understand that he is important to the growth of the organization. 'Leadership is based on inspiration, not domination; on cooperation, not intimidation'

### Sample Composition

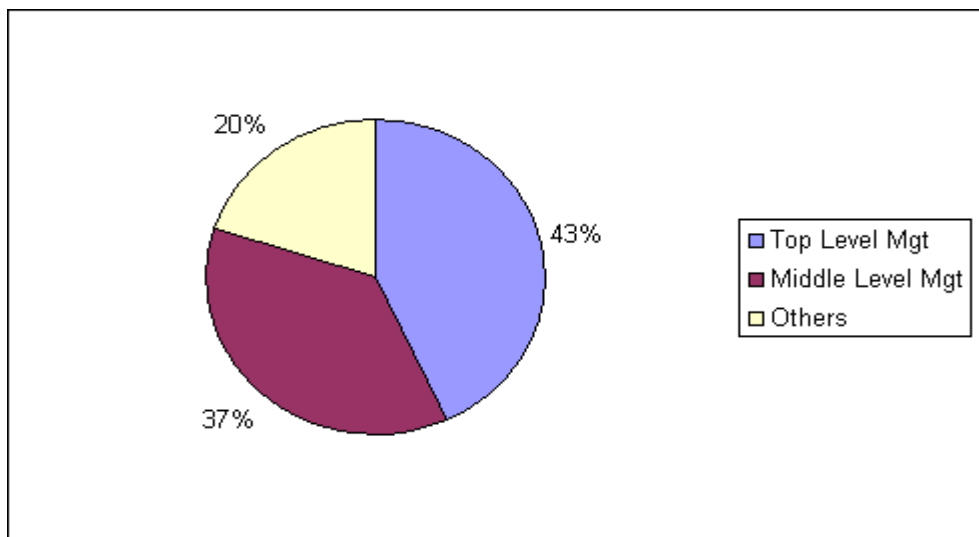
#### *Basic Description*

❖ Sample Size	200
❖ Gender	61% male
❖ Age	25 to 58 = Average age 41.5
❖ Educational attainment	78% with Post graduate degree

### Occupational Class

Figure 1 describes the sample distribution by occupational class. 43% of the sample was top-level management and 37% middle level management.

Figure 1: Sample Distribution by Occupational Class



Top Level Management	43%
Middle Level Management	37%
Others	20%

Figure 2 describes the sample distribution by tenure. It means the opinion of the respondents when asked how long employees stay in the Organisation. Employees who move away from the company are more during 7-8 months. The percentages of people who leave are less after a year.

Figure 2: Sample Distribution by Tenure

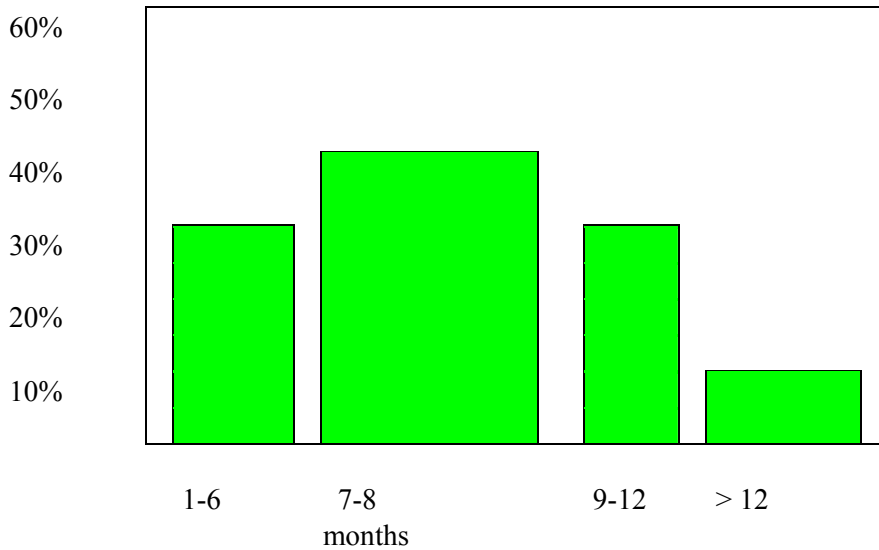
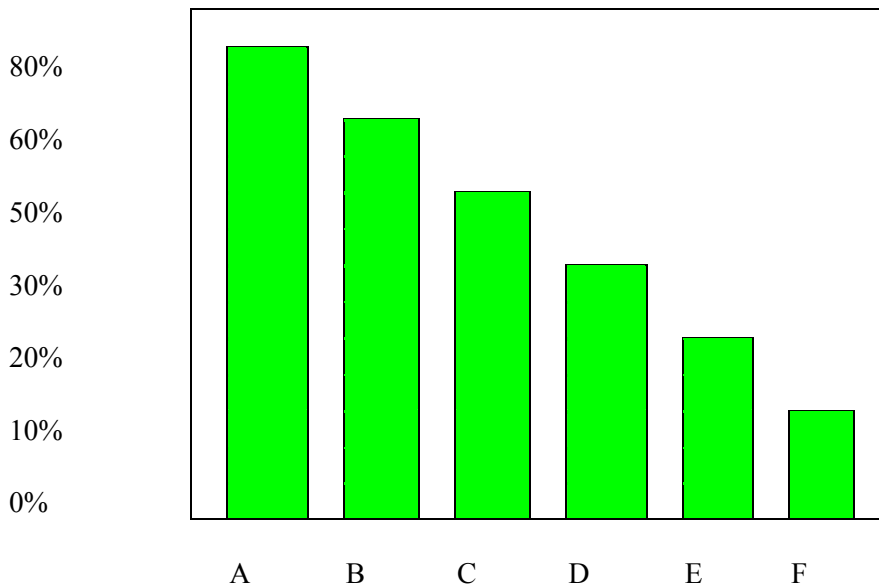


Figure 3 describes the sample distribution by reasons for leaving. The most common reasons for leaving were

Figure 3: Reasons for Leaving



- A. Monetary benefits or other rewards or inadequate
- B. Feeling of not being considered important by their superiors
- C. Too many rules and overlooking of suggestions given by them

- D. The culture of the company does not go well with them.
- E. Encouragement & development opportunities are not intense
- F. Personal reasons

Figure 4 describes the sample distribution in terms of when they are likely to leave was definitely made. 40% of the sample decided to leave less than 3 months, although 5% decided to leave over a year.

Figure 4: Likely to Leave

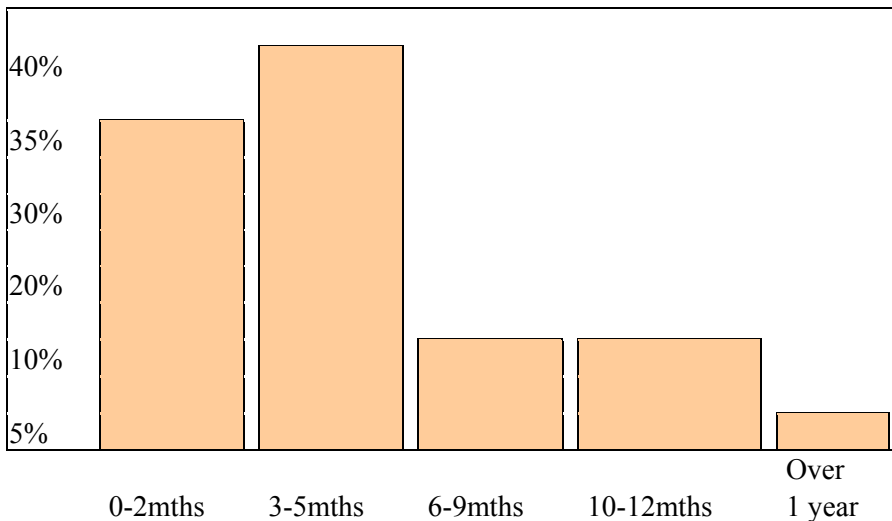


Table 2: Parameters

<i>Parameters</i>	<i>Explanation</i>
Salary & Rewards	Receiving a competitive salary and benefits package and being paid above the market average for the type of job
Career Advancement	A clearly defined career path which stretches one's capabilities to realize his/her full potential
Working Relationships	A team atmosphere and a sense of belonging with a good relationship with the manager based on mutual respect
Job Satisfaction	A job you find satisfying and that interests and stimulates the employee
Working Conditions	Modern Infrastructure and flexible working conditions and participative management
Loyalty	Working for an organization with commitment

The top 3 reasons for employees leaving are

- 1) Lack of opportunities for personal and career development
- 2) Lacking sense of belongingness & adaptability to organization culture
- 3) Salary & benefits

### Organizational Factors and Reasons for Leaving

63% have stated that leavers from the Public Sector are more likely than leavers from any other industry to leave because of a lack of development opportunities.

### Propositions for Retention Strategies

The investigation into employees' reasons for leaving has revealed a number of causative factors. Many employers were ignorant of the real causes of employee attrition. This highlights the importance of employers ensuring they understand and pro-actively manage the most influential HR practices to reduce employee attrition. Even though not the major cause of turnover, pay and reward does remain an important factor in the retention issue. Organizations that pay employees below the market rate are likely to experience high levels of turnover. Strategies like financial incentives to employees to retain are unlikely to secure anything more than short-term dedication to the organization. A lack of development opportunities was the most important factor in employees' decisions to leave their previous organization. Matching development opportunities to individual employee's career aspirations is likely to have the most positive influence on staff retention.

The task of managing employee attrition can be split into three stages:

- 1) Identify the level and cost of turnover of employees
- 2) Realize the reasons for employees to exit
- 3) Implement retention strategies with leadership continuity

### FINDINGS AND CONCLUSIONS

There is unquestionable substantiation that the field of Employee Retention is growing in importance as an HR function. This is due to a general consensus that certain types of turnover can have a large detrimental impact on organizational effectiveness, together with a growing awareness that it is possible to reduce redundancy and improve organizational performance and employee well being. Nevertheless 'Retention' as defined HR function does not seem to exist in many organizations, mainly due to apparent lack of information and visibility. Keeping an eye on turnover rates and collecting reasons for leaving both increase the information available, as well as raising the awareness of retention issues within an organization. Unfortunately approaches towards collecting exit data seem to be for the most part haphazard, unsystematic and non-strategic. Most exit data collected can be questioned in terms of validity. For a significant proportion of organizations the data collected is not aggregated across the organization to give a strategic overview. The results were then compared from a large sample of actual employees. In the main the results were very similar, although there were also areas of discrepancy that the reader can use to challenge his or her own ideas.

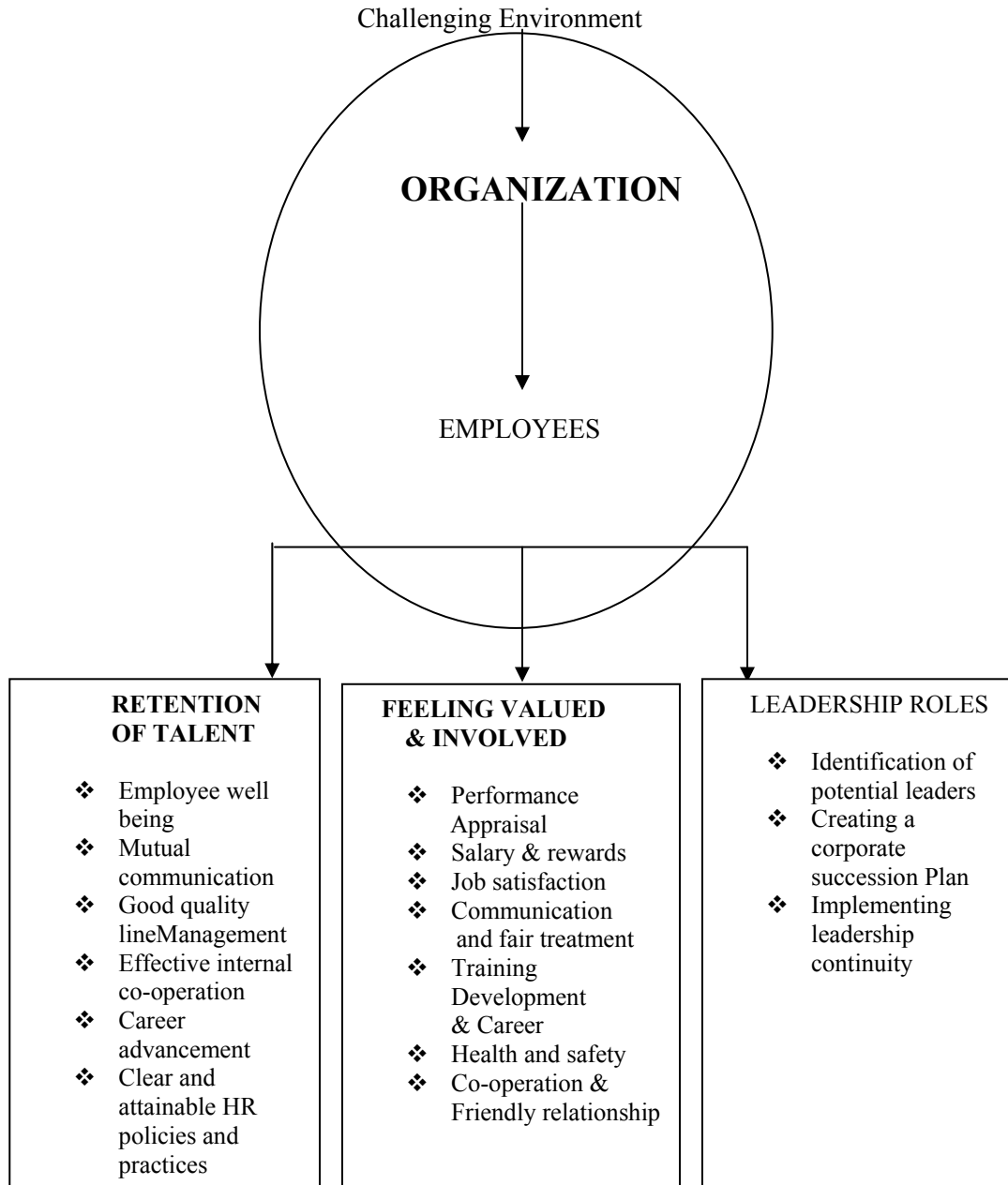
To summarize, it is clear the Employee Retention is an immediate attention seeking HR initiative that has to be given the priority in human capital management. It is however still in its formative years compared to the typical recruitment function with its relatively enormous infrastructure and budget. This disparity needs to be rectified.

### RECOMMENDATIONS

After analyzing the causes and the effects of talent retention and lack of leadership development there is a need to implement the right model to ensure the smooth functioning of organizations.

The following model is a guide to organizations in improving their ability to attract, develop, motivate, organize, and retain talent. Be it retention of talent or leadership development the need is to create employee involvement.

#### RETENTION OF TALENT AND LEADERSHIP CONTINUITY MODEL



To overcome the causes the management has to implement strategies in retention. Employers should be visionaries' in-

- Creating and maintaining an environment that lures, retains and encourages employees.
- Relating to employees and treating them as one family.
- Supporting them by giving them the right infrastructure and information to make them do the job.

- Making them grow professionally and personally.
- Compensating them in a broad perspective.
- Building their relation with their superiors

Appropriate strategies as mentioned above should be implemented to overcome problems of attrition. The best practice could be to

- Select the right candidate for employment.
- Orientate for a longer period with new employees.
- Cherish the values of organization and implement the same.
- Use different rewards for different tasks and recognize the employee.
- Make the job easily done without interference.
- Implement corporate leadership continuity.
- Conduct exit interviews to know the reasons for departure

In today's unpredictable business environment, succession planning is a lengthy process, which faces tensions and challenges including flexibility. To hire the people who make their career decisions and to increase the diversity of the talent pool and to ensure that the employees are properly developed has become a challenge to management. Though training helps to develop future leaders, the experience they require for the position of a future role as a leader is not delivered. Leadership continuity is a process, which helps the **organizations to develop** structure career development programme or the most talented individuals and align this with the needs of the organization.

#### Leadership Continuity (Succession Plan) Involves:

- Identification of possible successors
- Development plans for individuals
- Review the actual pattern of job filling to check the individual development plan has taken place

There should not be any secrecy in implementation of succession plans. All employees should be aware that such a process exists and how the process works. Those who are within the process should have a chance or an opportunity to formulate their career aspirations, preferences and constituents. The organization should give the feed back of their work and how they are perceived and the kinds of job moves for which they would be considered. This necessitates the linking of various outputs with leadership continuity. It therefore calls for linking of resource policy, strategies for skill development, job-filling process, individual development plans and assessment processes. It calls for:

- A broad human resource planning that has a combination of internal development and external recruitment. It calls for a mix between generalist and functional career paths and also the outline for successions demanded in various areas during various frame of time.
- Implementation of strategies for developing the skills needed in the organization.
- Proper job-filling process that should be adopted by the organization. It could be a direct one to make appointments, which become a rare phenomenon. It could also be advertising for the job internally.

- A talent pool of those identified should be made. They should be given the skill training /coaching and the job experience required to meet the profile of the post. This is otherwise termed as individual development plan.
- To derive a conclusion or a judgement on the skill criteria needed for the job; assessment processes are considered as feedback on succession plans. Individuals need to be aware of the assessment process used to cover the specific and generic skill sets mentioned by the organization.

In the organization, the leadership continuity has to be a graceful event. Strategising rightly and executing successfully would not make it a dramatic one instead would resemble the flow of events that occurs over a period. Psychologically, no body prefers to think about their mortality. Executives/Leaders are no exception to this rule. But, not planning the succession and leaving the place due to unforeseen circumstances like serious illness, disability or death can be a rude shock in the company. Such crises are upheavals.

Some people are reluctant and feel no one knows their business like they do. They have to have faith and trust to appoint a board. The board is a surrogate parent and advises the management like a moderator, reconciler, cautioner and supporter. This is helpful in case of family owned business. Identifying the right successor amongst many children is a difficult task. The board would help in grooming the right successor. If a key employee leaves the company it can mean a loss of continuity and even loss of profitability while the company recruits new people.

The long-term success of your organization depends on how well you develop the people around you by inculcating the corporate culture and psychology. Leadership continuity helps the organization to

- Know the keys to success at each level
- Build morale in enabling the individual to grow personally and professionally
- Identify the training needs of individual and group
- Identifying the people who are like successors at various levels
- Assess the performance of individuals
- Create developmental plans
- Cutting cost on hiring from outside
- 

The starting point of leadership continuity is to identify the key leaders whose absence would have a negative impact on the stability of the business to avoid this situation identification of internal talent and developing them would reduce dependency. Leadership continuity is a process, which requires careful thought planning and effort for which the payback is significant. People are persuaded by reason, but moved by emotion; [the leader] must both persuade them and move them.”- Richard M. Nixon

Excellent talent management is one of the key strategic drivers of corporate performance today. Companies, which do a better job of attracting, developing and retaining talent, will gain more than their fair share of this critical resource, boost their performance and gain competitive advantage.

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# **THE ROLE OF SELF-EFFICACY ON SALESPERSON EFFORT: THE INFLUENCE ON NEW PRODUCT INTRODUCTIONS**

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Mike Ahearne, University of Houston  
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Kevin Trainor, Kent State University

## **ABSTRACT**

*This research focuses on the impact of salesperson product perceptions on customer product perceptions, and salesperson behaviors of working smart and hard after a new product launch. We also examine the role of a salesperson's self-efficacy in our conceptual framework, as well as, outcomes of both salesperson and customer perceptions of the product. Our hypotheses are tested using survey data from a sample of 231 salespeople in the pharmaceutical field, along with external ratings from customers, and archival measures of effort and performance. Our findings suggest that favorable product perceptions enhance working smart behaviors; however, our results also indicate that contrary to popular belief, salespeople with favorable product perceptions may actually demonstrate less effort. Interestingly, we discover that self-efficacy strengthens this negative relationship leading to speculations of intrinsic motivation. Ultimately, we find that a salesperson's new product sales are impacted by that salesperson's smart and hard behaviors, as well as by the customer's product perceptions. We conclude with a discussion of implications and promising directions for future research.*

# **IS IT WORTH THE COST? MARKETING TO NEGATIVELY PERCEIVED CONSUMER GROUPS**

Susan Baxter, Bethune-Cookman College

## **ABSTRACT**

*Examining consumer concerns is of importance to marketers. Some concerns include the desire for businesses to be more socially responsible through products and being more inclusive in advertisements. . To stress the need for social responsibility, consumers have reverted to using civil disobedience. A civil disobedience tool, the boycott, is now being used to protest not only unethical behaviors, but to also discourage businesses from marketing to certain populations and from giving employees of that group recognition. Consumer groups that are prejudiced against other consumers are attempting to impact corporate decision making in regards to human resource policies and marketing decisions. This paper looks at the history of inclusiveness, boycotts, and the current state of affairs with consumer groups.*

# **JOB INSECURITY AND CONSEQUENCES A COMPARATIVE STUDY: CONTRACT AND PERMANENT EMPLOYEES**

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## **ABSTRACT**

The experience of job insecurity in most of the studies has been linked to several organizational outcomes but relatively lacking the impact on individual outcomes. The strength of these effects has been found to be inconsistent and vary across studies. The present study examines the level of job insecurity perception and its individual consequences (physical & mental health complaints, job withdrawal intentions) and organizational consequences (organizational commitment, job involvement) amongst contract and permanent employees. The study also examines the impact of gender and experience level on job insecurity and its outcomes. The study is conducted on middle level managers of a telecom company, which is in transition phase of privatization and reorganization. The data are analyzed by t-test and ANOVA. The results show significantly higher health complaints, job involvement, organizational commitment and lower job withdrawal intentions among permanent employees. Men show significantly higher health complaints than women. Study also shows significantly higher health complaints and lower job withdrawal intentions among employees with more job experience. Practical implications of study, limitations and recommendations for future research are made.

## **INTRODUCTION**

In the past two decades, effects of economic globalization and rapid technological changes have resulted in increased workloads and a faster pace in the workplace. Consequently stress emerged as one of the most pervasive phenomena in the world and affects people from all walks of life. Occupational stress is interchangeably termed as job stress and work stress. In the research literature stress is defined as the harmful physical and emotional response that occurs when the requirements of the job do not match the capabilities, resources or needs of the worker. In recent years the dynamic economic vexation situations and competitive standards have resulted in downsizing, mergers, acquisitions, joint ventures, outsourcing and other type of structural changes. The immediate response to cope such dynamic environment is reduction in workforce and employment practices of temporary jobs, as a strategy to reduce costs and increase flexibility. All these factors of organizational transition tend to produce increased feelings and perception of insecurity, pertaining to job and its future. Since job insecurity involves the experiencing of threat and is described as a stressor, as it implies great deal of uncertainty regarding whether individuals would be able to keep and maintain their jobs in future. Consistent with theories of the stress, job insecurity would result in various types of individual and organizational outcomes and being an important stressor requires further investigation for its relative impact on these strains (Katharina, Sverke, & Hellgren, 2005)). The results of previous studies are not conclusive (Katharina et al. 2005), as the findings of study in one culture cannot be generalized readily to other cultural settings. Currently less research has been conducted in South Asia and particularly in Pakistani socio-cultural context, indicating to fill this knowledge gap. Furthermore, researches that have been conducted on job insecurity considered the construct with

reference to contract employees mostly and ignoring the impact on permanent employees, particularly during reorganization transition phase. The present study examines and compares the level of perception of Job Insecurity between contract and permanent employees and its individual consequences (physical & mental health, job withdrawal intention) and organizational consequences (organizational commitment, job involvement). Study also examines the level of these variables with regards to demographical factors including gender and level of job experience.

## LITERATURE REVIEW

Like other work-related stressors, job insecurity is associated with a number of detrimental consequences for both the individual and the organization. Perception of job insecurity has been shown adversely effecting physical and psychological health. The relation varied in strength from weak to moderately positive and in some studies no support for a significant relationship between these two variables.

Job insecurity leads to an increased intention to leave the organization (Sverke Hellgren & Neswall, 2002). Limited empirical research has examined turnover intention with reference to job insecurity and job status (Rannia 2002). Organizational commitment in many studies found to negatively moderate the association with job insecurity. Whereas, some reported a strong negative relationship or no significant relation at all, indicating further exploration to establish the relationship. Job involvement has been theorized to increase psychological attachment and would result in a stronger negative reaction to a perceived threat of stressors. Studies have reviewed that job involvement may influence the work outcomes (Brown 1996) but studies lack impact with respect to job insecurity. Researches suggest that characteristics of the jobholders have vulnerability for detrimental consequences of job insecurity. Contract workers are shown to have less experience in an organization due to increased intention to leave the organization and change jobs and organizations quite often (Sverke et al., 2002). There is evidence that gender is related to employment status and women found to express more negative reactions to contract work as compared to men.

## METHODOLOGY

### Participants

This hypothesis testing study is conducted in the middle level managers of leading Telecom Company of Pakistan, presently under process of privatization and deregulation with increased feelings of job insecurity. Based on the stratified disproportionate random sampling design, questionnaire was given to 130 individuals and a total of 112 respondents returned, with response rate of 86%. ANOVA and t-Test are used in hypotheses testing statistical analyses.

### Measures

Physical and mental health measured by manual of the general health questionnaire by Goldberg (1978), organizational commitment by Porter (1974), job involvement by White (1973), job withdrawal Intention by Hanisch and Hulin (1990) and job insecurity based on De Witte, (1999). Demographical information include, job status (contract, permanent), sex (men, women), level of job experience (1-3 years, 4-6 years and more than 6 years) categories.

## RESULTS AND DISCUSSIONS

As shown in Table 1, the results in the present study consistent with (Kaiser, 2002), show significantly different levels of job insecurity in the contract and permanent employees ( $p=.004$ ). Consistent with De Witte (1999), results show a significantly higher health complaints ( $p=.000$ ), job involvement ( $p=.000$ ), organizational commitment ( $p=.046$ ) and lower job withdrawal intentions ( $p=.001$ ) among permanent employees as compared to contract employees.

Table 1: *Comparison of Means for Contract and Permanent Employees with Level of Significance*

	Contract (n=53)		Regular (n=59)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Health	21.66	6.31	27.81	6.49	-5.1	.000
Organization Commitment	54.13	6.16	56.96	8.38	-2.0	.046
Job Insecurity	6.75	2.38	5.42	2.33	2.98	.004
Job Involvement	32.98	4.42	35.77	4.42	-3.8	.000
Job Withdrawal Intention	9.05	3.26	7.10	2.60	3.52	.001

*df=110*

As shown in Table 2, there is significantly higher health complaints ( $p=.011$ ) and in consistent to Probst, (2000) a significantly lower job withdrawal intention ( $p=.000$ ) among more job experienced employees as compared to low experience.

Table 2: *Means and One Way ANOVA of Different Levels of Job Experience with Significance Levels*

	1-3 Years (n=45)		4-6 Years (n=19)		More than 6 Years (n=48)		<i>F</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Health	23.28	6.91	22.94	5.46	27.18	7.28	4.67	.011
Organization Commitment	54.35	7.37	54.73	6.54	57.16	7.86	1.80	.169
Job Insecurity	5.53	2.32	6.84	2.56	6.22	2.44	2.18	.118
Job Involvement	33.73	4.41	33.78	3.89	35.39	3.91	2.18	.117
Job Withdrawal Intention	10.11	3.39	7.94	2.19	6.10	1.37	29.81	.000

*df=111*

Consistent with Martocchio and O'Leary (1989) Table 3 shows that men are more vulnerable to health deterioration than women ( $p=.052$ ).

Table: 3 *Comparisons of Means for Men and Women Employees with Level of Significance*

	Males (n=75)		Females (n=37)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Health	25.81	7.04	23.05	6.89	1.96	.052
Organization Commitment	56.30	8.21	54.24	5.74	1.37	.173
Job Insecurity	6.18	2.34	5.78	2.63	.820	.414
Job Involvement	34.80	3.92	33.75	4.58	1.25	.214
Job Withdrawal Intention	7.72	3.02	8.64	3.14	-1.50	.134

*df=110*

## PRACTICAL IMPLICATIONS AND FUTURE RESEARCH

Job secured employees are more job involved, more committed to the organization, and have fewer turnover Intentions, but are more vulnerable to adverse effects of distress. The study

provides a mechanism to identify individuals who may be more adversely impacted by organizational transition. This study enhances our understanding of the process and outcomes of job insecurity for organizations that wish to develop human resource planning, counseling, policies and procedures on empirical basis. Future research can consider other job factors, demographic characteristics, contextual variables, and personal characteristics and adding moderators in such studies. This will be the impetus for researchers to conduct research across such more local organizations where privatization, downsizing, mergers, joint ventures and other reorganizations are planning of future. Increase in sample size, population diversity from different firms, industries and country may strengthen the study. Longitudinal research is really required to confirm and establish the causality of the variables in post transition phase.

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# IAS 39: DO THE COMPANIES FULFIL THE REQUIREMENTS FOR REPORTING OF FINANCIAL DERIVATIVES?

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## ABSTRACT

*Although in the United States derivatives have been traded since around the middle of the nineteenth century, in the Czech Republic a derivative was an unknown term until lately – or rather a term referring to someplace an un unknown empire. The situation started to change roughly in the second half of nineties, when as part of macroeconomic shocks and government crisis in 1997 when interest rates increased significantly and the Czech crown devaluated from day to day. At that time companies felt first time ever how heavy impact an unexpected and not counted on change of market conditions may have on them. From 2001 to 2004 another unusual phenomenon occurred which shook the business sector; should a prophet has predicted it at the end of the nineties, he would probably be clamed to be crazy. The exchange rate of dollar against crown dropped from over 40 CZK/USD to 20 CZK/USD. Companies that made contracts with their customers in dollars but with suppliers in crowns bore a great exchange rate risk and they frequently paid a lot when dollar dropped. At the moment we also have to mention world prices of oil and oil products which rocketed so high that nobody could have expected it several years ago.*

*This paper focuses on the comparison of reporting of the derivatives using IFRS in comparison with the Czech accounting legislature by the companies listed on the Prague Stock Exchange (PSE). Study draws the attention to check the differences in reporting of derivatives and also compares their qualitative advantages. Results of this study are based on the analysis of annual reports of the companies listed on the PSE. Any of analyzed companies didn't allow all of the requirements of IFRS on reporting of the financial derivatives.*

## INTRODUCTION

The motives why Czech companies started or are string to make derivative businesses are a few. The praiseworthy motive is the control of financial risk, elimination of possible unexpected losses from unpredictable movement of exchange rates, interest rates, commodity prices or other market factors which a company cannot affect in any way. This motive, however, is not the only one. In lots of cases companies conclude derivate trades – although they hardly admit it – simple because they want to try such a business. And there are also businesses – fortunately only exceptional – when a company agrees derivatives that even cannot be determined as hedging and they represent only mere speculation, or an adrenaline game in the market casino. We should also add that such an adrenaline game usually is hidden under the robe of complex models and studies, adding the special tinge of scientific, modern and progressive qualities.

In the Czech business sector derivatives are admissible mainly via banks. The access to derivative stock exchange is rather complicated and is related with considerable transaction costs. Some companies, however, are offering the access to derivative stock exchange and it will only take some time before Czech companies start up search for the access actively. This paper focuses on the comparison of reporting of the financial derivatives using IFRS in comparison with the Czech accounting legislature by the companies listed on the Prague Stock Exchange. Results of this



study are based on the analysis of annual reports of 51 companies listed on the Prague Stock Exchange. Currently there are traded 133 securities on the Prague Stock Exchange:

Table 1: Securities listed on the Prague Stock Exchange

	<b>Stocks</b>	<b>Bonds</b>	<b>Total</b>
<b>Primary market</b>	8	25	<b>33</b>
<b>Secondary market</b>	25	17	<b>42</b>
<b>Free market</b>	14	44	<b>58</b>
<b>Total</b>	<b>47</b>	<b>86</b>	<b>133</b>

The most important players on the Prague Stock Exchange are definitely the financial institutions and majority of bonds are state bonds. We focus our analysis on corporations listed on the PSE. We will analyse 51 companies (see the following table):

Table 2: Segmentation of Analyzed Companies

<b>Segment of the industry</b>	<b>Analyzed companies</b>
Traffic, communications	3
Timber and paper industry	1
Energetic	20
Chemical industry, pharmaceuticals	5
Trade	3
Services	6
Construction industry	2
Mechanical engineering	3
Textile and clothing industry, leather manufacture	1
Mining	3
Food industry	4
<b>TOTAL</b>	<b>51</b>

Defined targets of our analysis focuses on empirical data including their impact on the financial results of analysed companies. The main problem is the fact that management of the companies many of information needed presents quite abstractly because of the very sensitivity character of these information. We will focus our analysis on the data published in the Annual Reports of the companies and their Financial Statements for the period of 2004. All data presented are measured in thousands CZK.

## CONCLUSION

The main conclusion of this analysis is the fact, that the impact of using derivative operations on the financial results of the companies is very low. If the company has the positive or negative result of these operations, their impact on the balance sheet was less than 2 %.

As for the derivative typology, the companies in Czech prefer in the management of currency risks the FX forwards much more than FX options. In the way of interest rate derivatives, companies prefer interest rate swaps. The quite surprising fact of our analysis is that the Czech companies listed in Prague Stock Exchange don't use commodity derivatives.

The main problem of the reporting about the derivative operations is the very low level of the information about derivatives. Moreover the companies are in this way non-uniform although they should meet the requirements of IAS 32 and IAS 39. Therefore the data are very difficult to compare and interpret.

Information about the structure of the derivative operations, their nominal and fair values, types of the derivative instruments are crumbled on whole length of the annual report. For example company reports the nominal values for each type of the derivative instrument, but the fair value of these instruments is aggregated only for the types of the financial risks. Other problem is the reporting of cross currency swaps. Some companies reports CCS as a part of the currency risks, other companies as a part of the interest rate risks.

Majority of the companies didn't report the information about their hedging strategies. The shareholders of these companies therefore have no information about the fact which part of the sum could be classified as a fair value hedge and which part as a cash flow hedge. There were reported no information about the measurement of the efficiency of the hedge accounting. Companies only cribbed the Act about derivatives.

Majority of the companies reported, that the derivative operations are not used for speculation. Therefore the companies which didn't mention this fact demonstrably use derivative operations for the speculation. We assume that the companies are nowadays more cautious in using these operations than in previous years. But we should realise that the very low level of the information about the derivative operations have the negative impact on the possibility of making fair financial decisions because of the information asymmetry. Another problem is the measurement of the fair value in the Czech OTC derivative market.

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# **DOUBLE-LOOP LEARNING PERFORMANCE MEASUREMENT SYSTEM – PART I: LAYING THE GROUNDWORK ON THE THEORIES OF ORGANIZATIONAL LEARNING**

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## **ABSTRACT**

*This article demonstrates that an effective performance measurement system (PMS) must be one that is capable of delivering a continuous process of adjusting, learning and applying the right strategic contents to a business opportunity scenario by a context setter in adaptation to changing competitive contexts of businesses which when it is successfully implemented it will deliver expected organizational performance of competitive advantage. In other words, effective performance measurement system demands organization to engage in higher-order or systemic learning that is capable to unfreeze ineffective business or strategy assumptions, and thus organization can manage performance initiatives which lead to successful change management.*

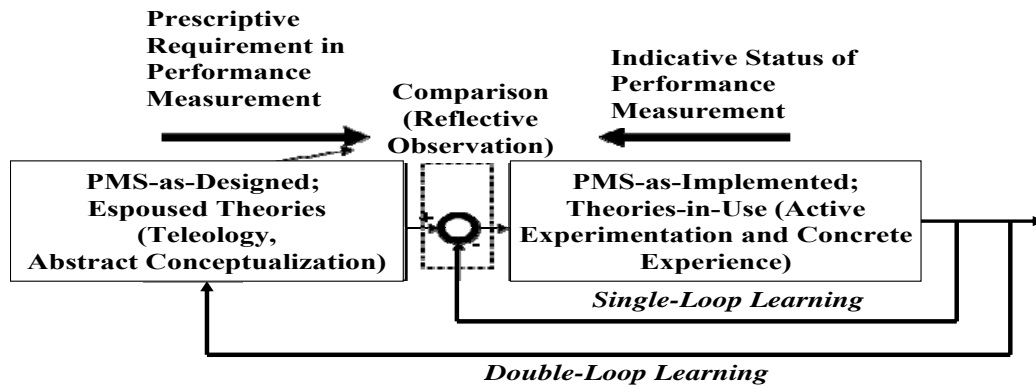
## **INTRODUCTION**

Performance measurement enables us to critically question our current assumptions through learning. As such performance measurement system is a lived corporate space for continuous and systemic learning which is the result of a process of cognitive construction and continuous action adjustment in order to meet goals (Scott, 2001). Performance measurement system as a systemic learning system also exhibits the property of whole-part interaction in a way that we each embody our thought and consciousness and that the wholeness is implicated in each of us. Leitch et al (1996) assert that all organizations indeed learn whether they consciously choose to or not. Thus, performance measurement system is a management control and leadership platform of holistically sensational interaction that creates highly positive energy for focus and corporate uplifting (Tan and Arsirapongpisit, 2002). It is like a kinesthetic speaker who is able to take audiences on an emotional journey enriched with sensory experience and infuses the presentation with a legitimate sense of authenticity and emotional impact that reinforces and connects with the content (of the presentation) and informs its development (Morgan, 2001).

In other words, an effective performance measurement system must be the result of a proactive behavioral act (accountability, empowerment, commitment, and responsibility) which delivers the embodiment of an implicate order that symbolizes a shared value type of corporate policy or value norms, where energy communicated and sent is reverberated back into the source of communication for better synergistic actions, organization and performance management (Tan and Arsirapongpisit, 2002). In sum, there are three important domains of systems performance in which an organization must target in order to yield positive performance results, namely cognition, action and behavior (Yolles, 2004) from which performance measurement must reach. Careful analysis on the literature indicates that these three domains of systems performance do indeed span across four different disciplines, namely organization development (Yolles, 2004), performance measurement system, strategy formulation and organizational learning. The meta-, action- and behavior-domains of systems performance (Yolles, 2004) signify the concurrent importance of mental models or assumptions, execution and deployment, and finally leadership and behaviors. The linkage between cognition, action and behavior is established through the feed-forward and feedback control mechanism as highlighted in the concept of systems-as-

designed and systems-as-executed, and also as captured within the framework of single and double-loop organizational learning system depicted in Figure 1.

Figure 1: Performance Measurement System Presented as a Performance Comparative Process and Feedback Control System



## LAYING THE GROUNDWORK ON ORGANIZATIONAL LEARNING FOR PERFORMANCE MEASUREMENT SYSTEM

Learning and performance measurement are interrelated. Learning is stimulated by absorbing an organization in a perceived problem or opportunity (Argyris and Schon, 1996). Bandura (1986) asserts that learning is conceptualized mainly as a knowledge acquisition through cognitive processing of information, which in this case is about performance measures. In Zubert-Skerritt and Perry (2002), organizational learning and performance are interrelated as learning involves a participatory or collaborative process of learning and performance in solving complex problems and in achieving change, and in improving performance at the individual, team and organizational levels. In a way, performance and learning process can be perceived as a ‘safe practice field’ where participants’ mental models and future actions are shaped and reshaped in continuous developmental cycle (Smith and O’Neil, 2003) with full support from management. In today’s hypercompetitive environment, organization must be equipped with a capability to sense and actualize emerging potentials and to discern the shape of the next game (Arthur, 1996). The only source of sustainable competitive advantage is now shifting towards organizational learning. Simultaneous learning and performance thus necessitates one to take on an interpretivistic epistemological approach that emphasizes the necessity of taking action in ambiguous circumstances as a means of creating knowledge. Blackman et al (2004) treat this learning approach as a double-loop learning within a Popperian epistemological learning model (Popper, 1979) presented in a deterministic equation as P1 (problem in its original form) → TT (tentative solution or theory) → EE (error elimination e.g. critical discussion or testing) → P2 (problem in new form). That is, performance gaps or errors are eliminated by reflecting on mismatches between tentative solutions and expected outcomes (Blackman et al., 2004).

Gustavsson (2001) describes such an organization as eventually possessing transcendental consciousness and capability, which is in reality a double-loop learning ability. Blackman et al (2004) argue that when organization reaches a double-loop level of organizational capability, it begins to develop consciousness in its routine and thus it enables organizations to be skillful in examining the problems at higher level of cognitive and experiential level. Such an ability to adapt to change and seek epistemological knowledge discourse is itself a source of competitive advantage. In Wright and Geroy (2001), continuous learning helps renewing corporate soul with

distinctive attitude and belief system. Learning nature of performance measurement system has been illustrated by Tan (2004). Essentially the learning loop on performance measurement system embeds the leitmotiv and model of Kolb's (1984) experiential learning which is consisted of learning mechanisms that include reflective observation, abstract conceptualization, concrete experience and active experimentation. At the organizational level, there is a profit plan to meet, and we have our shareholder, customer and key stakeholders' values that we are committed to deliver within the reach of our organizational capabilities and resources. The stakeholder expectations are then translated into marketing and business plans, which are then deployed to internal business process dimension in terms of management decisions and system of differentiated activities for sustainable competitive advantage. Management decision demonstrates our ability in abstract or strategic conceptualization, and our system of activities reflects our concrete experience. The learning and growth is an active experimentation. It reflects a leadership culture for active experimentation, hands-on management, and careful exploitation of technologies and human competencies. When values-as-espoused and values-as-delivered are compared, performance gaps resulted will continually keep the learning loop in action.

Dodgson (1993) states that 'learning is a dynamic concept, and its use in theory emphasizes the continually changing nature of organization.' As such, when organizational learning is embedded and internalized in the theories and practices of performance measurement system, organizations that practice them become thrilled in hyper-competitive changing environments, and they are creative and alive, and are always willing to engage in continuous improvement activities to meet stretched goals. In other words, performance measurements should be aimed to stimulate continuous improvement rather than simply monitoring particularly in a hypercompetitive environment of constant changes. Learning needs information and in particular codified information, otherwise learning is limited to implicit or indirect channels. Performance measurements are important particularly when we view organization as a knowledge market. In sum, a discourse over performance metrics is regarded as a learning activity that influences behavior and helps improve our ability to make effectively balanced decisions. Learning enables the creative generation of effective business strategies which is necessary for organizational success. As such, organizational learning is a key driving force in PMS.

Organizational learning is effective in transforming organization and its context, its knowledge and capacity. Even more fundamentally, organization needs learning as organization is a learning system itself (Revans, 1982). Effective higher-order organizational learning has to emphasize in enriching epistemological understanding and ontological insights, which is on the other hand a hermeneutical undertaking to facilitate inquiry and learning discourse of shaping interpretation and bringing learners or action participants on board on the themes in organizational learning. Hermeneutic traditions undertake to understand human and social realities by interpreting the meanings shared by the social group or held by social actors. This requires participants to be skillful in tapping into the advantages of multi worldviews or multi performance perspectives such the 4 BSC (Balanced Scorecard) perspectives described in Kaplan and Norton (2001).

Equifinality property advocated in the systems complex theory further reiterates that it is highly possible that drastically different actions or processes may lead to a common destiny. This forms the epistemological learning and learning-how-to-learn process in gaining knowledge within the context and environment of PMS. Doing so will equip one with a competency to excel in workplace. In uncertain industrial environment today, organizational ability to learn to compete and survive in the context of the Darwinian law of the survivability of the fittest is probably the only sustainable source of competitiveness. In other words, learning within a systemic performance measurement system is both process-centric and ends-oriented. On the process-centric aspect, the process of engaging within the performance measurement system identifies the

way we can go about acquiring a competence, a necessary organizational structure, culture or industrial environment in order to facilitate and support that competency achievement, whereas the ends signifies the level of competence and ability to forge a niche position. On the ends-oriented aspect of performance measurement system, the ends should be met with a learning process that is systemic and generative learning in nature by strategically asking where the organization should stand in the future marketplace.

## CONCLUSION

A simple configuration of feedforward-and-feedback loop-based organizational learning system established within the lived space and system of performance measurement is demonstrated. Both single-loop and double-loop learning concept to performance measurement system (PMS) are introduced. Double-loop learning capability in performance measurement system is achieved when performance gaps detected gets corrected in ways that involve the modification of an organization's underlying management theories, paradigms, norms, policies, business strategies, objectives, management and performance deliverable systems.

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# **DOUBLE-LOOP LEARNING PERFORMANCE MEASUREMENT SYSTEM – PART II: UNIFYING SCHOOLS OF THOUGHT**

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## **ABSTRACT**

*This article demonstrates that an effective performance measurement system is one that is capable of delivering a continuous process of adjusting, learning and applying the right strategic contents to a business opportunity scenario by a context setter in adaptation to changing competitive contexts of businesses which when it is successfully implemented it will deliver expected organizational performance of competitive advantage. In other words, effective performance measurement system demands organization to engage in higher-order or systemic learning that is capable to unfreeze ineffective business or strategy assumptions, and thus organization can manage performance initiatives which lead to successful change management..*

## **INTRODUCTION**

Six broad schools of thought in the research discipline of performance measurement system (PMS) are proposed in Tan (2006), namely systems worldview, generic and bounded rationalism, prioritizationism, functionalism, behaviorism, instrumentalism and consequentialism. These six schools of thought embrace broad-based dimensions of key success factors in the design, implementation and routine operations of Performance Measurement System (PMS) or BSC (Balanced Scorecard) system which for instance include:

- Pay attention to process effectiveness and interconnectivity (functionalism)
- Make clear on competitive priorities and performance targets (prioritizationism or valuationism)
- Establish business strategies that are capable of generating competitive advantage (instrumentalism and consequentialism)
- Ability of the performance measurement system to influence human behaviors on aggregate basis and also to eliminate measures that shift behavior out of line with their core business strategies (behaviorism).
- Establish and make effective implementation on business policies, management belief and value system, leadership model and corporate culture, business management model and operations principles, performance accountability and stakeholder relationship structure (generic and bounded rationalism), and
- Foster the establishment of a cohesive system of similarity to a total quality management approach that integrates the value chains of the business or the organization (systems worldview).

## **DOUBLE-LOOP LEARNING APPROACH TO PERFORMANCE MEASUREMENT SYSTEM**

As noted in Mintzberg et al. (1998), different schools of thought, when appropriately overlapped, will bring about creative frameworks and new perspectives of synthesis. Based on the systematic review in the literature of performance measurement system within the lens and context of systemic organizational learning, a systemic learning approach to performance measurement system can be configured in a feedforward and feedback adaptive control system model as shown

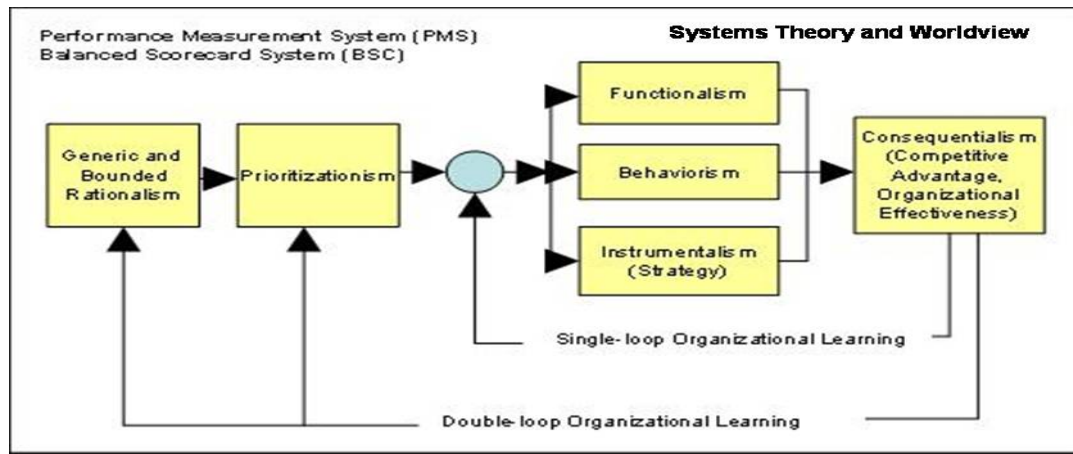


in Figure 1. Essentially Figure 1 presents the systemic learning approach to PMS along the creative modeling direction asserted by Mintzberg et al. (1998) in which schools of prioritizationism, generic and bounded rationalism and systems worldviews take the lead in driving both first-loop and double-loop learning and essentially form the so-called meta-competency of the organization. While the generic and bounded rationalism provides the philosophical norms and values for the organization and the systems worldview provides the systemic competency in order to secure the cohesion and productive contribution of each sub-system component, prioritizationism school of thought forms the basis from which other schools of thought (that predominantly handle the action and behavioral domains or theories-in-use dimension of PMS, referred to Tan, 2006) such as functionalism, behaviorism, instrumentalism and consequentialism are relying upon for the direction and objectives of the PMS establishment in the organization in the first place. The positioning of prioritizationism in the systemic learning loop of PMS can be confirmed by borrowing the findings from Campbell et al. (1997) and Drucker (1974).

In Campbell et al. (1997), it is asserted that the only firm foundation in strategy formulation is the establishment of organizational purpose or objective. Also in Drucker (1974), it is stated that objectives form the basis for work and assignment, and they determine the structure of the business, the key activities which must be discharged, and above all, the allocation of people to tasks. In the systemic learning approach to PMS, two types feedback are made possible within a performance measurement system, which are negative feedback and positive feedback. While positive feedback tends to create destabilizing effect on performance system behavior (Boland and Fowler, 2000), the negative counterpart is a stabilizing agent of change that always seek to bring about convergence towards some declared goals (Boland and Fowler, 2000). While single-loop organizational learning is predominantly a negative feedback as it is a learning and performance mechanism to enable organization to make simple adaptation and taking corrective action (Argyris and Schon, 1978), double-loop learning possesses both negative and positive feedback characteristics. However as double-loop learning is a higher cognitive learning and performance mechanism, it avoids the consequence of destabilizing effect as cautioned in Boland and Fowler (2000).

The reason is that the negative feedback of double-loop learning mechanisms allows organization to see things in totally new ways (Argyris and Schon, 1978) while the positive feedback of double-loop learning reinforces the effectiveness of plans and systems-as-designed and thus confirms the usefulness of refreezing effective management paradigms and methodologies as it has already been argued in Lewin (1951)'s unfreeze-change-refreeze change management model. In addition, the feedback and feedforward elements and functions of performance measurements, when they are systemically configured and exploited, have directive, motivational and reinforcing properties (Bilodeau, 1966), and when positive behaviors are reinforced, the possibility for better effective actions is increased (Harrison and Pelletier, 2000). Brignall and Ballantine (1996) names the evaluation of performance based on feed-forward as ex-ante and the evaluation of performance based on feedback as ex-post. Two double-loop-feedback attributes are explained in Ashby (1960) which could be of usefulness; that is, the double-loop feedback delivers two types of measurements, one of a frequent and short-run kind, and the other of a less frequent but longer-run kind or slower frequency dynamics version.

Figure 1: Systemic Learning Approach to Performance Measurement System Presenting in a Feed forward and Feedback Adaptive Control System Configuration



The adaptive systemic loop approach to performance measurement system essentially fosters organizational learning and continuous improvements at paradigmatic and value level, cognitive and reasoning level, strategic level, action level and socio-cultural level. As such, organization absorbing in such a PMS becomes a repository of learning which is a direct result achieved from the system's self-adaptability and auto-generation of the performance measurement system. The double-loop learning is aimed to put the management system always in the loop of continuous improvement. Double-loop learning is needed in order to avoid the weaknesses brought about by 'group-think' or collective blindness. Larsen (2001) cites that the whole tenor of the literature on organizational learning is that collective blindness, 'group-think' often seriously limits the vision and reduces learning to take place within a paradigm, a way of thinking that is not questioned. As such, questioning into the assumptions behind actions is a necessity for organizational success. It avoids falling into the trap of collective blindness – i.e., part of a culture, a dominating paradigm in the organization (Larsen, 2001).

With the continuous higher-order learning capacity in place, the performance measurement system will not fall into the normal feedback management control situation; that is, when objectives are met, improvement efforts will slow down (Ghalayini and Noble, 1996). An obvious advantage with systemic circular intercommunication or cybernetic process is that through continuous adaptation, learning and performance, positive behaviors can be established and reinforced. Thus, systemic ability enables the performance measurement system to behave as an epistemological device from which managers inquire and learn about the difference perception of reality and solve messed business problems.

Each school of thought presented in Figure 1 possesses the themes and key-success-factor characteristics of an effective PMS captured in a systems worldview. Systems worldview school of thought in performance measurement system serves three purposes. First, systems worldview is demonstrated as possessing the capacity in unifying the theoretical disciplines of all other five schools of thought. Second, systems worldview serves as a useful part of management paradigm that still fits the competitiveness requirements of today's knowledge industry. Third, systems worldview demands a need for systemic integration across the components of key success factors or management variables which it integratively forms the systemic organizational learning system in organization. With the systemic learning system being installed, the performance measurement system will increase the fullness and deepness of learning about the diversity of performance

issues and dilemmas faced, which is centered around reflexively conscious intervention towards a balanced reconciliation and resolution to the themes of process and organizational design (e.g., are we doing the things right), processes for debate (are we doing the right things), and in optimal knowledge-power dynamical condition (is rightness buttressed by mightiness or vice versa) (Flood and Romm, 1996).

In other words, this triple loop learning manifests itself in the form of “collective mindfulness”, that is members discover how they and their predecessors have facilitated or inhabited learning, and produce new structures and strategies for learning (Romme and Witteloostuijn, 1999) and thus effective organizational change efforts and performance. As it has already been theoretically demonstrated that the other five schools of thought can be unified within the systems worldview theoretical framework, it is thus propositioned that simultaneous higher scores or capabilities in Behaviorism, Prioritizationism, Functionalism, Generic and Bounded Rationalism, and Instrumentalism and Consequentialism will represent the characteristics of a triple-loop learning competency of the organization – that there is a systemic coverage absorbed in collective mindfulness on key performance issues and variables of concern that bring about expected organizational effectiveness and success.

## CONCLUSION

This article presents a systemic double-loop learning approach to PMS. The double-loop learning configuration unifies six broad schools of thought in PMS originally presented in Tan (2006). In order to equip PMS with double-loop learning and performance capability, PMS must be made capable of adjusting and transforming assumptions behind actions, and norms and practices so that the original level of performance achievement can be readjusted to a new height or new competitive level. This avoids the pitfall of being confined within a single-loop learning level in PMS: that is, when objective is achieved, organization stops to make further continuous and generative improvement efforts.

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# **IDEALISM AND RELATIVISM: A STUDY OF UNDERGRADUATE BUSINESS MAJORS VERSUS NON-BUSINESS MAJORS**

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## **ABSTRACT**

*In the field of psychology there is a theory of ethical grounding that distinguishes between people on the basis of “idealism” versus “relativism”. An idealistic person is one who believes in absolute truths, values, and rules. A relativistic person, on the other hand, believes that truth is relative to some context; and for them there are no, nor should there be, any absolute values or rigid ethical rules of conduct. This study surveyed undergraduate business and non-business students at a mid-sized southern university to examine whether business majors differed from non-business majors on idealism/relativism and moral decision-making. This research question has important implications not only for pedagogical purposes but also practical implications in the hiring of persons by employers. The results of the study produced evidence that on theoretical terms business students are more relativistic than are non-business students; but when presented with practical real-world situations in which to apply relativistic thinking, the two groups were not significantly different.*

# POST-VIOLATION TRUST REBUILDING IN B2C ELECTRONIC COMMERCE

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## INTRODUCTION

The last decade or so has witnessed an explosive growth of electronic commerce. While the extensive use of Internet provided a new arena for marketers and retailers, the long-term profitability and survival of business to consumer (B2C) electronic commerce depend on the continued online buyers rather than the first-time users. According to Parthasarathy and Bhattacharjee (2001), it costs as much as five times more to acquire new customers than keeping existing ones. For example, a 5% increase in customer retention in the insurance industry typically translates into 18% savings in operating costs (Crego and Schiffrin 1995)

Trust is important for keeping continued buyers (Brynjolfsson and Smith 2000). An online customer has to trust the online business to disclose his/her personal and credit information in order to finalize a transaction. He or she has to trust the quality of the products or services because in most of the transactions the seller and buyer may have had never met. There are many studies that have investigated on how trust affects consumer behavior in electronic commerce. Online companies have been using third party seals, customer feedback or comments board, reputation advertising, privacy statement and insurance to engender trust over their customers and differentiate themselves from untrustworthy competitors (Lee, Ang et al. 2005). In risky online environments where information fraud and breach may exist, the online merchant should also understand how trust can be rebuilt should there be a violation of trust.

This study will focus on the process of trust rebuilding using the expectation-confirmation theory. A theoretical model of post-violation trust rebuilding will be developed and empirically tested with the data collected from a survey of online auction users. The specific research questions that we would like to address in this study are as follows: 1) what are the factors behind the online users' intention to continue trusting the site even after a trust violation? 2) how do these factors influence continuance trust intention?

The paper is arranged as follows. The next section describes trust, expectation-confirmation theory and the concept of trust violation. The third section develops the proposition and the research model as well as the methodology. The fourth section presents the possible findings and implications of the research.

## LITERATURE REVIEW

### Trust and Trust Rebuilding

Trust has been one of the most significant research phenomena across a variety of disciplinary fields including philosophy, psychology, sociology, management, and information systems, etc. Theoretical underpinning of trust has been demonstrated through a plethora of various perspectives. Lumann (1979) indicates that trust refers to the belief that other people will react in predictable ways. From a social-psychological point of view, Cremer et al. (2001) argue that

social interactions are pleasant and cooperative if individuals take into account others' interest because understanding trust is important to promote cooperation across different social interactions. Trust is a bilateral relation that involves an entity manifesting trust called the trustor and an entity being trusted called the trustee. In this research, we adopt the universally acknowledged definition of trust from the work of Mayer et al. (1995), who refer to trust as the willingness of a party/trustor to be vulnerable to the actions of another party/trustee based on the expectation that the other (trustee) will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party (trustee).

Trust is believed to exist when one part has confidence in an exchange partner's reliability and integrity and is the perceived credibility and benevolence of a target of trust (Morgan and Hunt, 1994; Doney and Cannon, 1997). Trust has been considered essential for understanding interpersonal behavior because of uncertainty and information asymmetry. In conventional or off line commerce, trust stems from the expectation of positive consequence as well as the acceptance of vulnerability, and is of crucial importance due to the difficulty of confirming another's identity and the information asymmetry between trustors and trustees. This importance of trust has been magnified in online environment, partly because of the lack of physical proximity, which, in offline settings, can aid trust building. This viewpoint is supported by Quelch and Klein (1996) who argue that trust is a crucial factor in stimulating purchase over the Internet.

Trust enables cooperation and permits voluntary participation in mutually beneficial interactions which are otherwise costly to enforce or cannot be enforced by third parties. While previous literature has suggested that the establishment of trust is a gradual process because trust is built on the assumption that trustee can entertain estimates of trustor's trustworthiness, it does not take more than an instant to destroy trust by misfortune or a mistake and it may be costly or take a long time to rebuild trust once it is lost. We argue that trust is bound to be lessened if the trustee fails to perform the tasks to meet his commitments due to lack of incentive, lack of ability, or complicated circumstances beyond his control. The erosion of trust is believed to harm both the involved parties. The severity of trust violation depends on the magnitude of the violation, number of prior violations, and the specific dimension of trust that was violated. Notwithstanding the previous contention that trust cannot be repaired once it is violated, we argue that broken trust can be retrieved and that rebuilding trust is a long and arduous journey even if trust violation may seriously damage or irreparably destroy trust. Our argument is based on the assumption that the trustor is willing to or has incentive to reconcile and restore trust on the trustee.

From a psychological perspective, reconciliation occurs when both trustee and trustor exert effort to rebuild a damaged relationship following an incident involving a broken promise and strive to settle the issues that led to the disruption of that relationship (Lewicki and Bunker, 1996). Defined as a deliberate decision by the trustor or victim to surrender feelings of resentment and grant amnesty to the trustee or offender, reconciliation is viewed as a behavioral manifestation of forgiveness (Tomlinson et al, 2004). Furthermore, according to Lewicki and Bunker (1996), it is possible to forgive someone or release him from responsibility for damage he has inflicted without exhibiting a willingness to reconcile the relationship or trust him again in the future. Therefore, we believe that, following a trust violation, if the trustor or victim is willing to reconcile, rebuilding trust in the relationship becomes possible.

While previous literature has tended to demonstrate the factors that influence trust, less attention has been paid to how trust may be rebuilt after trust is breached or violated. Trust violation occurs when the trustor's confident positive expectations of the trustee are disconfirmed. The consequence of the violation is that subsequent trust is eroded and lowered and that it may reduce

the extent to which victims of these violations cooperate with the offender. This reflects the fundamental mechanisms of human psychology known as the asymmetry principle (Slovic, 1997). According to this principle, trust-destroying events are more noticeable, more credible, and carry much greater weight than trust-building events. For this reason, once initiated, distrust tends to reinforce itself. The asymmetry principle makes it more difficult and more costly for the learning party to obtain estimates of trustworthiness. Research within organizations has shown that trust violations stifle mutual support and information sharing, and even exert negative effects on organizational citizenship behaviors, job performance, turnover, and profits.

### Expectation-confirmation Theory

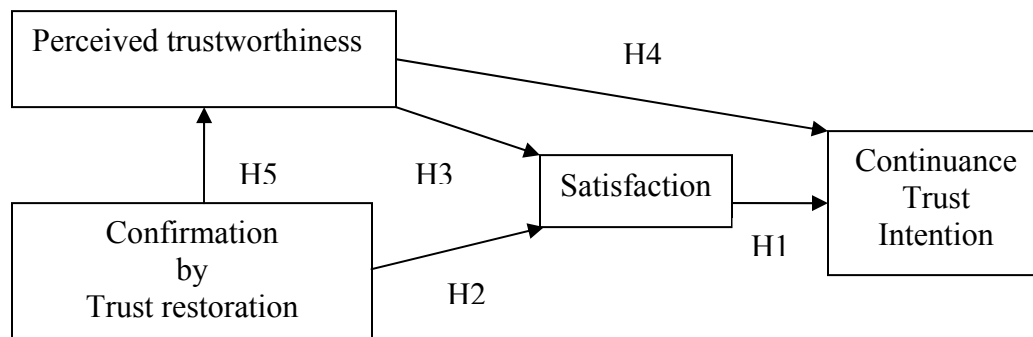
Expectation-confirmation theory describes the process by which consumers reach repurchase intentions (Oliver 1980). It has been used to study consumer satisfaction, post-purchase behavior in consumer behavior literature (Oliver 1980; Oliver 1993; Dabolkar, Shepard et al. 2000). The constructs in the expectation-confirmation theory include expectation, perceived performance, confirmation, satisfaction and repurchase intention. According to the theory, consumers purchase a product or service based on initial expectation on the product or service. Satisfaction is formed if the post-purchase evaluation matches their initial expectation. Satisfied consumers finally lead to repurchase intention but dissatisfied users discontinue the subsequent use.

Satisfaction is the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience (Oliver 1981). In expectation-confirmation theory, satisfaction is the key to forming and maintaining loyal consumers. The level of satisfaction depends on the baseline expectation. A high level of expectation tends to enhance one's satisfaction, while low expectation reduces consequent satisfaction. Pre-purchase expectation can change when consumers had first-hand experience and the post-purchase expectation provides the basis for subsequent behavior (Bhattacharjee 2001).

### Conceptual Development

Consumers' post-violation trust rebuilding in electronic commerce is similar to consumers' repurchase decision-making. Both decisions are influenced by an initial experience and followed by a confirmation experience (product/service use or trust restoring activities). Rational users most likely will go through a decision making process, similar to that in expectation-confirmation theory, prior to making a decision choice. Figure 1 shows the proposed relationships among the constructs and the focus is on the post-violation trust rebuilding.

Figure 1: Research Model





According to expectation-confirmation theory, consumers' continuance trust intention is determined by their satisfaction with prior trust restoration experience after a violation. The relationship between user satisfaction and continuance intention has been confirmed by many information systems researchers (Davis, Bagozzi et al. 1989; Taylor and Todd 1995; Karahanna, Straub et al. 1999). The same contention can be extended to trust rebuilding in B2C electronic commerce. When the post-violation activities fulfill the assuring promises, present action consistent with their policies, or show care and concerns for damages caused by the violation, the consumers are likely to reconcile, accept the remedies, understand it as a temporary condition, and stay in the trusting relationship. Gregg and Scott (2006) found that recent negative feedback posted in an online reputation system can be used to predict future online auction activities. Therefore, the first hypothesis:

H1: Consumers' level of satisfaction with trust restoration activities is positively associated with their continuance trust intention for that online business.

Expectation-confirmation theory holds that consumer satisfaction is determined by perceived website trustworthiness and confirmation of expectation after actual violation. Since the current study focuses on the post-violation trust, the perceived trustworthiness represents the post-violation baseline expectation, against which confirmation is evaluated by consumers to determine their satisfaction. Confirmation implies the realization of the expected remedies assured by the online company, while disconfirmation denotes failure to achieve expectations. This leads to the second hypothesis:

H2: Consumers' extent of confirmation is positively associated with their satisfaction with online business.

The second determinant of satisfaction in the expectation-confirmation theory is expectation of the website's trustworthiness. In B2C e-commerce, companies use signals by trustworthy web merchants to differentiate themselves from untrustworthy ones (Lee, Ang et al. 2005) and add reputation advertising and structural assurance to increase the consumers' expectation of their trustworthiness, showing that their effects did not erode over time (McKnight, Kacmar et al. 2004). The perceived trustworthiness can be a result of cumulated expectation through repeated transactions and probably effective trust restoration activities, which according to Dinev and Hart (2006) can even balance out their personal information disclosure concerns. Customers with high perceived trustworthiness would be more willing to tolerate violations and open to reconciliation and therefore, more satisfied.

H3: Consumers' perceived trustworthiness of online business is positively associated with their satisfaction with online business.

The expectation-confirmation theory posits that expectation influence customer continuance intention. This can be explained by self-perception theory (Bem 1972), which states that individuals continually adjust their perception (e.g., expectation) as they acquire new information about the focal behavior. The adjusted perceptions then provide the basis for subsequent behaviors. In this context, it would be the decision whether to continue the trust with the website. If the violation was very damaging and the consumer experience strong negative cognitive and emotional reactions, and was not willing to accept the trust restoration, the trust cannot be rebuilt.

H4: Consumers' online business continuance intention is positively associated with their perceived trustworthiness of online business.

The association between confirmation and expectation (perceived trustworthiness) holds by the expectation-confirmation theory can be supported by cognitive dissonance theory (Festinger 1957). The theory states that consumers may experience psychological tension if their pre-violation trustworthiness perceptions are disconfirmed by a violation. Confirmation will tend to elevate online businesses' perceived trustworthiness and disconfirmation will reduce such perceptions. Therefore, we propose that:

H5: Consumers' extent of confirmation is positively associated with their perceived trustworthiness of online business.

## METHODOLOGY

### Data Collection

Empirical data for this study will be collected using an online survey of electronic commerce customers. Several online auction sites will be selected to obtain customers information because online auction fraud is the most frequently reported online crime (Gregg and Scott 2006) and it is comparatively easy to access the customer information at the feedback forums.

The sample will consist of 1000 online customers selected from online auction sites. Each customer will receive an email soliciting his/her participation in a survey of online commerce trust rebuilding. The message will outline the purpose of the study and provide a hyperlink to an online survey form. According to recent research output, online surveys have several advantages over traditional paper-based mail surveys, such as lower costs, faster responses, and geographically unrestricted sample (Tan and Teo 2000).

### Instrument Development and Validation

Four constructs will be measured in this study, including perceived trustworthiness, satisfaction, electronic commerce continuance intention, and confirmation. Constructs will be measured using multi-item scales, drawn from existing trust and expectation-confirmation research, and reworded so as to relate specifically to the context of B2C electronic commerce use (See Table 1). Satisfaction items will be based on the seven-point semantic differential scales. All others will use seven-point Likert scales anchored between "strongly disagree" and "strongly agree".

Table 1: Constructs Building

Construct	Operational definition	How measured
Ecommerce continuance intention	Consumers' intention to continue using e-commerce	Mathieson's (1991) behavioral intention scale
Satisfaction	Consumers' feelings about e-commerce	Adapted from Spreng et al.'s (1993) overall satisfaction scale
Perceived trustworthiness	Consumer's perception of the expected trust of e-commerce	(Jarvenpaa, Knoll et al. 1998; Ba and Pavlou 2002; Straub, Hoffman et al. 2002)
Confirmation	Consumers' perception of the congruence between expectation of e-commerce trustworthiness and its actual trust restoring activities	Adapted from Bhattacharjee (2001)

A pre-test and a pilot test would be conducted to validate the instrument. The pre-test would be conducted by administering the questionnaire to IS researchers comprising of doctoral students and faculty. A follow-up interview would be conducted to capture the feedback of the respondents in order to ascertain the content validity of the instrument. The pre-test would be followed by a pilot test that will be conducted with undergraduate students. Necessary changes will be accommodated in order to further refine the instrument.

## DATA ANALYSIS

Partial Least Square (PLS) will be employed to test the hypotheses of the proposed model. The model testing will be preceded by conducting a confirmatory factor analysis to ascertain the construct validity of the measurement scales. Reliabilities of the measures will be analyzed to determine that multiple measures of the constructs are measuring the respective constructs. The results of the analysis will be presented followed by its discussion.

## IMPLICATIONS OF POSSIBLE FINDINGS AND CONCLUSION

As more malicious intruders and online crimes are targeting electronic businesses, understanding how online businesses handle breaches or violations can be of crucial importance for safeguarding and retaining customers. In addition to initial trust-building mechanisms, strategies should also be implemented to rebuild customer trust in an effort to avail businesses with additional surviving mechanisms. In essence, the trust rebuilding approaches may differ from the ones that are used for initial trust building. Kim and Benbasat (2006) found that when dealing with customer complaints, claim plus data backing can better increase consumers' trusting belief. Cumulated internet trust is important to balance out consumer negative concerns (Dinev and Hart 2006). Customers prefer trust-assuring approaches that encompass market driven (reputation advertising, branding and relational marketing etc.) as well as institutional (legal binding) strategies (Pavlou and Gefen 2004). Because trust is not only time-consuming to engender and cultivate, but also fragile and therefore can be easily destroyed. The process of continuous trust development deserves special attention (Siau and Shen 2003) and businesses have to ensure the effect of their trust assuring and rebuilding effects did not erode over time (Mcknight, Kacmar et

al. 2004). These mechanisms engender trust, not only in a few reputable sellers, but also in the entire community of sellers, which contributes to an effective online marketplace.

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# **AN EMPIRICAL STUDY OF THE TRAINING DIMENSION OF TASK-TECHNOLOGY FIT AND THE PERFORMANCE IMPACT OF CUSTOMER RELATIONSHIP MANAGEMENT SYSTEMS**

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## **ABSTRACT**

*Customer relationship management (CRM) is one of the fastest-growing software market industries in the world. According to Gartner, the market for CRM software revenue totaled \$5.7 billion in 2005. Although companies are making huge investments in technology, in practice most customer relationship management efforts fail leaving the companies' management struggling to understand why. In 1995, Goodhue proposed task-technology fit (TTF) as an additional model of IS success. TTF is the measure of the match between the task requirements of the individual, the individual's abilities, and the functionality available in the system. TTF can be conceptualized as the degree that a technology helps individuals perform their portfolio of tasks. TTF is higher when the gap between the task need and the functionality of the technology is reduced. TTF is lower as tasks become more demanding or technologies offer less functionality. This paper examined the relationship between the training dimension of TTF and the performance impact of marketing managers who utilize a commercial CRM system.*

## **INTRODUCTION**

The main goal of *customer relationship management* (CRM) is to create opportunities to “communicate with the right customer, providing the right offer (product and price), through the right channel, at the right time to satisfy the customer's need or desire” (Swift, 2001, p. 14). In essence, CRM is intended to make it easier for customers to do business with the firm (Peppard, 2000).

Information technology (IT) plays a key role in CRM. IT facilitates a comprehensive, unified view of the customer and enables companies to calculate the lifetime value of a customer more easily. IT also allows the integration of a multi-channel capability, supports product customization (Peppard, 2000), enables the company to increase access to the customer, provides greater insight into the customer's wants and needs, facilitates more effective interactions, and integrates all customer channels and back-office functions (Andrews, Bona, Cain, Close, Collins, & Daum, 2004).

## **CRM TECHNOLOGY**

According to Chen and Popovich (2003), CRM is often referred to as an information industry's term for the methodologies, software, and, in general, the Internet capabilities that help a company manage relationships with its customers in a well-organized way. CRM integrates the information from the various systems into a unified view of the customer.

While technology has amplified many companies' ability to become customer-centered (Bose, 2002), in practice most CRM implementations fail (Bull, 2003; Croteau & Li, 2003; Rigby, Reichheld, & Schefter, 2002; Woodcock & Starkey, 2001). As investments in CRM technology

increase, so does the need to understand what might foster the success of these systems. In his 1995 study,

## TASK-TECHNOLOGY FIT

Goodhue and Thompson (1995) posit that in order for technology to actually be used and for it to have a positive impact on a business' performance, it must fit the task needs of the user it supports. Goodhue and Thompson propose the task-technology fit (TTF) model as a perspective focusing on business productivity and efficiency. The task-technology fit model measures the match between the user's needs and the functionality of the information technology (Dishaw & Strong, 1999).

Goodhue (1995) suggests that user evaluations of TTF are a measure of IS success, and his 1995 research supports the notion that users are capable of evaluating the TTF of their systems. If the systems meet the users' needs, the users will provide a more enthusiastic evaluation based on the characteristics of the system. A good fit increases the likelihood of system use and results in a positive performance impact, regardless of the reason the system is used. A higher TTF implies higher performance and is a combination of improved effectiveness, efficiency, and/or quality (Goodhue & Thompson, 1995).

Our study investigated the relationship between the training dimension of TTF and performance impact.

## THE VARIABLES

Performance impact is "the accomplishment of a portfolio of tasks by an individual" (D'Ambra & Wilson, 2004, p. 299) "leading to some mix of improved efficiency, improved effectiveness, and/or higher quality" (Goodhue & Thompson, 1995, p. 218).

The dependent variable in our study is performance impact. Goodhue, Klein and March (2000) stated that when a technology has the specific functionality needed to perform a required set of tasks, better performance should result. Similarly, when an individual has the appropriate knowledge and experience required to use the technology, better performance should result.

User attributes – such as training, computer experience, and motivation – may affect how easy or difficult they find the technology to use, and may also influence how well they use the technology (Goodhue & Thompson, 1995). Training is the degree of instruction available for learning how to use the CRM system and the independent variable presented in this paper.

## RESEARCH QUESTION

Is there a relationship between training and the performance impact of marketing managers who utilize a commercial CRM system?

## HYPOTHESIS

H<sub>10</sub>: There is no relationship or a negative relationship between training and the performance impact of marketing managers who use a commercial CRM system.

H1<sub>a</sub>: There is a positive relationship between training and the performance impact of marketing managers who use a commercial CRM system.

## METHODS AND PROCEDURES

### TTF Instrument

The theoretical framework for this study, task-technology fit and the methodology, are derived from prior validated work by Goodhue (1995,1998) and Goodhue and Thompson (1995). Goodhue (1998) developed the task-technology fit instrument to measure user evaluations of information systems. The instrument is a multi-dimensional measure and each dimension has been validated for internal and external consistency (Goodhue, 1998). Task-technology fit has been successfully measured in prior research in a number of task domains (Ferratt & Vlahos, 1998; Goodhue, 1995,1998; Goodhue & Thompson, 1995; Ioimo, 2000; McCarthy, 2002). We utilized Goodhue's (1998) task-technology fit instrument with and an additional measure for performance impact (D'Ambra & Wilson, 2004). Training was comprised of two questions within the TTF instrument. Performance impact consisted of six questions. No related questions were adjacent.

### Sample

The TTF survey was mailed to 1700 respondents in 1543 organizations. One hundred forty respondents completed and returned the survey. After removing incomplete surveys and those that did not fit the study criteria, the number of useable surveys was 129. The sample consisted of marketing managers in companies that utilize a commercial CRM system to perform their job functions.

### Reliability And Validity

Reliability concerns the extent to which measurements are repeatable (Nunnally & Durham, 1975), or have a relatively high component of true score and relatively low component of random error (Carmines & Zeller, 1979). The reliability of a measure is important because it reflects the internal consistency of the survey questions in an instrument. The reliability coefficient assesses the consistency of the entire scale, with "Cronbach's alpha being the most widely used measure" (Hair, Anderson, Tatham & Black, 1998, p. 118). Cronbach's alpha is a measure of reliability that ranges from 0 to 1. The lower limit of .60 is the generally agreed lower bound of acceptability in exploratory research (Hair et al., 1998). In our study, Cronbach's alpha was well above the lower bound for both variables used in our study. The alpha for training was .80 and .90 for performance impact.

Factor analysis is a generic name given to a class of powerful multivariate statistical methods (Hair et al., 1998). Factor analysis is concerned with exploring the patterns of relationships among a number of variables. These patterns are represented by what are termed principal components or factors. A principal components confirmatory factor analysis was conducted to assess the structure of the individual characteristics, task characteristics and the performance impact subscales. The factor analysis revealed that all performance items loaded strongly on one factor. All items had eigenvalues greater than .50 and over 66 percent of the variance was accounted for by this single factor.

Goodhue (1995) breaks TTF into two categories, individual characteristics, and task characteristics. Training is included in the individual characteristics category. The factor analysis



revealed that all individual characteristic items loaded strongly on one factor. All items had eigenvalues greater than .50. Roughly, 52 percent of the variance was accounted for by this single factor. Finally, factor analysis revealed that all task items loaded strongly on one factor. All items had eigenvalues greater than .50. Roughly, 38 percent of the variance was accounted for by this single factor.

### Analysis

We hypothesized that there is a positive relationship between training and the performance impact of marketing managers who use a commercial CRM system. Correlational analysis revealed a positive correlation between training and performance impact ( $r = .366, p = .00$ ), as training increased, performance increased. A linear regression was conducted to test whether training would predict performance impact (see Table 1). Training explained 13 percent of the total variance in performance impact ( $R^2 = .127, p < .001$ ),  $F(1, 128) = 19.611, p < .01$ . The Null Hypothesis is rejected therefore there is support for Hypothesis 1 that there is a positive relationship between training and the performance impact of marketing managers who use a commercial CRM system.

Table 1 - Hypothesis 1

<b>Regression Coefficients<sup>a</sup></b>				
<b>Variable</b>	<b>B</b>	<b>SEB</b>	<b><math>\beta</math></b>	<b>p</b>
Training	0.252	0.570	0.366	.00*

a. Dependent Variable: Performance Impact

### CONCLUSION

CRM systems are quite complex and require the user to understand how to navigate through the screens to find the data they need, to understand the source of the data elements being presented by the system, and when data is presented in aggregate form, what the data represents. Our results indicate that the better marketing managers are trained (the higher the training), the higher the job performance (performance impact). This should be a consideration for practitioners planning to implement a CRM system and also should be considered as part of the training process for marketing managers new to the CRM system.

All of these needs on the part of the user generally require some mix of training. In addition to gathering the respondents' evaluation of whether or not they received adequate training to use the CRM system, we also asked what type of training they received (formal, mentoring, online tutorial, learned on their own, and other types of training). The satisfaction with training and its relationship to the type of training may be an interesting avenue to pursue in future research.

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# SHARIAH GOVERNANCE IN THE ISLAMIC FINANCIAL INSTITUTIONS IN MALAYSIA

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## ABSTRACT

*Dynamic and good shariah governance is the very essence in the development of Islamic banking and finance sector in Malaysia. Good shariah governance guarantees the dynamicity of Islamic financial growth. In Islamic financial institution shariah governance mostly refers to the management, establishment and affairs of the Shariah Committee. The Shariah Committee who is normally consisting of fiqh scholars, practitioners and academicians has a duty to advise Islamic financial institutions on the shariah compliance in all aspects and its operations. This paper aims at providing a general overview and the recent development on the shariah governance in Islamic financial institution in Malaysia by referring to the Shariah Committee with special emphasize on its legal framework.*

## INTRODUCTION.

Malaysia aspires to transform the country into becoming Islamic banking and finance hub and one of the efforts is through strengthening the shariah governance in the Islamic financial sector. The development of Islamic finance industry strongly needs good shariah governance and thereafter the government imposed statutory conditions for the establishment of the Shariah Committee (hereinafter referred to as “the SC”).

The establishment of the SC is a statutory requirement to all banks and takaful operators which offer Islamic banking and takaful products pursuant to section 3 (5) (b) of the Islamic Banking Act 1983 (IBA 1983) for Islamic banks, section 124 (7) of the Banking and Financial Institution Act 1989 (BAFIA 1989) for Islamic Banking Scheme Banks, section 8 (3) (a) Takaful Act 1984 (TA 1984) for Takaful operators and section 16B of the Central Bank of Malaysia (Amendment) Act 2003 (CBA 2003) for Central Bank of Malaysia.

The main objective of the establishment of the SC is to advise Islamic financial institutions on any shariah matter and also to ensure compliance with the shariah tenets and requirements in their operations. Section 3 (5)(b) of IBA provides that the Central Bank shall not recommend the grant of a license, and the Minister shall not grant a license, unless he is satisfied that there is, in the articles of association of the bank concerned, provision for the establishment of a shariah advisory body. Section 124 (7) of the BAFIA 1989 provides for the establishment of a Shariah Advisory Council to advise the Central Bank on the shariah relating to Islamic banking business or Islamic financial business. Section 8 (3) (a) of the TA 1984 states that a Religious Supervisory Council, whose members would be made up of Muslim religious scholars in the country, shall be established to advise the Company on the operations of its takaful business in order to ensure that they do not involve any element which is not approved by the religion of Islam.

Section 16B (1) of the CBA 2003 provides that the Bank may establish a Shariah Advisory Council which shall be the authority for the ascertainment of Islamic law for the purposes of Islamic banking business, takaful business, Islamic financial business, Islamic development financial business, or any other business which is based on Shariah principles and is supervised and regulated by the Central Bank. Based on those provisions it is understood that the statutory functions of the Shariah advisory body are to advise the Islamic financial institutions on shariah

matters and to ensure that their operations do not involve any element, which is not approved by the religion of Islam.

## THE DEVELOPMENT OF SHARIAH GOVERNANCE IN ISLAMIC FINANCIAL INSTITUTION

Dynamic and good shariah governance is very important. The ultimate purpose of the establishment of the SC in Islamic financial institutions is to ensure shariah compliance to its operations and products. All banks and takaful operators must have provision regarding the establishment of SC in their Articles of Association and Memorandum of Association.

The term shariah committee or shariah advisory body or shariah advisory council has been used interchangeably for the past 21 years. IBA 1983 (refer to section 3 (5) (b)) used the term shariah advisory body while BAFIA 1984 (refer to section 124 (3)) used the term shariah advisory council. The term shariah committee has been introduced by Central Bank of Malaysia (CBM) in section 3 of the Guidelines and Procedures for Shariah Committee (BNM/GPS1) issued in December 2004. With the issuance of this Guidelines and Procedures all shariah advisory council of Islamic financial institutions and Takaful operators will be recognized as Shariah Committee and the term National Shariah Advisory Council (hereinafter referred to as "the SAC") will be used by CBM.

The first Shariah Committee was set up in 1983 by Bank Islam Malaysia Berhad (BIMB). BIMB started its operations as Malaysia's first Islamic bank on 1<sup>st</sup> July 1983, set up with an initial authorized capital of RM600 million and a paid-up capital of RM 79.9 million. The bank has gradually increased its authorized and paid-up capital to RM 2 billion and RM 563 million respectively, to accommodate the growth of its assets and to better position itself in meeting future expansion and growth (<http://www.bankislam.biz>).

After 10 years, on 4<sup>th</sup> March 1993, CBM introduced a scheme known as "*Skim Perbankan Tanpa Faedah*" (Interest-free Banking Scheme) in which conventional banks may offer Islamic banking products through its windows (Ahmad Ibrahim 1997: 23). With that policy, many conventional banks set up their Islamic windows and at the same time they appointed selected Muslim scholars to be members of shariah committee. On 1<sup>st</sup> October 1999, a second Islamic bank, namely Bank Muamalat Malaysia Berhad (BMMB) commenced operations. The establishment of BMMB was the effect of the spin-off following the merger between Bank Bumiputra Malaysia Berhad (BBMB) and Bank of Commerce (Malaysia) Berhad (Nik Norzrul Thani 2001: 147).

As part of the effort to streamline and harmonize the Shariah interpretations among banks and takaful companies, National Shariah Advisory Council of CBM was established on 1<sup>st</sup> May 1997 under BAFIA 1984. This Council is the highest Shariah authority on Islamic banking and takaful in Malaysia (<http://www.bnm.gov.my>).

It is important to note that the SC's duties and responsibilities with other *fatwa* institution such as the National Fatwa Committee and the State Fatwa Committee differ in several aspects. In selecting the subject matter of *fatwa*, the latter is subject to three occurrences for example in section 34 of the Administration of Islamic Law (Federal Territories) Act 1993 provided that fatwa will be issued if it is ordered by the Yang Dipertuan Agong (YDPA) or if it is upon the request of the general public or on accord of the Mufti himself. The scope of *fatwa* is general and wide and limited to the inquiries of the ruler or the public. Furthermore, any *fatwa* issued will only bind the state if it is gazzeted.

The SC on the other hand has a rather active approach in selecting the subject matter of any issue and its decision will be considered as the SC resolution rather than naming it as a *fatwa*. The SC

has to scrutinize the *shariah* principles, evaluating product features and in many instances they have to suggest for alternatives. The nature of studying and analyzing the fiqh in the Islamic finance industry is also technical, complicated and in depth. In addition, the SC will only issue resolution based on the inquiries and needs of its respective Islamic financial institutions and not from the public at large.

## DUTIES AND RESPONSIBILITIES OF THE SC.

The primary objectives of the establishment of the SC are to advise Islamic financial institutions in its operation, to analyse and evaluate Shariah aspects of new products/schemes submitted by the respective banking institutions or takaful companies. In general, we can sum up the main duties and responsibilities of the SC as follows:

### Concept and Structure of the Products

The SC will evaluate the concept and structure of the new product and will review the existing products. Islamic banking products can be classified into Deposit, Financing, Treasury/Money Market Investment, Trade Financing, Card Services and Banking Services (<http://www.bnm.gov.my>).

Islamic banking products can be under the various concepts such as *Uqud Tamlikat* (contract of ownership) or *uqud al-Mua'wadhat* (exchange), *Uqud Isytirak* (contract of partnership) either *mudharabah* (passive partnership) or *musyarakah* (active partnership), *Uqud Tawsiqat* (contract of security) either *Kafalah* (suretyship) or *Rahnu* (pledge), *Uqud Ilaqat* (contract pertaining to do a work) either *wakalah* (agency), or *hiwalah* (debt transfer), *Uqud Taqiydat* (contract of restriction) and *Uqud Hifz* (contract of safe custody) or *wadiah* (safekeeping, *Isqatat* (waiver), *ibra'* (rebate), *muqasah* (off-set of the debt), *will* (*wasiyyat*), *endowment* (*fund*) and loan (*al-qard*) (Wahbah al-Zuhaili 2002: 246-247).

For instance, home financing is under the concept of *Bay' Bithaman Ajil*, credit card under the concept of *Bay' Inah*, project financing under the concept *Bay' Istisna'*, *Letter of credit* under the concept of *Bay' Ad-dayn* and machinery financing under the concept of *Bay' Murabahah*. From observation, Islamic banking products under the concept of “*al-Bay'*” or contract of exchange classified under *Uqud Tamlikat* are the biggest contributor in terms of growth and profit to the Islamic financial institutions in Malaysia.

### Documentation

Not only the concept of the product must be Islamic, but its documentations as well. The SC will vet meticulously and endorse all documents involved and these include the terms and conditions contained in the proposal form, contract, and agreement or other legal documentation used in executing the transactions; and the product manual, marketing advertisements, sales illustrations and brochures used to describe the product.

They will review the documents and will give their comments in order to ensure the compliances to the Shariah principle. Section 20 (b) and (c) of BNM/GPS 1 expected the SC to endorse and validate all relevant documentations and this includes the term and condition, the product manual, marketing advertisement, sales illustration and brochures used to describe the product.

Each Islamic financial institution has their own structure of the documentations and it varies according to the products. The SC may give advice to its respective banks whether the documents

is in accordance with the shariah principles and they may reject the documents which is contrary to Islamic law or require the banks to do some amendments so as to meet the shariah principles. For instance, home financing product under the concept of *Bay Bithaman Ajil*. Home Financing-i is a contract of deferred payment sale at an agreed selling price, which includes a profit margin agreed by both parties. Profit in this context is justified since it is derived from the buying and selling transaction as opposed to interests accruing from the principal lent out. The documents involved in this type of financing are the Letter of Offer, Property Purchase Agreement and Property Sale Agreement. The SC of the Islamic financial institutions in Malaysia accepts that such documents evidenced a valid sale and purchase transaction. If they found that the documents against the Islamic law, the Islamic financial institutions would have to do the amendment, modification and addition based on the advice and comments given by the SC.

### Business Operations

The SC will monitor the Islamic banking operations from time to time. Section 20 (a) of BNM/GPS 1 provides that they shall advise the bank on shariah matters in order to ensure that the business operations of the Islamic financial institutions comply with shariah principles at all times. It includes the procedures for transaction, actual business operations, and system applicable to the banking operations. If the Bank intends to introduce new information system to all its products, they need to clarify with the SC for the determination of the system so as to comply with the shariah requirements.

For example, we may refer to the issue of securitization on the sale and purchase of vehicles (Mohamad Nazri Chik and Nasruddin Yaakub 2004: 112). BIMB requires the customer to charge his vehicles to BIMB as a security so that in the case of default payment, BIMB may repossess that vehicle. This is based on the view of *madzhab Syafii* upon hadith of Prophet SAW whereby the prophet allowed the companion to ride the animal and to take its milk which is charged to him. The SC follows that opinion and therefore it is permissible for the bank to impose condition to their customer so that the car will be a collateral security for the vehicle financing offered to him.

### To Advice Related Parties on Shariah Matter Upon Request

The related parties of Islamic financial institution such as its legal counsel, auditor or consultant, branches or even customer may seek advice on Shariah matters from the SC. Section 20 (d) and (e) of BNM/GPS 1 states that the SC is expected to provide opinion to them so that compliance with Shariah principles can be assured completely. However, practically Shariah secretariat is actually providing the opinion by doing a short research if it involves simple issue and need quick deliberation. The Shariah secretariat will refer to the SC for deliberation in complicated issues which need depth study on the subject. Sometime the SC may advise Islamic financial institution to consult the SAC of CBM on any Shariah matters which have not been resolved or endorsed by the SAC yet.

### To Provide Written Shariah Opinion.

Section 20 (f) of BNM/GPS 1 requires the SC to record any opinion given. In particular, the Committee through its secretariat shall prepare written Shariah opinions where Islamic financial institution make reference to the SAC for advice; or where Islamic financial institution submits applications to Central Bank Malaysia for new product approval. This written shariah opinion shall consist of issues, product structures and features, the SC's opinion together with their reasoning from sources of Islamic law.

### To Endorse Shariah Compliance Manuals

Islamic financial institution shall have a Shariah Compliance Manual. The manual shall be regarded as a standard operational procedure for shariah governance of Islamic financial institutions. Section 20 (b) of BNM/GPS 1 states that the manual will specify the manner in which a submission or request for advice be made to the SC, the conduct of the SC's meeting and the manner of compliance with any Shariah decision. Shariah secretariat will prepare the manual in accordance with the policy and procedures of respective Islamic financial institutions and it will be endorsed by the SC.

### To assist the SAC of CBM on Reference for Advice.

Section 20 (e) of BNM/GPS 1 requires the SC to assist the SAC of CBM on any matters referred by Islamic financial institution. If any institution refers the SAC of CBM on certain products and fiqh issues, the SC must explain the shariah issues involved upfront and they have to provide recommendations for a decision. The explanation and recommendation must be supported by relevant shariah jurisprudential literature from the recognized sources. The SC has a duty to ensure that all SAC's decisions that being referred to be properly implemented by Islamic financial institution.

### General Tasks and Duties

Beside, the SC also will deal with certain general duties and tasks relevant to their job scope and this includes to assist the related parties on shariah matter and to determine the *zakah* policy of the banks. Some Islamic banks pay *zakah* for their depositors and some bank requires their depositors to pay *zakah* by themselves. It depends on the SC's approach to the policy of *zakah*.

As an illustration, we may look into BIMB's policy of *zakah* (Mohd Nazri Chik and Nasrudin 2004: 108). The SC of BIMB will revise the policy of distribution of *zakah* and approve the amount of *zakah* including *zakah asnaf* that should be paid by the bank. BIMB paid *zakah* on behalf of all their depositors. This policy actually was adopted from the practice of Faisal Islamic Bank Egypt. BIMB pays *zakah* for all their depositors based on the concept of *Syahsiah I'tibariyah* or body corporate or company.

The SC sometimes is invited to attend shariah dialogue or to present a paper in a seminar or conference representing their respective institutions at national and international level. This is good practice whereby the SC may have contributions in the development of Islamic products particularly to shariah matter. They will get an opportunity to exchange ideas amongst the scholars and practitioners and also to share experiences of other countries.

### Procedures for Approval of the Islamic Finance Products before the SC.

Every Islamic financial institution has its own procedures for the SC. There are no standard guidelines for the SC whether to the aspects of management, products approval and etc. The practice is that there will be Shariah Secretariat to organize and handle the shariah matter. The Shariah Officer in the secretariat will compile and collect any document and issue involved, which are to be presented during the SC meeting.

In term of procedures, the SC will normally have a meeting once or twice a month depending on the issues involve in the respective Islamic financial institutions. It will take about 3-4 hours per meeting. The SC meeting will be attended by chief executive officer, head of product department,



legal officer, lawyers, representative from branches and it depends on the issue involved either operational or product matters.

During the meeting they will discuss specifically on the concept and structure of new and existing products, documentations, and implementation and banking operations. The SC will receive all relevant documents from respective Islamic financial institutions at least one week before the date of the meeting to give sufficient time to the SC members to peruse the documents. Shariah officer and the findings will record all minutes of the meeting or resolutions and it will be compiled and distributed to relevant parties in the banks. Sometimes the SC is unable to come up with a decision during the meeting. It may take 2-4 weeks for deliberation. The delay for a decision is due to among others cross-checking with CBM or Securities Commission's Shariah Advisory Council.

It is observed that majority of the SC members are academicians and most of them are involved in administrative tasks at their institutions. There were comments from some Islamic financial institutions on the performance of the SC especially in the aspects of time, research, difficulties in understanding operational matters and so on. However, majority of the SC members are able to analyze issues and provide very concrete reasons on discussing certain issues. From observation, it is submitted that the SC members must be scholars who have high value propositions on Shariah and law, economic knowledge, critical thinking, able to provide alternative solutions and also proficient in English and Arabic.

## LEGAL FRAMEWORK'S DEVELOPMENT

In Malaysia, separate Islamic legislation and banking regulations exist side-by-side with those of the conventional banking system. Islamic banking and finance is put under Federal List of Federal Constitution since it refers to commercial dealings although it actually falls under the purview of Islamic law. Thus, it is under the power of the parliament to pass any law governing the Islamic financial institutions and takaful operators.

The decision to establish Islamic banking in the country is a result of the Muslim demands to have a sound banking and financial system which is in accordance with the Shariah. A steering committee was formed by the government in 1981 to study the establishment of an Islamic bank in Malaysia (Nik Norzrul Thani 2001: 144).

The legal basis for the establishment of Islamic banks is the IBA which came into effect on 7<sup>th</sup> April 1983. The IBA provides CBM with powers to supervise and regulate Islamic banks, similar to the case of other licensed banks. However, looking at IBA that has 60 sections and divided into 8 parts, it is obviously very brief. True as it is, the Act is rather regulatory than substantive in nature. The IBA is general, non-exhaustive and non-comprehensive (Norhashimah Yasin 2002:6). The concept of takaful was first introduced in Malaysia in 1985 when the first takaful operator was established to fulfill the need of the general public to be protected based on the Islamic principles. The legal basis for the establishment of takaful operators is the TA which came into effect in 1984. Similar to IBA 1983, TA 1984 is also brief and regulatory as compared to its counterpart, the Insurance Act 1996. The Act does not explain the management and operational aspect of the takaful industry. This is evidenced in its interpretation of section 2 which explains the meaning of takaful merely as a takaful business which has no element contrary to the Shariah. Takaful operations are regulated and supervised by CBM since 1988 with the appointment of the Governor of CBM as the Director-General of Takaful.

As regard to the SC's governance, Central Bank Malaysia has issued BNM/GPS 1 that regulates the governance of Shariah Committee of an Islamic financial institution. This guideline consists of 10 parts with 24 sections and one appendix. The contents include objectives, scope of application, establishment of the SC, membership, restrictions, duties and responsibilities of the SC and Islamic financial institutions, reporting structure, effective date and secretariat of the SAC CBM. Islamic financial institutions have to comply with the guideline by 1<sup>st</sup> April 2005 (Section 23) and the dateline has been extended to a development financial institution prescribed under the Development Financial Institutions Act 2002 (DFIA) which carries on Islamic Banking Scheme to 1<sup>st</sup> September 2005.

As for the appointment of the SC members, section 8 provides that they will be appointed by the board of directors of an Islamic financial institution upon recommendation of its nomination committee. The appointment shall obtain prior written approval of CBM and the term of appointment shall be valid for a renewable term of two years. Part V section 10-13 mentions the qualifications to be the SC members. A member of a Shariah Committee shall be an individual and the proposed member of the Shariah Committee shall at least either have qualification or possess necessary knowledge, expertise or experience in Islamic jurisprudence (*Usul al-Fiqh*); or Islamic transaction/commercial law (*Fiqh al-Mu'amalat*).

The objective of BNM/GPS 1 is to set out the rules, regulations and procedures in the establishment of the SC, to define its role, scope of duties and responsibilities and to define relationship and working arrangement between the SC and the SAC of CBM. It is also hoped this guideline may solve the issue of clashes of opinion amongst the SC of various Islamic financial institution that may cause confusion to the general public. There are two main branches of schools in Islamic jurisprudence, namely the Sunni branch and the *Shiah* branch and within the Sunni there are four other *madhahib*, the *Shafii*, the *Hanafi*, the *Maliki* and the *Hanbali* schools. These *madhahib* varied on many aspects of the Islamic law. At this point, the guidelines provides that the SAC has the authority to decide which view it sees best on any issue on Islamic finance either it is in line with the principles of Shariah or not.

In Malaysia, cases on Islamic banking and takaful is under the jurisdiction of the civil courts. This due to the fact that Islamic banking and takaful is considered as under the item 'finance' provided in First List, 9<sup>th</sup> Schedule of the Federal Constitution. The issue here is the vulnerable position of Islamic finance principles, whether the SC's resolution on certain matter could be defended as one of law which has legal standing. In fact, the judges in civil courts face difficulties to understand certain concepts and terms of Islamic finance.

As a matter of fact, CBM with a cooperation of judicial body has agreed to set up a special High Court in the Commercial Division known as the Muamalah bench. According to Practice Direction No.1/2003, paragraph 2, all cases under the code 22A filed in the High Court of Malaya will be registered and heard in the High Court Commercial Division 4 and this special High Court will only hear cases on Islamic banking. Below is the statistic of cases under Code 22A from the Chief Registrar of the Federal Court's Office.

Table 1: Muamalat Cases Registered in the High Court from 2003-2005.

Cases Registered from 1.3.2003 – 1.12.2005	Settled Cases from 1.3.2003-1.12.2005	Balance of Cases up to 1.12.2005	Percentage of Settled Cases from 1.3.2003 – 1.12.2005
656	497	388	75.7% $(\frac{497 \times 100}{656})$

From the statistic, it shows that more than 75% out of 656 cases has been settled by the court from year 2003 to 2005. It is also observed that majority of the cases on Islamic finance are concerning defaulters of facilities payment and not to challenge the decisions of the SC. For instance in the case of Bank Islam Malaysia Berhad v. Adnan Omar [1994] 3 CLJ 735; [1994] 3 AMR 44 and Dato' Nik Mahmud Bin Daud v. Bank Islam Malaysia Berhad [1996] 4 MLJ 295, both cases refer to the issues pertaining to the default payment by the customer. The recent case in the High Court of Kuala Lumpur between Affin Bank Berhad vs Zulkifli Abdullah [2006] 1 CLJ 447 also discusses the same issue. In this case, Justice Datuk Abdul Wahab Patail ordered the house that has been purchased through scheme of *al-bai bithaman ajil* to be auctioned under the National Land Code to recover over RM582, 000 sought by the bank. Affin Bank Berhad had sued Zulkifli Abdullah, for defaulting on the payment of the facility given out by the bank in December 1997 for a double-storey corner link house.

Apart from the above development, in providing effective shariah governance amongst the SC of various Islamic financial institutions, the parliament has amended section 16B of the CBA 2003 whereby the National Shariah Advisory Council will be the sole authorities to be referred by the civil courts pertaining to Islamic banking and finance. Section 16B (1) of the CBA 2003 provides that the Bank may establish an Advisory Council which shall be the authority for the ascertainment of Islamic law for the purposes of Islamic banking business, takaful business, Islamic financial business, Islamic development financial business, or any other business which is based on principles and is supervised and regulated by the CBM. The effect of this amendment is expectedly to ensure that any deliberation of the SAC will bind the court and should be followed by all Islamic financial institutions in Malaysia.

## CONCLUSION

As a conclusion therefore, effective shariah governance framework requires involvement of the Shariah Committee as the key player, the government as the regulatory body, the Islamic financial institutions as the implementer and also to other persons relevant to the business such as auditors, accountants and lawyers.

The SC plays very important role in ensuring good shariah governance. The role of the SC is to include advising board of directors on shariah matters to ensure that the operations comply with shariah principles at all time, endorsing and validating relevant documentations pertaining to the products and services, as well as the internal policies and manuals and marketing advertisements, assisting related parties, advising on any shariah matters arising before referring the same to the SAC, assisting the SAC on reference for advice and ensuring all its decisions are properly implemented.

The recent development on setting up a special High Court in the Commercial Division or the Muamalah bench and also the amendment of section 16B of the CBA 2003 shows positive indication by the government in providing more comprehensive and effective shariah governance in Islamic finance sector. The muamalat bench in the High Court provides special focus by the respective judges on the disputes on Islamic finance and it also can be considered as an approach of harmonizing the civil and Islamic law in Malaysia. Shariah governance is unique to Islamic system of financial management. It can be considered as vital corporate governance for Islamic financial institutions. Good shariah governance assures a tremendous growth of the Islamic banking and finance industry.

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# **THE BEHAVIOUR OF IMPLIED VOLATILITY SURFACE: EVIDENCE FROM CRUDE OIL FUTURES OPTIONS**

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## **ABSTRACT**

*In this paper, I investigate Implied Volatility Surface patterns for Call options on crude oil futures. Instead of studying the power of the large number of explanatory factors inherent to oil markets, I focus on the common characteristics of option prices. By using quadratic Implied Volatility Functions (IVFs), I aim to establish a mapping from implied volatilities to option's intrinsic characteristics i.e. moneyness and time to expiration and to test the capacity of these functions to provide a good forecast of option prices. I found that the profile of crude oil implied volatility is too complex to be fully explained by IVFs. The main contribution of the paper is to perform an econometric explanatory analysis on a high volatile market, the petroleum market.*

# **TIMING AND STRATEGY OF NEW PRODUCT DEVELOPMENT FOR LATECOMERS IN THE DYNAMIC ENVIRONMENT- THE CASE OF IC DESIGN HOUSES IN TAIWAN**

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## **ABSTRACT**

*This study explores the enter timing and strategy of new product development in Taiwanese IC design houses, and contends that if IC design houses in latecomer countries can utilize their existing competitive advantage from industrial clusters to develop import substitution, then these firms will be more successful in new product development. Under capability constraints, IC design houses in latecomer countries initially tend to develop more mature products. Technological complexity and entry timing are important influences on profitability. Taiwanese IC design houses face different strategic choices for new product development: which period of technology life cycle, what stage of product life cycle, and what kind strategy of the technological strategy. The appropriate timing and strategy could make latecomers such as Taiwanese survival prospects.*

## **INTRODUCTION**

Information electronics is a key industry for the economic growth of Taiwan, and Taiwan has also established a very complete industrial cluster, from downstream information hardware to upstream IC (integrated circuit) foundry and design. According to ITIS statistic index, Taiwanese IC market share reached to 28.7% in 2003 and 42% in 2004. Taiwanese IC design houses have ranked second only to the USA for many years, demonstrating that Taiwan IC design houses have established a competitive advantage over the rest of the world. Taiwanese IC design houses have average gross profit of 30-40% in 2003, significantly exceeding other segments of the IC industry. However, owing to the lack of technological resources and product ideas in Taiwan compared with America, and given the typically short product life cycle, and the industry emphasis on technology, speed, flexibility, and innovation, correct new product development strategy is the key for the survival of Taiwanese firms in the rapidly changing IC design industry.

## **THEORETICAL BACKGROUND**

### **Industrial Cluster and Import Substitution**

Geographically close and operationally related firms and institutions shape industrial clusters based on commonality and complementation. Establishing industrial clusters requires long development. Consequently, latecomer countries or areas have difficulty in establishing similar clusters through imitation (porter, 1990). The division of labor within the Taiwanese electronics industry, existing since the 1970s, originally developed around the geographic industry cluster. The development history of the Taiwanese information electronics industry followed the traditional electronics industry supported the information hardware industry. Subsequently, the information hardware industry came to support the semiconductor manufacturing industry. Finally, the semiconductor manufacturing industry came to support the IC design sector (Yang and Cheng, 1996; Fuller et al., 2003). The industry cluster was involved in every facet of the

business, from IC design to chip fabrication, testing and assembly, and the utilization of chips in system products (Hung and Yang, 2003). Thus, the IC design sector, supported by a complete semiconductor manufacturing cluster, is developing chips according to a pattern of import substitution for downstream system manufacturers (Shih, 2001).

### Technological Complexity

The IC design industry is based on a high degree of strong technological competition, and relies heavily on modules to accelerate new product development. Product ideas that require no support from complex technologies are readily copied, meaning that any competitive advantage is easily eroded (Tsai, 2001).

### Technology Life Cycle

Technology Life Cycle (TLC) describes the different stages of technological progress. The Industry Life Cycle is consisted by Technology Life Cycle. Therefore the industrial characteristics are related to the technological characteristics. (Khalil, 2000).

Taiwanese IC design houses currently lack the capability to enter markets in the technological embryonic period, and most Taiwanese IC design houses enter markets during the growth to mature periods of TLC.

### Product Life Cycle

Product Life Cycle (PLC), like TLC, describes the idea that product sales experience various stages, including the embryonic, growth, maturity, and decline stages (Kotler, 1994)

#### Technology Life Cycle & Product Life Cycle

TLC comprises different PLCs (Howar, 1977; Afuah, 1998; Khalil, 2000). Firms may enter markets during the growth period of TLC, and yet provide a mature or low end product during the PLC. Alternatively, firms may enter a market during the mature period of TLC, and yet provide growth or high end products during the PLC. Therefore, firms face two separate decisions regarding entry timing of TCL and PLC.

### Technological Strategy

From the view of Maidique and Patch (1978), the technological strategy of a business has two perspectives: one is technological life cycle (TLC); another one is product life cycle (PLC). Product technology strategy is based on the competitive characteristics of products on PLC, including First-to-Market, Fast Follower, Cost Minimization and Market Segmentation.

Given the capability constraints of IC design houses in latecomer firms, firms initially generally only adopt Cost Minimization or Segmentation-Market product strategies to develop more mature or niche products. After gradually developing their competence, such firms may have the capability and intention to devise a Fast Follower product strategy. Thus latecomer firms, such as the IC design houses of Taiwan, initially have little choice in their product technology strategy of Maidique and Patch.

## METHOD AND DATA COLLECTION

The case study was developed through various sources of archival data. The configuration from the theoretical research and the secondary data in the form of databases explains the timing and strategy of new product development strategy for IC design houses in Taiwan. Then data collection was concluded when saturation was reached in order to obtain the information for the



study. Since new product development is confidential in the short PLC and intensely competitive environment of the IC design industry, accessing related data is difficult.

## RESEARCH CONCLUSIONS

Latecomers in IC design house, newly developed products need to enter the mature stage of PLC  
Latecomers in IC design house, newly developed products need to enter the growth period or mature period of TLC.

Latecomers in IC design house, when the entering time of the firm is in the early period of TLC, will utilize long-term internal developing R&D strategy.

Latecomers in IC design house, when the entering time of the firm is in the early period of TLC, will use import substitutive marketing strategy.

Latecomers in IC design house, when the entering time of the firm is in the early period of TLC, will use a long-term and stable financial strategy.

Latecomers in IC design house, when the entering time of the firm is in the later period of TLC, will use external control and technology to develop integrated products.

Latecomers in IC design house, when the entering time of the firm is in the later period of TLC, will use merging technology to obtain the customers.

Latecomers in IC design house, when the entering time of the firm is in the later period of TLC, will use sums in short-term financial strategy.

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# INTRA-INDUSTRY TRADE BETWEEN THE UNITED STATES AND LATIN AMERICAN COUNTRIES

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## ABSTRACT

*This paper aims to explain the extent of vertical and horizontal intra-industry trade (IIT) in United State's foreign trade with 20 Latin American countries. It also attempts to identify the country- and industry-specific determinants of vertical and horizontal IIT. Trade patterns are identified by breaking up total trade into three trade types: one-way trade (i.e. inter-industry trade), two-way trade (i.e. intra-industry trade) in horizontally differentiated products, and two-way trade in vertically differentiated products. This study uses detailed trade data at the 10-digit Harmonized System (HS) industry level and covers a longer and more recent period, 1990 through 2005. The Grubel-Lloyd intra-industry trade index is used to calculate the intensity of these two types of intra-industry trade.*

*One of the main findings is that, with the exception of Mexico, the U.S. trade patterns with rest of Latin American countries are dominated by one-way trade. Another main finding is that the observed increase in intra-industry trade between the United States and Latin America is almost entirely due to two-way trade in vertical differentiation. The third important finding is that, among the country-specific determinants, the level of per capita income and trade intensity are found to affect the shares of all three types of IIT positively while difference in per capita income, difference in economic size, distance, difference in factor endowment, and trade imbalances are found to affect the share of all three types of IIT negatively. Finally, among the industry-specific variables, product differentiation, vertical product differentiation, industry size, and product quality differences are found to have a positive effect while industry concentration is found to have a negative and statistically significant effect on all three types of IIT share.*

# **DIVIDEND POLICY AND SECURITY PRICE BEHAVIOR IN EMERGING FINANCIAL MARKETS: EVIDENCE FROM BANGLADESH**

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## **ABSTRACT**

*Few studies have examined dividend policy and security price behavior in emerging markets and there have been no studies in regards to the Bangladesh Stock Market. The primary purpose of this study is to identify the effect of dividend policy on stock price behaviour in the emerging market of Bangladesh. Partial adjustments are made to dividend behavior models that are then tested on the Dhaka Stock Exchange using data over the period of 1988-2003 in order to identify the dividend policy and behavior of the emerging Bangladesh Stock Market. The empirical results suggest that Brittain's (1966) dividend behavior model offers satisfactory explanation of dividend behavior of the listed companies on the Dhaka Stock Exchange. However, the empirical results also suggest that dividend decisions are primarily governed by current profitability for measuring the capacity of the companies to pay dividends as well as dividends paid in the previous years, i.e., lagged dividends. Moreover, the empirical results identified cash flow as the better measure of the company's ability to pay dividends.*

## **BIOGRAPHY**

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# BELARUSIAN ECONOMICS: INVESTMENT POSSIBILITIES

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## ABSTRACT

*The priority of the state economic policy of Belarus is creation of a favorable investment climate for attraction and effective use of foreign investments. The Republic of Belarus is the only country among the CIS states which adopted the Investment Code – the fundamental document regulating foreign investments on the territory of the country. The state guarantees stability of the rights of subjects of investment activities. In order to attract foreign investors measures concerning improvement of relevant legislation, institutional and structural reforms, and state protection of foreign investors are being carried out. Commercial organizations involving foreign capital have certain advantages compared to national economic entities. Six Free Economic zones have been established in Belarus, where favorable economic conditions are provided through fiscal and customs preferences. Belarus has positive experience with foreign companies in implementing large and medium investment projects.*

## INTRODUCTION

Inflow of foreign portfolio investments in the Belarusian economy increases from year to year. This fact is confirmed by positive change in the amount of securities issued by the Belarusian joint stock companies and distributed outside the territory of the Republic of Belarus. Totally, over 40 billion of securities of 600 Belarusian issuers were distributed to foreign investors from 40 countries for the period from January 1, 1997 to April 1, 2006.

## INVESTMENT CONDITIONS IN THE REPUBLIC OF BELARUS

Belarus offers potential investors such advantages as favorable geographic position in the center of Europe, auspicious natural and climatic conditions, political and social stability, macroeconomic stabilization, a qualified and relatively inexpensive labor force, high scientific, technical and industrial potential, capacious domestic market, legal and organizational framework stimulating investment process.

The Republic of Belarus is at the crossroads of main rail and motor routes, oil, gas and product pipelines, communications systems between Western Europe and Russian regions as well as Asian countries. Belarus can therefore become a base for foreign investors seeking to acquire promising new markets in CIS countries. The economic situation in the country is characterized by a stable inflation level, predictability of exchange rates, availability of tax and customs advantages for foreign investors, growth of export potential, developed banking system, burgeoning market of financial and insurance services.

Highly developed scientific and research facilities make it possible to conduct fundamental and applied research and development. About 300 scientific organizations work in Belarus. Over 30 thousand people are engaged in scientific research and development, including 805 Doctors of Science and 3400 Candidates of Science. The activities of Belarusian scientists in the fields of laser and nuclear physics, nuclear technology, powder metallurgy, optics, software tools, biotechnology have received world recognition.

There are facilities for manufacturing goods and services that are competitive on domestic and foreign markets in Belarus. Belarus specializes in production of machinery, chemical, petrochemical, light industries, livestock breeding, flax production and potato farming. Belarus exports over 90% of its automobiles and tractors, about 90% of television sets and potash fertilizers, and about 80% of machine-tools.

Belarus is a part of a common customs area with Russia. For a potential investor investing in Belarusian economy he offers access not only to the Belarusian territory, but also to a very capacious Russian market. Conducive to the expansion of investment opportunities are the positive dynamics of negotiation process on the accession of Belarus to the World Trade Organization, improvement of relations with international financial organizations (International Monetary Fund, International Financial Corporation, and European Bank of Reconstruction and Development).

Six Free Economic zones have been established in Belarus, where favorable economic conditions are provided through fiscal and customs preferences. Income tax and value-added tax for the residents of Free Economic Zones are two times lower than elsewhere in the country. The income of the residents of Free Economic Zones for their own production is tax exempt for 5 years from the moment of the declaration of the income.

The Republic of Belarus is the only country among the CIS states which adopted the Investment Code – the fundamental document regulating not only domestic, but also foreign investments on the territory of the country. The Investment Code protects property rights of foreign investors, secures for them business environment as favorable as for national producers, as well as sets for them special stimulating advantages in fiscal, customs and currency areas.

The Coordination Council on Foreign Investments headed by the Prime Minister has been active in Belarus. This body develops major objectives and measures to improve the investment climate in the country and also assists foreign investors in solving problems related to their activities in Belarus. The Standing Committee and working groups set up under the Council are perfecting investment legislation, developing free economic areas, improving tax and customs conditions of activities at the Belarusian market, etc.

The Council includes from the Belarusian side: the prime minister of the Republic of Belarus (chairperson), the first deputy prime minister, representatives of the Presidential Administration, the National Assembly and other key Belarusian ministries and departments. The secretariat of the Coordination Council on Foreign Investments is the Ministry of Foreign Affairs.

Foreign members of the Coordination Council on Foreign Investments include: international organizations and large foreign investors operating in Belarus: the International Financial Corporation, Representation of the UNDP in Belarus, the German Economic Club, Ernst and Young, Slavneft, Coca Cola, MacDonald's, SJS, Maersk Medical, Bacco Bisov Svenska, Impek, Karl Zeis Stiftung, and Stots Agro-service.

By decision of the Government, foreign investors set up within the Council the working groups on the following lines: formation of a favorable investment image of Belarus abroad; financial and tax policy, reform of the Belarusian accountancy system; improvement of customs procedures and of the legislation on foreign investments. Foreign investors actively supported the initiative of the Ministry of Foreign Affairs and held several meetings of the working groups; the

results will help to present to the Government proposals on how to improve conditions of work for foreign investors in Belarus and a plan of their practical implementation.

Governmental institutions are working on the realization of the National Program on Attracting Investments to the Economy of the Republic of Belarus until 2010, adopted in 2001. Along with development of the Belarusian investment potential, the Program has provisions for further improvement of frame conditions (financial, political and social, as well as in the fields of administration, management), which would secure the increase of foreign investments.

## PRIVILEGES AND GUARANTEES FOR FOREIGN INVESTORS

Foreign investors in Belarus enjoy equal treatment with local ones under the Investment Code of the Republic of Belarus which was adopted in 2001 and replaced the Foreign Investment Law of 1991. The Government guarantees equal rights to all investors regardless of the form of ownership, as well as equal, discrimination-free protection of the rights and lawful interests of investors. Together with the Investment Code the foreign commercial and investment activities are regulated by the Law on Enterprises and Joint-Stock Companies. Belarus offers potential foreign investors a wide range of opportunities for investments into the national economy. Relative legislation provides for the following forms of investments activities: foundation of enterprise with 100% foreign capital; creation of joint ventures; redemption of share of an enterprise.

The state guarantees stability of the rights of subjects of investment activities. According to the Investment Code in case Belarusian legislation adopted subsequent to the creation of a commercial organization with foreign investment impairs the situation and business conditions for foreign investors and commercial organizations with foreign investment established with their participation (i.e. in case additional or increased obligations are imposed thereupon or in case of a limitation or suppression of their rights), for a period of five years the legislation in effect at the date of registration of the commercial organization with foreign investment shall be applied to the foreign investor, commercial organization with foreign investment, and/or foreign investments.

Investments in Belarus are immune from nationalization without consideration, requisition, and measures equivalent to nationalization and requisition in terms of their consequences. Nationalization and requisitioning shall only be possible subject to the timely and full compensation of the cost of the nationalized or requisitioned investment assets and other damages caused as a result of nationalization or requisition. Compensation payments with regard to nationalized or requisitioned investment assets shall be equivalent to the real value of said assets at the moment immediately preceding the earlier of the nationalization or requisition, or the date of the public announcement on the nationalization or requisition. Moreover, compensation payments to domestic investors shall include interest calculated on the basis of the appropriate currency as quoted by the National Bank of the Republic of Belarus, and compensation payments to foreign investors shall include interest payments calculated on the basis of the LIBOR rate, with respect to the period between the date of nationalization or requisition or the date of the public announcement to that effect, and the date of remittance of the compensation amount.

As of November 2001 Belarus has concluded 42 bilateral investment agreements with following countries: Poland, Vietnam, Finland, China, Germany, Switzerland, France, United States, Great Britain, Sweden, Netherlands, Romania, Iran, Italy, Turkey, Ukraine, Bulgaria, Yugoslavia, Czech Republic, Pakistan, Egypt, Korea, Latvia, Syria, Cyprus, Tadjikistan, Lithuania, Kyrgyz Republic, Moldova, UAE, Israel, Singapore, Cuba, Libya, Qatar, Austria, Armenia, Mongolia, Lebanon, Macedonia, Croatia and Kuwait. Investors enjoy the right to appeal in court against

actions (inaction) of government bodies or their officials and local self-governance bodies or their officials, as well as regulations issued by the government bodies of the Republic of Belarus or local self-governance bodies, in the event that the said actions or regulations infringe upon the investors' rights or cause them losses or other damages. Damages, including losses incurred as a result of actions by government bodies or their officials and local self-governance bodies or their officials, or as a result of regulations issued by government bodies of the Republic of Belarus or local self-governance bodies, shall be compensated from the appropriate treasury by court order.

Foreign investors are guaranteed the right, following the payment of all taxes and other mandatory charges as established by the legislation of the Republic of Belarus, to repatriate to locations outside the Republic of Belarus any profits (earnings) received in the Republic of Belarus as a result of investment activity, as well as any proceeds from the full or partial sale of invested assets upon the termination of investment activity. The Law on Property allows foreign legal entities to have in Belarus production and related enterprises, buildings and constructions, and other property necessary for business activities. Property of foreign owners and their right of property are guaranteed.

#### ACTIVITIES OF JOINT VENTURES AND FOREIGN ENTERPRISES IN THE REPUBLIC OF BELARUS

According to the official data on January 1, 2005 3457 enterprises with foreign capital (1841 joint ventures and 1616 foreign enterprises) were registered with declared authorized fund capital of US\$ 742.1 million, out of these US\$ 382.7 million belong to foreign investors. The major investors according to the number of the JV and FE founded for the beginning of 2005 are: Russia (730 or 21.1% out of the total number of working JV and FE), USA (523 or 15.1%), Germany (375 or 10.8%), Poland (350 or 10.1%), Lithuania (255 or 7.4%), Great Britain (201 or 5.8%), Latvia (176 or 5.1%), Cyprus (144 or 4.2%), Czech Republic (82 or 2.4%) and Italy (82 or 2.4%).

The division of investments by countries of origin provides the following – the USA (US\$ 123.8 million or 17.1%), Russia (106.2 million or 14.7%), the Netherlands (101.6 million or 14.0%), Germany (77.2 million or 10.7%), Great Britain (62.0 million or 8.6%), Cyprus (47.2 million or 6.5%), Austria (27.9 million or 3.9%), Poland (26.6 million or 3.7%) and Latvia (21.2 million or 2.9%).

Belarus has accumulated positive experience of the activities of foreign companies in implementing large and medium investment projects. Belarus has been successfully cooperating with internationally known multinational corporations. For instance, joint ventures and foreign enterprises have been set up with such corporations as German “MAN”(production of light and heavy automobiles), Dutch “Coca-Cola”, American “MacDonald's” (production of refreshment beverages and catering), Danish “Maersk Medical”, Swiss “SB Telecom”, German “Alcatel SEL” (mobile systems of GSM standard and production of commutation equipment), German “Fresenius” (production of medical instruments), Russian “MTS” (Mobile TeleSystems) and German “Carl Zeiss” (production of optical and mechanics equipment).

The distribution of the enterprises by the fields of activities is as follows: industry (US\$ 423.5 million or 30.6%), trade and catering (US\$ 464.6 million or 30.6%) and communication (US\$ 226.6 million or 14.7%). Less than 1% of combined investments go to agriculture (0.8%). According to Ministry of Statistics and Analysis data of 2004 enterprises with foreign investments exported goods for more than US\$ 2582.3 million (US\$ 1 656.6 million JV and US\$ 925 million FE). The export of goods increased by 53.8% in comparison with 2003. The

trade turnover in 2004 exceeded US\$ 6 287.4 million and increased by 58.6% in comparison with 2003.

## WAYS OF IMPROVEMENT OF INVESTMENT CLIMATE IN THE REPUBLIC OF BELARUS

After the Investment Code was adopted in 2001 in the Republic of Belarus, the legal situation for investment activity was greatly improved. Yet some draw-backs remain - inconsistency of normative legal acts, inconsistency and controversial character of some legal norms. It is necessary to finish up the formation of normative-legal base in the field of tax, credit, currency, custom regulation of investments and provide foreign investors with stable, favorable conditions for business.

The annual monitoring of investment climate in Republic of Belarus becomes a very actual task. The most suitable variant is to track the condition of investment climate in the country's economy without pointing out the separate management systems (branches, regions, economic zones). For this purpose Ministry of Economy and other ministries are to work out the methodology of evaluation of investment climate criteria and the methods of its monitoring as well as to organize cooperation with one of the leading specialized international agencies to define the investment rating of Belarus. In accordance with economic assessments, the demand for investments within the period 2000-2010 may constitute US\$39. The total amount of investments into the fixed capital in 2010 is to increase by 2,2-2,5 times in comparison with 2000 (in 2005 it is to increase by 1,6-1,7 times in comparison with 2000). The investment share into gross domestic product will be 26-28% in 2010 (19,8- in 2000). It will make possible to ensure the development of industrial sector, increase of competitiveness of ready-made products in the home and foreign markets and as a result.

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# **DIVIDEND ANNOUNCEMENT AND SECURITY PRICE REACTION IN EMERGING FINANCIAL MARKETS: EVIDENCE FROM BANGLADESH**

A. Sabur Mollah, University of Botswana  
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## **ABSTRACT**

*Dividend signalling and the information content of dividends are the areas of interest in financial literature. A vast majority of research conducted on dividend signalling and the information content of dividends, but there is no such recognised study found on the effectiveness of dividend announcements as a signalling device to influence the security prices on the Dhaka Stock Exchange (DSE) in Bangladesh. This research investigates whether dividend announcements convey information to the market or whether investors consider announcements of dividends as a signalling device of the firm's future prospects. The announcements of cash dividends of the listed companies on the Dhaka Stock Exchange (DSE) for the period preceding and following the financial crisis of 1998 are considered in this study. The empirical part of this paper employs a conventional event study methodology to examine the stock price reaction to the announcement of dividends. The empirical results suggest that there is no significant impact of dividend announcements on the security prices of the DSE, which implies that dividend announcements do not contain any information and effectively appears insignificant in the stock market of Bangladesh. Actually after the financial crisis, not only the local investors withdrew but also they had a huge psychological shock as most of them lost everything in the market. However, the regulators failed to take any significant initiative (changes in regulation or institutional change) to bring the investor's confidence back and apparently dividend payments even become less significant after the crisis in the stock market of Bangladesh.*

## **BIOGRAPHY**

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# **DIVIDEND POLICY RESPONSES TO DEREGULATION IN THE ELECTRIC UTILITY INDUSTRY**

Julia D'Souza, Cornell University

John Jacob, The University of Colorado at Boulder

Veronda Willis, The University of Texas at San Antonio

## **ABSTRACT**

*This paper investigates several facets of electric utilities' dividend policies following the onset of deregulation. The transition to deregulation provides an interesting setting in which to examine some of the unresolved questions surrounding the dividend puzzle, since in the regulated regime most of the theories to explain dividends do not apply. After deregulation electric utilities are subject to the same competitive forces that face firms in other industries. Consistent with the theory of dividend clienteles we find that utilities continue to pay high dividends even after deregulation. Under a regulated regime, we find no systematic pattern of associations between dividend changes and abnormal stock returns or future earnings changes. Post-deregulation, however, our results suggest that, consistent with prior research on unregulated firms, dividend increases (decreases) are viewed by the market as good (bad) news. When we examine earnings following changes in dividends, we do not find evidence in favor of the dividend signaling theory.*

# THE IMPACT OF LIBERALIZATION ON AIRLINE DEMAND IN THE PHILIPPINES

Wilfred S. Manuela Jr., University of the Philippines-Diliman

## ABSTRACT

*This paper explores the impact of airline liberalization on demand using a framework that builds on previous research, but incorporates variables that characterize the Philippine domestic airline industry. Since only a number of routes have been liberalized since 1995, the data consist of ten domestic routes. The methodology employs the generalized method of moments based on the Newey-West covariance estimator, which is robust to both heteroskedasticity and autocorrelation. The results indicate that even with entry, competition, and lower fares in the industry after 1994, liberalization does not result in higher demand due to the fall in passenger traffic in three markets in the sample.*

## INTRODUCTION

Graham, Kaplan, and Sibley (1983) report that deregulation attracted more entrants resulting in lower fares and less concentration in the United States while Moore (1986) reports that deregulation results in a substantial increase in the number of passengers, especially in tourist markets. Rietveld, Schipper, and Nijkamp (2002) report that fares and departure frequency on fully liberalized intra-European routes are 34 percent lower and 36 percent higher, respectively, than on less liberalized routes. These findings indicate that deregulation and liberalization result in higher demand due to entry and competition.

## DETERMINANTS OF DEMAND FOR AIRLINE TRAVEL

The demand for scheduled airline service is a function of two sets of variables—geo-economic and service-related factors. Geo-economic variables, which fall outside the control of airlines, are determined by the economic activity and geographical characteristics of the region where airline service is available. Distance affects the demand for airline service in two ways: demand falls as distance increases due to the lower commercial and social interaction between two cities in a market, while the relative competitiveness of airline service increases with distance because of reduction in travel time. Service-related factors, which are within the control of airlines, are determined jointly by the quality and money-related components of airline service. The literature defines the quality of airline service in terms of departure frequency, load factor, and aircraft size, while the financial cost of traveling is determined by fares, which incorporate the cost of providing the service (Jorge-Calderon, 1997).

This paper proposes that a variable representing other transport modes should be included in the demand model because time-insensitive travelers in the Philippines tend substitute other transport modes to air transport due to price differences.

## EMPIRICAL MODEL

The econometric model in this study consists of three equations due to the endogeneity of the fare and frequency variables in the passenger or demand equation. The three equations are estimated simultaneously and all continuous variables in the three equations are expressed in natural logarithms so that the coefficients can be interpreted as demand elasticities.

$$\ln \text{PASS} (ij) = \beta_0 + \beta_1 \ln \text{FARE} (ij) + \beta_2 \ln \text{FREQ} (ij) + \beta_3 \ln \text{MPOP} (ij) + \beta_4 \ln \text{ACSZ} (ij) + \beta_5 \ln \text{DIST} (ij) + \beta_6 \ln \text{MODE} (ij) + \beta_7 \text{LIBR} (ij) + \varepsilon (1, ij),$$

where for each route  $i$  and year  $j$ ,

PASS = the number of enplaned passengers  
FARE = the average fare per kilometer in pesos  
FREQ = the number of two-way flights  
MPOP = the mean of the provincial populations of endpoint airports  
ACSZ = aircraft size or the average number of passenger seats per two-way flight  
DIST = the roundtrip distance between airports in kilometers  
MODE = the bus or boat fare per kilometer  
LIBR = dummy variable, which takes a value of '0' from 1981–1994, '1' from 1995–2003  
 $\varepsilon$  = the error term

$$\ln \text{FARE} (ij) = \beta_0 + \beta_1 \ln \text{PASS} (ij) + \beta_2 \ln \text{FREQ} (ij) + \beta_3 \ln \text{RGDP} (ij) + \beta_4 \ln \text{DIST} (ij) + \beta_5 \ln \text{COST} (ij) + \beta_6 \text{LIBR} (ij) + \beta_7 \text{AFCR} (ij) + \beta_8 \text{TERR} (ij) + \varepsilon (1, ij),$$

where for each route  $i$  and year  $j$ ,

RGDP = the mean per capita regional gross domestic product of endpoint cities  
COST = the average variable cost per passenger-kilometer  
AFCR = dummy variable representing the effect of the Asian financial crisis in 1997–98, which takes a value of '1' in 1998, '0' otherwise  
TERR = dummy variable representing the effect of the terrorist attacks on September 11, 2001 in the United States, which takes a value of '1' in 2001, '0' otherwise  
and the other variables are as defined in the demand equation.

$$\ln \text{FREQ} (ij) = \beta_0 + \beta_1 \ln \text{PASS} (ij) + \beta_2 \ln \text{ACSZ} (ij) + \beta_3 \ln \text{OPTR} (ij) + \beta_4 \text{TERR} (ij) + \varepsilon (1, ij),$$

where for each route  $i$  and year  $j$ ,

OPTR = the number of airlines  
and the other variables are as defined in the passenger and fare equations.

## METHODOLOGY

The airline-related data come from the Civil Aeronautics Board, while the data on income, population, and consumer price index come from the National Statistical Coordination Board. The data on bus and boat fares come from the Land Transport Franchising and Regulatory Board and the Maritime Industry Authority, respectively.

The balanced panel data used in this paper come from 230 observations per equation or 690 observations for the three equations representing ten domestic airline markets for the period 1981–2003. The data are estimated using the generalized method of moments based on the Newey-West covariance estimator to minimize the estimation problems encountered in previous

work. In addition, the equations are estimated using the fixed effects model to control for the unobserved heterogeneity between years and city-pairs.

## ESTIMATION RESULTS AND ANALYSIS

Table 1 shows the results of the passenger equation estimation. FARE is highly significant and, as expected, demand falls when price increases. The inelastic demand observed in this study may be attributed to the low substitutability between airline service and other transport modes because of the 0.08 cross-price elasticity of demand for airline travel (reported as MODE in Table 1).

Table 1: Demand Equation  
Dependent Variable: Number of Passengers  
Estimation Method: Generalized Method of Moments  
Instruments: MPOP, RGDP, DIST, ACSZ, OPTR, MODE, LIBR

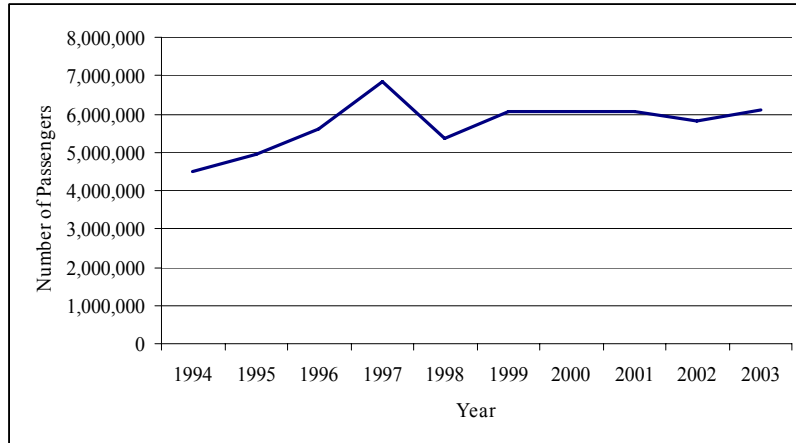
Variable	Coefficient	t-Statistic	Probability	
FARE	-0.45	-3.71	0.00	*
FREQ	0.84	19.68	0.00	*
MPOP	1.25	3.53	0.00	*
ACSZ	1.08	17.84	0.00	*
DIST	-0.10	-2.19	0.03	**
MODE	0.08	2.09	0.04	**
LIBR	-0.15	-3.80	0.00	*
Adjusted R <sup>2</sup>			0.98	
Included observations			230	
Total system observations			690	

\* Significant at the one percent level (highly significant)

\*\* Significant at the five percent level

FREQ has the expected sign and is highly significant, which means that demand responds positively to additional flights. ACSZ is highly significant and elastic, indicating that Philippine passenger airlines are inclined to switch to bigger aircraft to accommodate more demand rather than increase the number of flights proportionately, especially in slot-constrained markets. The coefficient of MPOP suggests that the population variable captures the demand resulting from domestic and foreign tourists in the country while the negative sign of DIST indicates that the socioeconomic effects of distance outweigh the relative competitiveness of air travel on longer routes.

Figure 1: Total Passenger Traffic in the Domestic Industry



Source: Civil Aeronautics Board

LIBR has a negative impact on passenger traffic, contrary to the impact of deregulation and liberalization on the US and Europe. Passenger traffic is almost one percent lower after the industry was liberalized in 1995, computed as  $\text{change in demand} = \frac{\Delta}{(\ln y + \Delta)}$  where  $y$  is the average number of passengers in the sample routes for the period 1995–2003 and  $\Delta$  is the coefficient of LIBR. The fall in demand indicates that the decrease in the average fare after liberalization (see Manuela, 2007) is insufficient to induce demand in the sample markets, despite a general increase in passenger traffic in the entire domestic industry (see Figure 1).

## CONCLUSION AND POLICY IMPLICATION

This paper has empirically explored the impact of airline liberalization on demand and the determinants of demand for scheduled airline service in the Philippine domestic industry using sample routes with different market characteristics and state of competition for the period 1981–2003. The estimated demand equation indicates that aircraft size outperforms departure frequency in generating airline demand probably due to the unavailability of additional landing slots in most of the airports in the sample markets while the rest of the variables behave as expected except for the liberalization dummy, which suggests that airline demand, at least in the sample markets, fell almost one percent after the industry was liberalized. The decline may be due to the fall in passenger traffic in three markets in the sample. The general increase in the demand for scheduled airline service in the Philippines after 1994 as reported by CAB (see Figure 1), however, means that more passengers are now able to travel by air as a result of lower fares due to the prevalence of promos and discounts observed in a liberalized Philippine domestic airline industry (Manuela, 2007).

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# **MIXED MEDIA AND NICHE MARKETING IN THE GLBT POPULATION**

Susan Baxter, Bethune-Cookman College

## **ABSTRACT**

*Targeted marketing can aid companies in reviving stagnant sales and/or customer bases by focusing specific products or services to precise market segments. This allows the market segment to feel that the product is customized to their needs, desires or affiliations. Successful niche marketing requires the appropriate utilization of mixed media that demonstrates an understanding of the targeted population segment. One population segment that demonstrates potential as a niche market is the Gay, Lesbian, Bisexual and Transgender population with an estimated buying power in the United States of \$450*



# **HIGHER EDUCATION INSTITUTIONAL BRANDING: A COMPARISON OF ARAB COUNTRY AND U.S. HIGHER EDUCATION ONLINE BRANDING STRATEGIES**

Andy Lynch, American University of Sharjah

## **ABSTRACT**

*Arab world and United States cultures contrast on many levels. One such contrast is the acceptance and implementation of aggressive marketing practices in higher education. This study focuses specifically on the branding strategies used to market higher education. In part because of the post-September 11, 2001 events, there has been a decline in Arab student applicants to United States higher education institutions (HEI's). As a result, growing numbers of Arab students have sought out suitable HEI's in their geographic region. A comparison of HEI branding strategies utilized by Arab world and U.S. HEI's are examined to document trends in global higher education marketing. This exploratory content analysis of 411 Arab world and U.S. HEI home pages established a snapshot of current branding strategies. Findings indicate that both regions value spotlighting institutional brand names, do not rely on slogans, but do include traditional and contemporary logos on their home pages. Findings indicate that U.S. National HEI's are more likely to utilize slogans and contemporary logos than Arab world HEI's. In addition, both HEI groups were found to project predominantly conservative product-focused branding strategies.*

# R&D COMPETITION WITH SPILLOVERS AND RELATIVE PERFORMANCE EVALUATION

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## ABSTRACT

*Conventional agency theory holds that relative performance evaluation (RPE) would prevent executives from being rewarded or penalized for events they cannot control. Yet empirical work on top executive compensation has found no evidence of RPE. This fact has been termed as the “RPE puzzle”. This paper provides a theoretical analysis on R&D competition between two companies which compensate executives by RPE, and shows that the executives’ optimal choice will be biased from the owners’. Specifically, executives will invest too much in innovation if the spillover of the R&D activity is small; while they will invest too little in innovation if the spillover of the R&D activity is large. Consequently, we provide a new explanation to the “RPE puzzle”.*

## INTRODUCTION

Most of the existing research on the “RPE puzzle” proposes one of three possible explanations: (1) it is incorrect to assume that the incentives of CEOs derive solely from their compensation, because the rest of their wealth also creates implicit incentives; (2) product market interactions may have a significant impact on optimal compensation schemes; and (3) optimal contracting in executive labor markets does not necessarily lead to RPE provisions.

In this paper, we try to explain the “RPE puzzle” from a new perspective. We build a model of R&D competition between two firms which compensate executives by RPE and we show that executives’ R&D strategy is biased from the optimal choice of the owners.

## THE MODEL OF R&D COMPETITION WITH NO SPILLOVERS

### Assumptions:

- ✧ Utility function of R&D decision makers

$$U_i = \alpha\pi_i + \beta(\pi_i - \pi_j)$$

where  $\alpha$  and  $\beta$  are parameters. It means that the evaluation of executives consists of two parts: one is the profit of his own company and the other is the difference between the profit of his own company and the profit of his rival firm.

- ✧ An industry consists of two (ex ante symmetric) firms. Originally, each firm’s marginal cost is  $c$ . Each firm chooses whether or not to undertake R&D to reduce the firm’s marginal cost by  $\lambda$ . So, after the R&D decision, the marginal cost of each firm becomes

✧

$$c_i = \begin{cases} c - \lambda, & \text{if invest in R \& D} \\ c, & \text{if not} \end{cases}$$

A firm's cost of R&D activity is

$$I_i = \begin{cases} I, & \text{if invest in R \& D} \\ 0, & \text{if not} \end{cases}$$

✧ In the product market, the inverse demand function is  $p = a - b(q_1 + q_2)$ , where  $q_i$  is the firm  $i$ 's quantity of products.

#### The Model:

The game is consisted of two stages: in the first stage, each firm chooses whether to conduct R&D activity simultaneously and the marginal costs change correspondingly; in the second stage, each firm chooses its quantity of products and the profits is realized.

		Firm 2	
		Y	N
Firm 1	Y	$U_{yy}, U_{yy}$	$U_{yn}, U_{ny}$
	N	$U_{ny}, U_{yn}$	$U_{nn}, U_{nn}$

Payoff Matrix of the Game

We first obtain the executives and owners' equilibrium strategies, respectively. And then, we obtain the following proposition by comparing the two equilibria above.

**Proposition 1:** Assuming that R&D activity has no spillovers, executives have more incentive for R&D than owners.

#### THE MODEL OF R&D COMPETITION WITH SPILLOVERS

We modify the model to accommodate R&D competition with technological spillovers like this: if only one firm invest in R&D, the reduction of marginal cost is  $\lambda$ ; if two firms invest in R&D simultaneously, the reduction of marginal cost is  $\lambda + \omega$ ,  $\omega > 0$ .

Again, we first obtain the executives and owners' equilibrium strategies, respectively. And then, we obtain the following proposition by comparing the two equilibria above.

**Proposition 2:** If the spillover of R&D is small, executives have more incentive for R&D than owners; if the spillover of R&D is large, executives have less incentive for R&D than owners.

Spillovers have two effects on executives' R&D choice: (1) competition effect. R&D can reduce the cost of production, and thus firms can obtain more profits by winning a larger market share and at the same time lower the opponent's profit. Thus, R&D improves the executives' evaluation and thus encourage executives to conduct R&D activities; and (2) spillover effect. R&D can also reduces the opponent's cost and then improve the opponent's profit. Thus, R&D lowers the executives' evaluation and thus discourages executives to invest in R&D. Therefore, when R&D activity's spillover is large enough, the second effect will dominate, that is, executives have lower incentive to conduct R&D than owners.

## SOCIAL WELFARE

We consider the social welfare as the sum of the profits and the consumer surplus, i.e.

$$W = \pi_1 + \pi_2 + \frac{1}{2}b(q_1 + q_2)^2. \text{ Then, we can obtain}$$

**Proposition 3:** Consider the R&D competition with no spillovers. Owners have too much incentive in performing R&D, compared with social optimal.

**Proposition 4:** Consider the R&D competition with spillovers. Executives' incentive in conducting R&D is less than the owners', and less than what the society requires.

Figure 1: R&D with no spillovers

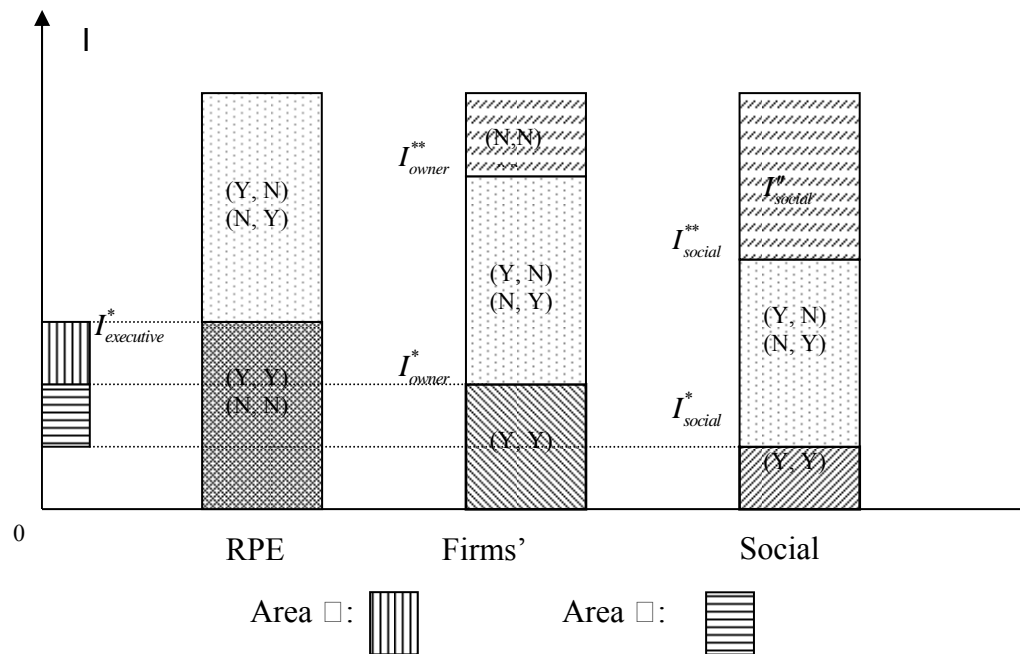
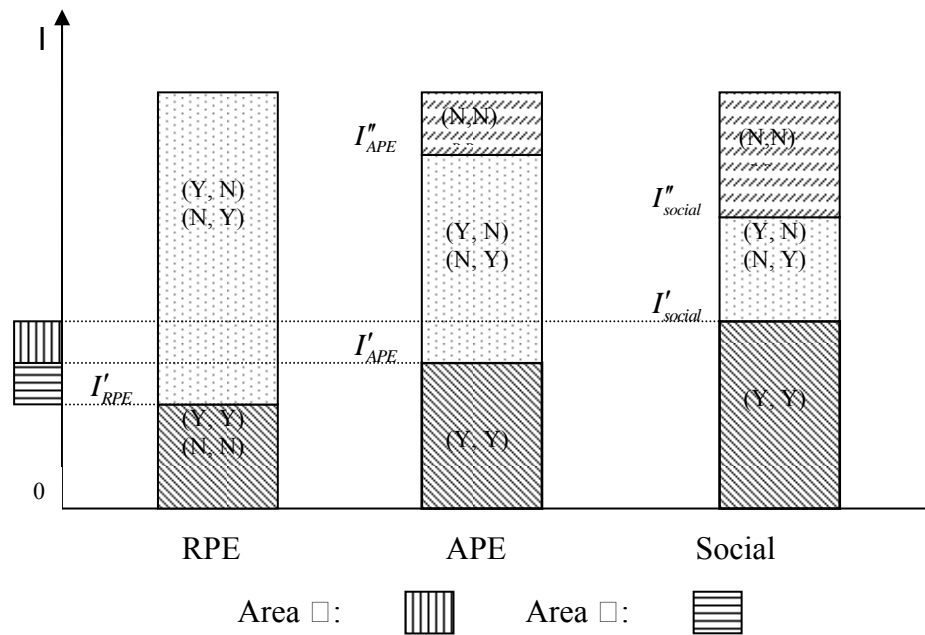


Figure 2: R&D with large spillovers



## CONCLUSION

It is well known that comparative performance information can be used to improve incentives and efficiency in an agency relationship. Yet empirical work on top executive compensation has found no evidence of RPE. This paper gives a new explanation to the “RPE puzzle” in the framework of R&D competition between two firms. We combine the “competition effect” and the “spillover effect” of the R&D investment, and thus show that executives’ optimal choice is different from owners’. In specific terms, executives invest too much in R&D if the spillover is small; while they invest too little if the spillover is large.

Besides, our results are not only useful for analyzing top executive compensation, but also applicable to other forms of implicit or explicit relative performance evaluations, such as tournaments within organizations, yardstick regulation, or political competition.

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# OPPORTUNITIES FOR RURAL ECONOMIC DEVELOPMENT

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## ABSTRACT

*This paper reviews the new economic challenges rural communities face in light of unfocused US rural public policy since the 1980's, the continued decline in the number of small farms and ranches, reduced employment in extraction industries and the migration of young workers from rural to urban areas. In some instances these challenges have been met with the recognition and exploitation of certain societal trends affecting population migration to rural areas due to establishment of amenities, urban crime and congestion, the desire for a natural environment and organic living and finally, the advent of economic enablers such as the internet and wireless communications. The conclusion reached here is that there are steps that rural communities can take with the assistance of federal and state policy makers that can help stabilize rural America's economy with focused attention on new business opportunities and new approaches to entrepreneurship.*

## INTRODUCTION

In the past few decades rural areas in the US have experienced continued depopulation as a result of farm consolidation, job growth in the metro areas and the draw of city life – the variety of entertainment, shopping and conveniences. The gap in education, skills and even age between city dwellers and their rural counterparts has individually widened as a result of the migration of the younger, more educated rural population segment to urban and suburban areas. Authors have drawn attention to these trends that appear to persist despite public policymakers' attempts to halt or at least slow down this redistribution of population. There are several reasons for the concern by government officials and they form, in part, the motivation for this paper and its study of opportunities for rural economic development.

- (1) Already there is concern of the concentration of population in the US metro areas. The growing population density in those areas has led to disturbing growth in crime rates, traffic congestion and pollution and overtaxed services such as water, power, solid waste disposal and sewage. After 9/11 the possibility of toxic materials spread through city water or air in metro areas has added to these concerns.
- (2) The gap in age, education, poverty and job skills between rural and city dwellers has threatened to make rural areas more and more dependent on federal and state aid. Unchecked, these gaps could lead to a greater drag on economic growth in the US which is already facing unprecedented global competition in many industries.
- (3) Public policy for rural economic development over the past few decades has failed to accomplish business creation and job growth to stem the tide of out-migration from rural areas.
- (4) Although technological changes have occurred in the past ten years – eg., internet, wireless telephony - that may lead to rural business opportunities, there has been no concerted effort to investigate their applicability to specific rural areas.
- (5) Despite technological advances in farming such as disease resistant crops, efficient harvesting methods, large farms and rapid distribution pipelines, the US has become increasingly dependent on foreign imports of food supplies. In light of recent terrorist attacks, this dependency has focused attention on the nation's self-sustainability of basic nutritional needs in dairy, meat, poultry and grains.

In this paper we will first review the status of rural areas in the US in a quantitative manner to better understand the magnitude of the problems listed above. Next, we will briefly review the observations of several authors concerning past public policy on rural economic development. Our contribution will be the identification of modern rural economic opportunities, suggestions for public policy changes that support the exploitation of these opportunities, and a new approach to entrepreneurship in rural areas.

## STATUS OF RURAL AREAS IN THE US

The U. S. Census Bureau's classification of "rural" areas consists of all territory, population, and housing units located outside of urbanized areas (UAs) and urban clusters (UCs). The 1990 Census of Population indicated that 24.8% (61.7 million) of the U.S. population lived in rural areas while the 2000 census yielded the figures of 23% and 60.4 million, respectively, indicating a continued decline in rural based population in the US. Revised numbers released in 2002 indicate "nonmetro" residents at 49 million and 17% of the US population. Over 300 nonmetro counties out of a total of 2359 went from a population gain during 1990-1995 to a population loss in the last half of that decade. Decreasing population counties rose from 497 to 750 in the same time frame. This decline parallels the decline in small farm and ranch based population, employment in mineral extraction and railroad operations – traditionally factors in a rural based economy. Efficiency in production by large commercial farms and ranches have led to the decrease in number of farms and ranches while production has increased or remained constant.

Rural areas constitute 70% of the land areas of the continental US including federally owned and managed lands. The statistics show that the rural population in the US is spread over large areas and thus forms a sparsely settled economic segment. The transition of the rural-based US economy (90%) in the early 1900's to one that is now largely urban has taken about one hundred years. The picture is not all black and white as the following statistics show. The Economic Research Service of the U.S. Department of Agriculture (USDA) calculated that 47.5% of the rural residents lived in metro areas (counties with one or more central cities of at least 50,000 or with a Census Bureau-defined urbanized area (and a total metro area population of 100,000 or more), while 52.5% lived in non-metro areas (counties outside the boundaries of metro areas and with no cities with as many as 50,000 residents). The former classification denotes those rural areas not far from a 100 thousand resident metro area or not far from a city of 50 thousand residents or more. Hence, there is some "gray" area of what is rural and what is urban, as lamented by Isserman (2001). Presumably residents in some rural areas have convenient access to resources, such as jobs, shopping, cultural events or other city-based amenities. The second classification from the USDA identifies those rural areas to which urban amenities and resources are not within easy access. These areas constitute those in most need of economic development in order to stave off continued decline in population and growth in poverty levels.

USDA's Economic Research Service indicates that compared with conditions in the 1980's, rural socioeconomic conditions during the mid 1990's were favorable.(USDA, 2002) However, in the same reference we find that while "rural earnings per job grew very slightly during -1995-96, a significant rural-urban earnings gap persisted and even widened. Similarly, since 1989, rural poverty rates have remained unchanged and continue to be higher than metro poverty rates. On the other hand, rural unemployment rates have continued to fall, per capita incomes grew faster in rural than urban areas, and average weekly earnings for rural workers showed a gain during 1996-97, the largest increase since the end of the last recession. Another sign of favorable economic times appears in a steady growth in non-metro and metro per capita transfer payments, which is the usual response to a strong economy." However, nearly all of the main economic indicators

"reveal wide gaps in the levels of poverty, unemployment, earnings, and income sources between rural minorities and whites. For example, the rural minority poverty rates were nearly three times as high as those of rural whites and substantially higher than those of urban minorities. The levels of poverty differed among rural minorities as well, with Blacks having the highest rate, followed by rural Native Americans and rural Hispanics."(USDA, 2002)

As a result of the lack of employment opportunities for rural youth, a factor in the migration of rural population to urban areas, the indirect result is that the rural population has become an aging segment. The elderly (age 60 or older) constitute 20% of the nonmetro population and 15% of the urban population.(USDA, 2002) Fewer and fewer younger folk are taking up the farm and ranch way of life. The out-migration of rural youth and its consequence on economic development in the countryside has attracted the attention of policy makers in Europe who seek to improve rural conditions. (Dax and Machold, 2001) The composition of the rural population that remains is less well educated than its urban counterpart. (Quigley, 2002) Poverty and poor education are highly correlated.(Stauber, 2001) The South has one third of the US rural population but is home to half of all adults who do not have a high school diploma. The nonmetro population with a college degree is 11 percentage points lower than their urban counterparts.(USDA, 2003) Lower demand for college graduates in nonmetro areas encourages rural and urban youth to seek jobs in metro areas. Although educational attainment has improved in rural areas over the last decade, there are still 23.2% rural residents who did not complete high school compared to 18.7% of the urban dwellers.

Why do people remain in rural areas? It is important to note that there do remain opportunities for making a living in rural areas as this paper will review below. However, some underlying psychological or lifestyle factors that influence the retention of a certain segment of population in rural areas include:

- a) Desire to continue farming or ranching lifestyle, even on a part-time basis;
- b) Attachment to land and the family or cultural heritage it may represent;
- c) Distaste for the urban lifestyle and pollution and its "rat race" image;
- d) Satisfaction with basics of life, a natural setting, in spite of frugality and modest means;

The rural population still has political clout in the US partly due to the roots of the political system that go back to the country's inception as a rural based economy. Members of the upper chambers of the state legislature and congress are elected on spatial factors, namely land areas that are either districts, counties or states. States that have few urban centers and sparsely populated rural areas have the issue of passing state laws that appeal to a powerful contingent of rural spokespeople. This fact alone is a reminder that the economic and political needs of the rural population cannot be ignored.

## PUBLIC POLICY TOWARDS RURAL ECONOMIC DEVELOPMENT

US public policy towards rural economic development in the last twenty years has been fragmented and lacking in a central focus.(Henderson, 2002) (Browne, 2001) However, this rural development policy has drawn criticism (Stauber, 2001) and had been much less effective in assisting rural people and places as they confront the fundamental changes occurring in the national and world economies. Dabson (2000) makes the observation that "rural development is still the stepchild of agricultural policy and rural entrepreneurship comes low down on the list of priorities for rural development policymakers and practitioners."



The USDA has sponsored the *National Rural Development Partnership (NRDP)* comprised of three entities: some 40 state rural development councils; the National Rural Development Council (NRDC) that brings together program managers from over 40 federal agencies; and the National Partnership Office which acts as the administrative center for the Partnership. The NRDP does not sponsor rural entrepreneurship programs either at the federal or state level. However, the Kauffman Center for Entrepreneurial Leadership has given a grant to Partners for Rural America and the Nebraska Community Foundation to work with state rural development councils in Maine, Minnesota, Missouri, and West Virginia to design strategies to promote entrepreneurship.(Dabson, 2000) Some authors have advocated entrepreneurship as a strategy for rural community development. (MacKenzie, 1992).

Notably, the Appalachian Regional Commission (ARC) has led a focused effort in promoting the creation and development of local entrepreneurial firms that increase local wealth and employment opportunities. The agency invests in five areas of entrepreneurship: business education and training, industry networks and clusters, technology transfer, access to capital and financial assistance, and technical and managerial assistance.(Dabson, 2000) ARC fostered the value of entrepreneurship and small business creation through conferences and workshops, scholarships for training programs, publications, and online resources. These efforts encouraged community leaders to build partnerships with associations, consultants, and mentors to assist in developing local entrepreneurial talent. Expectations among the community leaders and partners are that a sustained effort over many years is required to achieve genuine impact on regional wealth creation.

The US Economic Development Agency has sponsored research that reviews the US rural economic landscape from a cluster mapping perspective. (Porter, 2004) In that study additional research is suggested that would reveal cluster linkages between adjacent metro areas and neighboring rural counties.

Some policy makers continue to believe that business recruitment is the only cost effective approach to revitalizing rural economies. This type of program translates into resources for marketing and incentives, and also to continued expenditure on basic physical infrastructure. ARC's approach argues that entrepreneurship strategies involving locally grown talent supplement but do not replace traditional approaches.(Dabson, 2000)

## WAGES IN RURAL AREAS

Earning a living in the rural countryside has depended on farming if the soil can support crops with a market value that exceeds the expense to plant, grow and harvest them or ranching if the cost for labor and feed required can be held down. Nevertheless, with competition from overseas and larger commercial farms or ranches, these traditional methods of income generation for the rural family have been under attack for decades. The federal government has responded to the plight of the farmer with commodity price supports or with supplementary income for not planting if oversupply is anticipated. The rancher has had to contend with environmental concerns and fewer and fewer federal lands available for grazing. Although lobbying efforts from farmers and ranchers have solicited assistance from the federal level, the result has been that many family farms and ranches are no longer viable in the face of modern agricultural methods used in larger farms and cheap labor overseas. Of course, there has been opportunity for the small farms and ranches in niche markets, such as in organic vegetable farming or in organically-fed farm or ranch animals. These opportunities have not been without problems since new farming methods and quality control procedures are required in order to compete in these new markets. Immigrants from Mexico and other Latin American countries have taken low-wage farming and ranching jobs

and filled a rural labor need but new border restrictions and the attraction of higher paying jobs in urban areas such as in construction and service establishments has minimized the positive impact that this new labor pool can have for the rural community.

One way to continue living on the family farm is to have a family member(s) take on a job in the area. If the farm or ranch is near a metropolitan area, this often means commuting to the urban area on a daily basis and becoming a wage earner. These wages help in stabilizing the farm/ranch family income and keeps the family on the land. If the farm/ranch is not anywhere near a metro area, steady wages can still be earned by working for the county, the local school district, the post office or other federal agency. The extraction industries – logging, mining, mineral processing, etc., - that had provided jobs in the US for its rural based population have been on the decline for decades. New environmental rules and more efficient methods of resource extraction and processing indicate that the future for job growth in these areas remains bleak.

#### OTHER FORMS OF ENTREPRENEURIAL (E-SHIP) OPPORTUNITY

The demand for organically grown foods in US has been caused partly from the concern over the use of growth hormones and powerful anti-biotics in cattle and poultry farms, the extensive use of pesticides on crops and the development of mutated seeds. This societal trend has led to the establishment and growth of local farmer's markets. Adding to the support of locally grown vegetables, dairy products, poultry and meats is a concern for the growing dependency on foreign imports of food of unknown processing.

In addition to supplying new markets with organic farm products, rural families have taken to other forms of small businesses to supplement the family income. Rural areas near metropolitan centers have found that urban-based tourists enjoy antique shops, bed & breakfast inns, rural artisan-ware, restaurants with home-style cooking and direct purchase of produce, cheese, preserves and cured meats. In some cases cottage industries specializing in such esoteric products as dry flower arrangements, stuffed animals, weaving or embroidery crafts, etc., have emerged that take advantage of the cheap labor and handcraft skills that are prevalent in rural areas. In West Virginia, the establishment of a state-funded coop center "Tamarack" enables local craft vendors to display and sell their wares.

The pristine nature of rural areas with its scenery, association with unspoiled landscapes, clean air and water, and uncrowded infrastructure draw urban folk who desire a more tranquil home environment. In addition, people seeking a retirement home are drawn to the rural areas to live out the rest of their lives in a slower and peaceful setting. However, retirees do require health services and access to assisted living eventually. Clusters of retirement homes have started appearing in rural areas where these requirements are met including access to excellent medical facilities. Lorah and Southwick (2003) cite the retirement trend that government transfer payments, mostly social security benefits, exceed aggregate wages from all extraction industries in the rural West consisting of 11 states.

Other trends that have appeared to assist wage growth in rural areas are recreation, vacation homes and tourism. Lorah and Southwick (2003) offer evidence that rural counties with protected wilderness areas have shown both population and wage growth in the last two decades. The assertion made is that new service establishments, construction of second or third homes, hotels and recreational facilities, and new community infrastructure all lead to job creation in these rural areas with protected federal lands. An associated trend is the "amenity migration" described by Price, Moss and Barrett (1997) that claims that the natural environment can be a driving force in attracting those workers that can perform their duties almost anywhere. Improved and

inexpensive forms of communications – cellular phones, broadband internet, rapid file transfer via the web, rooftop satellite dishes, etc., - all have enabled the development of a migrant knowledge workforce. The impact on the rural economy by a digital telecom infrastructure is discussed in Malecki (2001).

The statistics from the study in Lorah and Southwick (2003) indicate that income growth rates are 2.75 times higher in rural counties with protected lands. The unexpected conclusion of the study made by Vias (1999) that jobs follow population growth instead of the reverse may be explained by the migration of the knowledge workforce (income derived elsewhere) attracted to rural settings or retirees (with investments or pensions) that choose to live out their lives in non-metro areas. Stauber (2001) observes that a “retirement base” was significant factor for rural counties that did not lose population in the 1990’s.

Amenities (includes recreation, second homes, etc.), retirement and knowledge worker migration constitute important trends that may change the economic landscape of rural areas in the US in the next decade. It behooves public policy makers at the federal and state level to understand how their resources can encourage and perhaps expedite the development of these societal trends for achieving job creation and wage growth in rural areas. These trends have already encountered some problems a notable example of which is “Aspenization,” or the result of creating a rural community in which living expenses, principally housing, can become so expensive that service workers cannot live there. (Lorah and Southwick, 2003) This phenomenon has been observed to happen where land for housing is scarce due to federal or state protected lands, reservation land for Native American tribes, over-restrictive local zoning ordinances or poor civic planning.

## ENABLERS OF OPPORTUNITY

There have been a few enablers that have facilitated the consideration of rural areas for economic development. Rural areas suffer from the twin economic obstacles of remoteness and low population density, two factors that have inhibited rural business creation in the past. First, the internet has greatly enlarged markets for rural extracted or manufactured products. Although specialty catalogs and targeted mailing lists were used previously by rural-based businesses, the internet now allows would-be customers worldwide to access their products through electronic storefronts. Payments for rural products and services are handled through electronic payment mechanisms as well. Telecommunications costs have dropped dramatically in the last ten years so telemarketing is now possible from remote, rural areas. Wireless networks can connect lightly populated areas and deliver telephony and broadband internet service. In addition, call centers can now be established in rural areas to take advantage of the cheap labor often available there. Light manufacturing in rural areas has been given a boost by the growth and pervasiveness of the overnight delivery services such as UPS or FEDEX for selling even perishable items such as fresh fruit, vegetables and smoked meats. Branding of products, especially organically grown, from rural areas, such as “Vermont maple syrup,” “Vidalia Onions,” “Hatch chili,” assists farmers in protecting their markets. Some rural areas have discovered and then exploited their differentiation in the products or services they can market in the face of global competition. Another amenity enabler is the result of Native American tribes capitalizing on their legal autonomy to establish gambling casinos, golf courses and resorts in rural areas. Construction and service jobs are created both for tribal members and other rural dwellers.

The recognition of the US societal trends described above, namely amenities, retirement and knowledge worker migration, can help rural communities orient their investments in regional economic development such as infrastructure (civic planning, water & power, roadways, telecommunications, regional transportation, healthcare facilities, public education, police and

fire protection) or in business creation or assistance, youth entrepreneurship programs, support for vocational training in nearby community colleges, farm and ranch extension programs for organic products, etc. Those rural areas that take the initiative in capitalizing on these trends will likely be the winners in the new rural US economy.

## E-SHIP GAPS IN RURAL POPULATION

*Business knowledge.* The transition from running a farm or a ranch to managing a business can be made difficult in the face of little or no business training. The finances for a small farm or ranch can probably be managed much like a checkbook. However, a business requires licenses, gross receipts tax to be collected, insurance, multiple suppliers and payroll bookkeeping if other employees are involved in the business. Hence, many new rural businesses find themselves short on experience in accounting, finance and cash management, employment law and regulations. These skills can be picked up over time by taking seminars or courses at local community colleges or the nearest Small Business Development Center (SBDC). Whereas a small farm or ranch requires little expertise in marketing, sales and knowledge of competition, the rural business owner finds that training in these areas can help bolster the growth of the business. Further, knowledge about product and service quality and legal assistance in labor and employment regulations and learning about contracts and agreements with suppliers and customers also helps. These needs for starting a rural business are not much different than those requiring fulfillment in urban areas. The main difference is that rural start-ups may not have easy access to training centers for this business knowledge. Another difference is that rural businesses are in large measure family owned and operated, a tradition inherited from the operation of the farm or ranch.

*Business Facilitation.* One model for creating rural businesses that has recorded notable success in several countries is attributed to Dr Ernesto Sirolli who has written about several case studies and elements of the model in his book, *Ripples from the Zambisi*. (Sirolli, 1999) His Sirolli Institute has been hired by rural communities and regional public agencies to establish the elements of his model labeled “enterprise facilitation.” The model requires a significant cash investment to hire a “facilitator” and the formation of a board of advisors to assist rural entrepreneurs in the formation of new businesses. In fact, the Sirolli Institute will not accept an assignment unless the rural community displays commitment in these forms. This requirement is in compliance with the belief that economic developers should not help those who have not asked for help, a credo borrowed from Fritz Schumacher. (1973) The Sirolli model relies on the belief that there exist would-be entrepreneurs in every corner of the globe, regardless of the environment, hopeless as it may appear to the untrained eye. Some of these aspiring entrepreneurs in rural areas do display a relentless will and energy to form a business, what Dr Sirolli calls a “passion,” unmistakable in its manifestation and absolutely required before a trained facilitator can assist in the business creation.

This feature of commitment alone differentiates the Sirolli model from other attempts to support initiation of enterprises in public policy or economic development programs in rural areas. There is a psychological factor in the “passion” requirement that is notably absent in the entrepreneurial qualifications normally assessed by business assistance agencies. Of course, some agencies do ask about the personal commitment in both cash and time that a would-be entrepreneur is willing to invest in the proposed business. However, Dr Sirolli’s model would argue that these commitments in and of themselves do not validate the emotional and psychological desire to form the business that his model labels the “passion.” How does one measure “passion?” Enterprise facilitators who are trained in the Sirolli model are trained in its detection and assessment. They are interviewed and hired by the community but are trained by the Sirolli Institute and are then

supported by the rural community network formed by the Board of advisors, numbering 50 or more. The advisors are also part of the Sirolli training program that takes up to three months or more with follow-up monitoring lasting up to three years. This aspect of the Sirolli model parallels the advocacy of multi-community collaboration reviewed in Borich (1994). The community involvement is a manifestation of the “organizing community capital resources” idea outlined by Shaffer. (Shaffer, Deller, Marcouiller, 2004, p. 216).

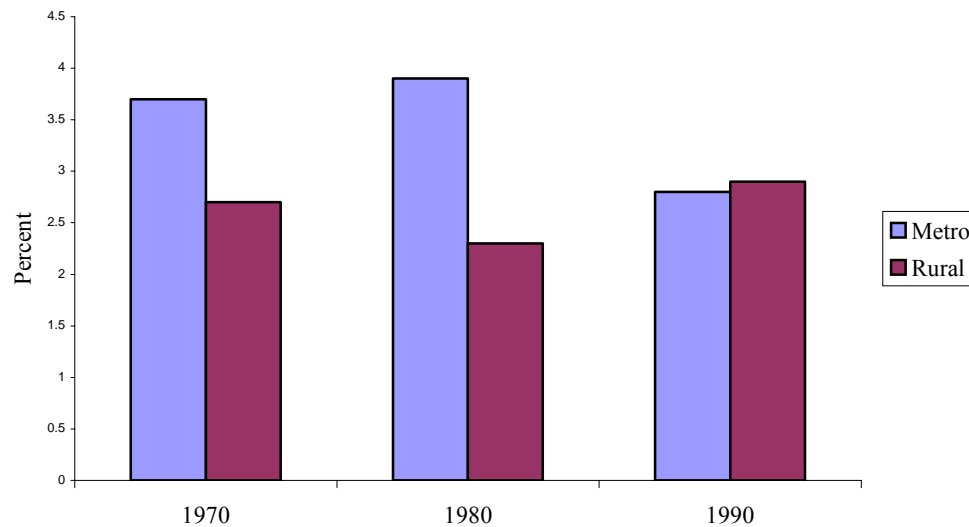
Enterprise facilitators operate on a one-on-one basis with the aspiring entrepreneur who seeks them out, protecting the confidentiality of the business concept, and customizing the assistance to entrepreneur as determined by extensive interviews and capacity to move forward. The Board of advisors supports the Enterprise Facilitator and the aspiring entrepreneur with assistance for getting the business off the ground, perhaps with networking contacts and financial help, operational advice, business counseling, rental space, equipment availability, etc. The idea of the enterprise facilitator and the Board of advisors is to create a community entrepreneurial advocacy or “social infrastructure” along the lines discussed by Flora and Flora (1990) or by Shaffer, Deller and Marcouiller (2004, p. 218).

The case studies of the Sirolli model at work validate that it does mobilize resources in a community and focuses them in the creation of new businesses and jobs in environments where other models have failed or simply do not achieve equivalent results. One reason for its success can be attributed to the “selection” process of first helping those entrepreneurs that are “serious” and then throwing significant community resources at the business concept that has been “molded” by the enterprise facilitator to maximize its chances for success. In some cases the Sirolli model has been tried in urban areas and similar positive results have been achieved. It is interesting to note that in many rural communities economic development agencies have objected to soliciting the assistance of the Sirolli Institute. The argument made is that the agencies do not see any difference between what they are doing currently with what the Sirolli Institute offers. The objections of these agencies still present the greatest barrier to the propagation of the Sirolli model in rural economic development.

## OTHER MODELS AND FINANCING

The most prevalent economic development facilitation model found in rural communities is that of the presence of a public agency funded by federal or state grants to assist the creation and growth of rural-based small businesses through loan programs, seminars on business topics and private counseling on business issues. Such agencies promote or represent the SBIR program from the National Science Foundation, SBIC or SBA loan programs or regional development programs formulated by the state or other federal agencies such as the SBDC. These programs have had mixed results despite being in place for a number of years and continual funding. A disturbing trend for financing rural businesses is bank consolidation. (Drabenstott and Meeker, 2003) When rural banks are bought up by urban mega-banks, the community often loses a community leader, the local banker. Worse, local entrepreneurs find that the new bank is no longer interested in financing small rural businesses. Venture capital has traditionally been scarce for rural entrepreneurs since their businesses have been small with low to medium growth prospects. The advent of equity capital for rural entrepreneurs would provide yet another form of capital to accelerate the growth of their firms. Despite the financial challenges that rural based firms face, there has been a noticeable increase in US rural self employment growth in the last decade, in fact surpassing the growth rate in metro areas as indicated in Figure 1. (Henderson, 2002, values shown are growth rates of the decades)

FIGURE 1: Metro and Rural Self-Employment Growth



Regional economic development initiatives include recruiting companies to relocate into rural areas, sometimes offering tax incentives, industrial park locations with low or rent-free incentives, and workforce training programs. Call centers and light manufacturing are eagerly sought by these initiatives. These “quick” fixes in creating employment in rural areas provide equity for those in political positions who wish to show rapid return of investment in economic development. Although such recruitment efforts do provide employment when successful, the nature of the jobs created is low-skill, low wage with little form of advancement. Worse, the transplanted companies often do not “put down roots” and can just as easily leave the region when more attractive incentives are found in other regions or, in some cases, in overseas locations. Such rapid job creations and destructions produce “whiplash” effects on the rural community and do affect the “trickle down” businesses as well. Even the growth aspects of transplanted companies can create transitional problems by attracting urban workers who perform reverse commutes and compete for jobs originally intended for rural denizens, a phenomenon alluded to in Start (2001). These mixed results have not stopped state and regional economic development agencies from pursuing business recruitment as a viable job-creation option for rural areas, at times sporting large budgets for travel and entertainment, tax incentive tools from governmental authorities and land/building incentives from regional economic development programs.

#### CHANGES IN PUBLIC POLICY

From this study, there are several themes that emerge that merit additional consideration by governmental agencies whose job it is to propose public policy for rural economic development. Below is a table of recommended policy initiatives together with a table of infrastructure or “capital outlay” programs. These tables are not intended to be a formula for rural economic development, however. Governmental authorities are often surprised that, after much debate, public policies put in place to assist in regional economic development do not lead to the intended result, namely job creation. At times, the main reason for the failure of public policy is that there really was no community buy-in or commitment for making the public policy work. Some studies (Popovich and Buss, 1990) indicate that there is no magic formula applicable to any region, rural

or urban, that will work yet public agencies insist on making a given model work as indiscriminately applied to any community. There is merit to involving the community in discussing alternatives for economic development especially the integration of the young rural constituency. (Dax and Machold, 2001) After all, rural youth must be able to see a future job in the countryside, otherwise their out-migration will continue. These tables are offered as business creation alternatives that should be considered for any modern program to address rural poverty and community sustainability.

Surprisingly, some communities may not endorse development and economic diversity, features of the initiatives listed in the tables. This is the possibility advanced in Schumacher (1973). There is no point to forcing such a community to take on an economic development initiative that it will not support. For public policy that supports organic growth, namely the creation of businesses natively by members of the rural community, it is important to market such support to those who can use it and to be able to customize the support to the need. The needs of every business start are not the same and it is futile to force-fit support in a one-size fits all strategy.

Table 1: Rural Economic Development Initiatives

Initiative	Steps	Comment
Entrepreneurship Training Program	Basic business principles in accounting, finance, human resource management, marketing and strategy.	Computer training, website creation, electronic payments.
Coop Marketing Programs	Awareness, establish membership	
Collaborative Community Effort in Business Creation	Supporting Organization, business facilitator	Sirolli Model
Amenity & Recreation Development	Identify community differentiation	Branding possibilities of products, services, areas.
Retirement Community	Identify resources that may contribute to viable community establishment	Health services, transportation important

Table 2: Capital Outlays for Rural Economic Development

Capital Program	Description	Comment
Telecom Infrastructure	Broadband trunking	Provides broadband connectivity to internet for community
Health Services	Hierarchical, non-overlapping among communities served	
Education	Strengthen regional interest coursework	Farming, ranching, crafts
Financing	Venture support	Low interest rate business loan programs.

Business training in rural areas should be made available, free of charge, to anyone who desires it. The benefits of small business starts, to a region and to society in general, are evident and

inclusive. Entrepreneurs should be recognized publicly for the value they create for communities. Much like public education or transportation infrastructure, business education and entrepreneurship should be associated with public benefit derived from job creation and wealth fulfillment. Statistics prove that innovation from small businesses forms the only sustainable advantage in a global economy.

In the same vein, business awareness and appreciation of entrepreneurship should be promoted in public schools along with learning about language, math and science and personal hygiene. The need for business knowledge has entered everyone's daily life, ranging from cash management to the do-it-yourself retirement program being promoted on the federal level as an alternative to the tenuously funded social security system. This program falls in line with the integration of rural youth in any initiative funded by regional policymakers.

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# DOES COUNTRY CREDIBILITY INCREASE THE CHANCE OF CURRENCY CRISIS?

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## ABSTRACT

*The main aim of this paper is to investigate the influence of country credibility on probability of currency crises. We follow the reasoning of Szczurek (2005) model was followed and extended by adding new variables, which the authors consider good instrument variables to describe country credibility. Two different indices were used: Corruption Perception Index (CPI) published by Transparency International, which is a global non-governmental organization devoted to combating corruption and Global Competitiveness Index (GCI) published by the World Bank Group.*

The IMF's International Financial Statistics (IFS: CD-ROM Version) of the period 1990-2002 for all variables apart from data concerning corruption was used. Data about corruption comes from Transparency International (<http://www.transparency.org>) for CPI and from The World Bank (<http://publications.worldbank.org/WDI>) for GCI. As a result of data availability our sample contains thirty seven countries. In order to examine the effect of corruption on the probability of currency crises the literature on the leading indicators of the currency crises was applied and used a model which relies on some empirical assumptions. The model takes the following form:

$$P(y_{t+1} = 1) = \frac{\exp(\beta_0 + \beta_1 CA_t + \beta_2 REER_t + \beta_3 I + \beta_4 CORR_t)}{1 + \exp(\beta_0 + \beta_1 CA_t + \beta_2 REER_t + \beta_3 I + \beta_4 CORR_t)}$$

where  $I$  stands for international liquidity (defined as a ratio of foreign exchange reserves to short-term debt),  $REER$  is real effective exchange rate overvaluation,  $G$  denotes the budget deficit and  $CORR$  is corruption measured with CPI or GCI. The authors decided to use both indices since they differ in the way they are created. The CPI index is based on experts' opinions whereas the GCI index is based on firms' records. Moreover, the authors also thought that membership in international financial and trade organizations might have a reasonable impact on country credibility and decided to include membership in the European Union.

The initial results indicate that country credibility has significant influence on currency crisis. Both applied corruption indexes are statistically significant. Negative coefficients on them prove that the higher corruption, the more likely currency crisis. Moreover, marginal effects of corruption indexes were high in relation to marginal effects of other explanatory variables. These results suggest that approaching currency crisis should capture country corruption itself or any other proxy of country prestige.

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# SERVICE MARKETING – A VOYAGE OF DISCOVERY OR HOW NOT TO RUN A SUCCESSFUL SERVICES ORGANIZATION

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## ABSTRACT

*The cardinal rule of marketing is that to be successful a company must satisfy its customers' needs in a manner that is efficient and better than the competition. Customer satisfaction (i.e. the difference between perceived performance of the company as compared to the expectations of the customer) is the key to success. Providing high value (i.e. quality/price ratio) being the Critical Factor for Success (CFSP).*

## BACKGROUND

When it comes to a service providing company the route to success can be very challenging. Since services are intangible, time perishable, immediate and inseparable from the provider each customer experience can be unique. Still consistency of excellence is required and bad impression in one instance can carry over to an overall assessment. For companies that offer services, especially in the hospitality industry, reputation is everything and bad “word of mouth” advertising can be deadly. Companies need to deliver a level of service that exceeds the customers' expectations and “delights them.”

Following is an analysis of Voyages, “an Australian company offering experience based holidays in spectacular wilderness locations... singularly focused on providing guests with incredible, memorable experiences, which they would not be able to enjoy elsewhere in Australia.”

In June 2006 I spent a month touring Australia with my wife and stayed at three of Voyages “world class accommodations.” We chose Voyages based on their reputation and were willing to pay a premium for first class locations we did not expect a third class level of service. We stayed at Ayres Rock, Kings Canyon and El Questro expecting “the last word in luxury.” However we were extremely disappointed and experienced multiple service failures on a variety of levels.

### Kings Canyon

Our first experience with Voyages was at Kings Canyon. A magnificent natural phenomena with one (Voyages) hotel where we stayed. While our experience there was not bad. It is literally in the middle of nowhere requiring many hours of driving but as our initial experience “down under” we were OK with the service. Only later, when we were meeting with friends in Melbourne did we become aware of a deficient element at Kings Canyon. When our friends were there they had arrived early at noon or 1PM. Wanting to check in they were told that the room was not ready and that check in is at 3PM. Being very tired they inquired if any rooms were ready or if they could be made ready in an expeditious manner. After a tiresome discussion a room was found but the memory of their treatment there lingered and they would have suggested an alternative to staying at Voyages. Unfortunately there are no options for someone wanting to see the Canyon.

## Ayers Rock

The scenery was magnificent and the location very expensive but ideal. However, in our accommodations the bathroom door handle was broken, the faucet dripped, the bathroom smelled of a bad odor and there was no extra blanket in a place where temperatures at night drop to freezing. Instructions on calling room service for assistance were a cruel joke since there was no phone in the (“budget”) room. When I walked back to the reception desk to inquire why there was no phone in the room the clerk, in a loud voice, said that since we were in the “budget” room I should not have expected a phone and that they will look into the problems I outlined above. Adding insult to injury, the customer satisfaction forms were in four languages (Spanish, French, Italian and German) but not in English. Since I also speak German I filled out the German language form while wondering why English-speaking guests are not entitled to have a voice. As in Kings Canyon Voyages had a monopoly position on the location so that visitors to Ayers Rock had very little choice in accommodations. We were expecting more and were disappointed.

## El Questro

The highlight and culmination of our trip was to have been El Questro. A vast national park that is remote even in a very remote place. It was a place to relax before starting back to civilization. Our problems started even before we got there. We had driven from Darwin (a two day trip) in a two-wheel drive car. To get to the resort we had to use a 4 wheel drive car or pay 90AUD each way per person for the transfer. Refusing to be held hostage and having to pay ransom (we could not cancel the reservation lest we lose our substantial prepayment) I opted to rent a 4-wheel car for two days and drive myself. Driving to El Questro on Friday morning (we had prepaid reservations for the weekend) we encountered our next disappointment. We planned to go to Zebadee Springs (a warm spring). We got there around noon and were told that the Springs had to be vacated at noon to allow tour groups exclusive use. We didn’t understand why tour groups were given preference until we noticed that there were very few people at the resort. The situation changed dramatically when two buses with people (on tour) arrived. It became obvious that the resort only survived on the basis of tour groups and not individual guests as we were.

Things only got worse. The tour group in general, and our next-door neighbors in particular, were very loud. While tolerable around the dinner table it became unacceptable at 10:30 at night. The accommodations at El Questro were “rustic”. Canvas walled cabins with no amenities. While there was electricity there was no phone, refrigerator or TV. A truly “wilderness” resort. The problem was that canvas walls do not keep out sounds very well. While the sounds of nature were expected the sounds of neighbors was annoying. Our neighbors set up portable chairs outside our door sitting, talking and smoking (another major issue for us) while we were trying to go to sleep. I finally fell asleep with the aid of Lunesta and earplugs only to be awoken at 7 AM by people walking outside out cabin engaging in very loud conversation. So much for peace and quiet. These were some very major annoyances. A minor annoyance was the broken light bulb, in the lamp, on the nightstand. We paid a lot of money for our accommodations and true to Voyages mission got “memorable” experiences though not quite what we expected from a “world class” company.

In all fairness, when we informed the reception desk of our plight they could not have been more helpful. They moved us to a more secluded and quiet location for the second night stay. They gave us ice to keep our chocolate from melting and were very apologetic as to the behavior of their guests. This response, in contrast to Ayers Rock, helped in soothing some very unhappy guests. We noted that in our (English) customer satisfaction form and also wrote that we expected some more formal response from the organization. When returning to the states I wrote

a long letter to the CEO of Voyages describing our experiences. To date (i.e. end October) we have yet to hear anything from the organization. This represents yet another service failure on their part. We did contact our travel agent who booked the hotels for our trip and strongly suggested that Voyages be avoided as a destination and, if one must go, the visit be kept to the shortest time possible.

We spent a lot of money and got very little benefit from Voyages. While they have a monopoly on the locations mentioned that is no basis for the worst of value propositions (i.e. high price/low quality). Had we known what we were to experience we would not have stayed overnight at any location except Ayers Rock (for one night) and seen the other sights as day trips. These would be very long and tiring trips, given the remoteness of Kings Canyon and El Questro, but still a much better experience.

Voyages publishes a very professional magazine, has a slick web site and other communications (e.g. brochure and booths) but it is the “sizzle without the steak.” Their service delivery is bad, employee behavior uneven (excellent in El Questro and contemptuous in Ayers Rock). The policies regarding operations are both petty (no phone in room) and mercenary (requiring a transfer fee of hundreds of dollars) and discriminatory (excluding individual guests from a nature site in favor of organized tours).

Finally, their service recovery, which might alleviate some of these shortcomings, is none existent.

My overall impression of the company is very poor, below a 2/3 star hotel where I had stayed in India. It is a place that I would not recommend to anyone planning a trip to Australia.

## SUMMARY

My experiences with Voyages, as described above, were very dissatisfying. Also it was not a rare, one time event. But rather consistent and poor service at self-characterized “world class resort”. This, coupled with very high prices, combined for a very low value proposition.

The **common denominators** for Voyages include:

1. Location monopoly at some of the world’s greatest natural wonders (e.g. Ayres Rock)
2. Second class accommodations
3. Very high prices
4. Gouging of the customers (e.g. gas prices at Kings Canyon)
5. Splashy, high class, communications.

The results were:

1. High expectations
2. Sub-par service
3. Dissatisfied customers
4. Negative word of mouth
5. This presentation

Voyages had failures in:

1. Systems (their core service offering)
2. Policies (an inflexible check in time)
3. Employees (condescending and insulting)
4. Service recovery (customer satisfaction forms)

5. Management (no response to complaints)

## RECOMMENDATIONS

It is obvious and common sense as to what Voyages should do to change. They should be:

1. Thoughtful - include phones and refrigerators in all their accommodations
2. Mindful – instructing their guests, especially at El Questro, as to a 10 PM quiet time and no
3. smoking
4. Generous – provide a low or no cost transfer to El Questro
5. Fair – not favor groups over individual guests and above all be
6. Honest – not promise in advertising what they cannot deliver

Potentially, Voyages failures could jeopardize their very being. They can operate only because they have a location monopoly in some of the best sights in Australia. Would the Australian government be willing to allow this to continue if they knew of how Voyages abuses their trust? Should I tell them?

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# STOCKS VERSUS BONDS IN THE NIGERIAN CAPITAL MARKET: GROWTH AND RETURNS ANALYSIS

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## ABSTRACT

*This paper sought to find out the growth pattern of both bonds and stocks in the Nigerian capital market, and to examine whether bonds can indeed outperform stocks in the same market. This investigation was triggered by our curiosity to find out if given the dynamics of the Nigerian economy, the capital market would respond to the similar stimuli as those of the well developed economies where market forces determine economic activities. In order to achieve our desired objective, we employed an event study design, which is in the same tradition as the historical case study design. This design allowed us to draw data from various sources, and investigate market activities around the event dates (1994 – 2003). From our study data, we were able to examine stock market volatility using average stocks' standard deviations. Similarly, we examined bond market volatility using the standard deviations of bonds around event dates. To strengthen our capacity to generalize, we also analyzed and compared average annual compounded rates of returns for both stocks and bonds during the period under review. Our results indicate that whereas the stock market was quite volatile especially between the year 2000 and 2001, the bond market remained relatively placid. This result is consistent with the level of activities of both stocks and bonds that we observed in the course of this study. Our results also show that the total average returns on stocks in our sample data outstripped the total average yields on bonds in our sample data by as much as 78%.*

## INTRODUCTION

By way of definition, “securities represent a claim on an asset and any future cash flows the asset may generate” (Fuller & Farrell, 1987, p. 9). Whereas a bond is a document certifying that the investor will receive a certain principal and interest payments on a pre-specified date in the future, a stock is also a document certifying that the investor owns a specified number of shares of a particular company and therefore is entitled to cash dividends and other financial benefits. This explains why stocks and bonds are the most prominent forms of securities used in financial transactions. It is this argument that informs the notion that to understand the investment game is to understand the stock and bond markets. The fundamental questions therefore are which of these two investment vehicles is best, and what informs the choice of a particular vehicle? As Fischer & Jordan (1995,) puts it, “an investment is a commitment of funds made in the expectation of some positive rate of return. If the investment is properly undertaken, the return will be commensurate with the risk the investor assumes”(p. 2). By this definition, one can easily understand that there is indeed a difference between investment and speculation. Whereas speculation is associated with unusually large returns over a relatively short period of time, investment is more interested in a good rate of return that is earned consistently over a longer period of time, and being mindful of the risk return relations of the investment opportunity. Therefore, it may be right to assert that a speculator is more interested in a high return that is earned in a very short time in order to allow him/her to move on in search of another abnormally high return opportunity. In other words, a speculator is more or less a sharp shooter who enjoys a one-time big hit because he/she is not interested in a consistent stream of low returns over a longer period of time.

The investor on the other hand would fit the profile of a forest hunter who is prepared to sit in wait for days in order to capture the desired prey (that sometimes move in a convoy). But in doing so, the hunter remains conscious of his environment or else he himself falls prey to other animals in the wild who are also hunting for survival. By direct analogy, an investor is concerned about his choice of investment vehicle, the return on investment, the risk commensurate with the return, and the consistency in performance—dividends and capital gains. In order to accomplish these objectives, the investor must begin by examining and analyzing every investment opportunity that is available. Over the years it has been commonly assumed that blue chip stocks offer higher returns on investment in the long run. Very little has therefore been done by way of comparison to determine the relative strength of bond yield aside from its traditional status as a secure instrument. Given the notion that anybody who wishes to buy stocks can do so with ease, and that analysts sometimes predict with some degree of accuracy the potentials of certain stocks, why should anyone be concerned about determining whether bonds are as good, or better than stocks? Could such comparison dispel the notion that stocks remain the instrument that offers the best return in the long run? In attempting to answer these questions, we are careful to remember that investments in the capital markets is a major factor in any economy, and that the economic environment shapes the functioning of the capital market. Therefore, effort is spared at examining the economic environment in Nigeria in order to determine whether it is conducive for good corporate performance, which we believe drives a robust capital market. In other words, we recognize that it is only when the operating environment is good that companies report higher earnings, which usually translates to higher stock prices.

A vibrant capital market is one in which there is strong healthy competition by the various segments of the market. The depth of its activities breeds creativity in both the design and marketing of capital market products, and creates opportunities for investors to choose from a basket of investment options beyond the basic choice between bonds and stocks. One of the most important decisions that an investor faces therefore, is the ability to avoid the numerous pitfalls that are associated with capital market investing. And one of the ways by which this can be accomplished is by clearly understanding what the investor can expect to derive from investing in financial assets, and the associated risks. In answer to the question why do we invest? Jones (1998) asserted that “we invest to make money—improve our monetary wealth, both current and future” (p. 4). In other words, since cash has an opportunity cost, and the purchasing power of cash diminishes over time, investors invest their surplus funds in order to constantly add value to the invested sum. They do so by choosing from a wide range of securities in an attempt to maximize the anticipated returns from the chosen investment.

The purpose of this paper therefore is to analyze the growth and returns of both stocks and bonds in the Nigerian Capital Market, and by extension determine whether stocks offer higher total returns than bonds or vice-versa in Nigeria given Nigeria’s volatile economic environment. In order to accomplish the tasks set forth in this investigation, we hypothesize that there is no significant difference between stock market volatility and bond market volatility over the ten-year period 1995 to 2004. Even though there are a number of studies that distinguish between bonds and stocks in the United States, Europe and parts of Asia. Such studies identify specific relationships between stocks and bonds in terms of periodic returns on investment. But even this class of literature is quite limited in Africa in general and in Nigeria in particular. The literature on the Nigerian capital market is scanty, and none so far addresses the issue of comparison of market instruments. Thus, scholars and students of finance agonize over the dearth of literature on the subject. We believe that this paper which is presented in five parts will add to the needed literature on the subject of bonds and stocks in Nigeria. The section following this introduction examines some theoretical issues, while the third segment identifies the data set and methodology. In section four, the result of the study is presented, while sections five and six contain the summary and references.



## THE NIGERIAN SECURITIES MARKETS AND FUNCTIONS

Fuller & Farrell (1987) define the securities market as “a mechanism bringing together buyers and sellers of a particular type of security or financial asset” (p. 14).

From this standpoint, we opine that for any capitalist economy to function properly, a strong, reliable, and dynamic capital market must exist to fuel the economic machinery. The capital market does this by channeling funds from individual as well as institutional investors to the most productive sector of the economy. Because of the capital market’s ability to allocate resources optimally, they allow both government and businesses to raise needed funds by selling securities. The Nigerian capital market, like any other capital markets in the more developed economies is considered to be the nerve center of Nigeria’s national economic order. Money creation, and wealth generation over the longer term evolves from the activities that take place at this market. Established in 1960 under the name and style, the Lagos Stock Exchange (LSE), the Nigerian Stock Exchange is a pioneer member of the African Stock Exchanges Association (ASEA), an affiliate of the Federation of International Stock Exchanges, and has an observer status at meetings of International Organization of Securities Commissions (IOSCO).

Table 1.1 - NSE Operational Highlights (1994 – 2003)

Description	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Mkt. Cap. (Nb)	65.5	171.1	285.6	292.0	263.3	299.9	478.6	662.6	763.9	919.7
Shares Traded (b)	0.524	0.397	0.882	1.3	2.1	3.9	5.0	5.9	6.6	4.82
Value Traded (Nb)	0.986	1.84	7.1	11.1	13.6	14.1	28.2	57.6	60.3	42.7
Daily Av. Vol (m)	2.1	1.6	3.5	5.3	8.4	15.6	19.9	24.1	26.4	n/a
Daily Av. Val.(N m)	3.9	7.4	28.4	44.3	54.3	55.7	112.2	230.0	237.2	n/a
Listed Securities	276	276	276	264	264	268	260	261	258	258
All-Share Index	2205	5092.2	6992.1	6440.5	5672.8	5266.4	8111.0	10963	12138	14565
No. of Bkrg. Firms	n/a	n/a	217	217	226	226	187	226	226	226
No. of Listed Coys.	177	181	183	182	186	196	195	194	195	196

Source: NSE Fact Book (Various Issues)

The Exchange has an automated trading system with performance data on listed companies published daily, weekly, monthly, quarterly, and annually. All the listings are included in the Nigerian Stock Exchange All Shares Index, which is the only index available in Nigeria. By 1997 there were 182 listed companies on the exchange. But this number rose to 195 by the end of 2002 with a market capitalization of N763.9 billion, up from N662.6 billion the previous year. The number of listed securities grew to a total of 261 by the end of 2002, up from 258 the previous year. The All-Share Index also hit an all-time high of 13,005.05 points in August of 2002 before

settling at 12,137.72 by year end, up from 10,963.11 points recorded the previous year. Turnover stood at N59.8 billion in spite of the difficult economic environment that characterized some part of the period covered in this thesis (1994 to 2002). There are a number of sources of market indicators in the United Kingdom too, of which the Financial Times Index is the largest and most important. The same applies to most European and South American countries. But in Nigeria, there is only one index, the Nigerian Stock Exchange All Share Index. Whereas the Standards & Poor's Stock Price Indexes (S&P 500) provide market indexes, including a 400-stock Industrial Average, a 40-stock Utility Average, a 20-stock Transportation Average, a 40-stock Financial Average, and a 500-stock Composite index, the Nigerian Stock Exchange Index publishes one All Share Index. Like the S&P 500, the Nigerian Stock Exchange All Share Index is a market value index. It is expressed in relative numbers with a base period.

Table 2.2: The Nigerian Stock Exchange All Share Index, Mkt. Capitalization and Shares Traded (1994 – 2003)

S/N	Year	Index (Year End)	Mkt. Cap. (b)	Shares Traded (b)
1	1994	2205.17	65.5	0.524
2	1995	5092.15	171.1	0.397
3	1996	6992.10	285.6	0.882
4	1997	6440.51	292.0	1.3
5	1998	5672.76	283.3	2.1
6	1999	5266.43	299.9	3.9
7	2000	8111.01	478.6	5.0
8	2001	10,963.11	662.6	5.9
9	2002	12,137.72	783.9	6.6
10	2003	14565.45	919.7	9.6*

Source: The Nigerian Stock Exchange Fact Book 2003

\* Extrapolation from half year figures,

Like in most exchanges all over the world, only members of the Nigerian Stock Exchange participate in stock trading on the floor of the exchange. Due to the fact that members perform various functions on the floor of the exchange, they are classified according to those functions. This explains why some members of the stock exchange are referred to as commission brokers, floor brokers, odd-lot dealers, registered traders, or specialists. By the end of 2004, there were four active trading floors in Nigeria, namely, Lagos, Abuja, Port Harcourt, and Kaduna. Each exchange provides a table of listed stocks daily. This table is the regular source of reference for basic stock price and volume of transaction. The statistical information in the table helps the investing public to understand the actual activity that takes place on a particular day, thereby helping them make informed decisions. Securities that have traded each day are recorded in alphabetical order. And as the table below shows, the listings include amongst other things, the public quotation price, the current market price, the highest and the lowest prices, the quantity of shares traded, last dividend paid, as well as earnings per share. These figures provide potential investors with the relevant tools for making educated decisions about the type of securities to invest in and the appropriate period to take such a plunge. Without a detailed analysis of the performance level of each security, the investing public would definitely struggle to determine which way to go. The lack of information could indeed work against the growth of the market in general by creating a dichotomy between practitioners who know the workings of the market in detail and the investors who have no knowledge whatsoever.

Table 2.3: The Nigerian Stock Exchange: Daily Official List

Securities	P.Q.P	C.M.P	Volume	High	Low	Div	EPS
Access Bank	0.50	2.48	31,642,990	3.01	2.22	0.10	0.13
First Bank	0.50	72.70	30,145,068	72.70	32.00	1.60	3.36
Zenith Bank	0.50	22.00	8,484,548	23.00	16.50	1.10	1.91
Guinness Nig.	0.50	156.85	193,890	158.85	95.50	3.00	5.70
NB. Plc.	0.50	48.40	2,550,686	48.40	30.02	1.05	1.31
Premier Breweries	0.50	0.93	1,000	0.93	0.93	0.06	0.06
UACN	0.50	27.50	2,695,124	27.80	15.91	1.00	1.38
Unilever Nig.	0.50	16.84	1,865,601	22.47	12.80	0.70	0.00
7-Up Bottling	0.50	44.90	107,393	44.90	25.05	1.25	2.27
Nestle Nig.	0.50	216.00	129,039	216.00	183.00	10.00	11.18
Evans Medical	0.50	4.08	480,916	4.25	1.88	0.12	0.43
Law Union	0.50	1.58	85,000	1.58	0.83	0.15	0.18
Mobil Oil	0.50	186.00	54,288	190.00	150.50	9.10	9.69
Total Nig.	0.50	206.00	69,504	206.00	172.90	9.50	9.98
Asaba Textiles	0.50	3.63	200	3.63	3.63	0.20	0.00

Source: Adapted From Financial Standard, August 14, 2006.

**Legend:**

P.Q.P:	Public Quoted Price
C.P.M:	Current Market Price
Volume:	Quantity Traded
High/Low:	Years' High and Low
Div:	Last Dividend Paid
E.P.S:	Earnings Per Share

The daily official listings are placed in the public domain to assist would-be investors track the performance of each of the stocks listed. Since capital gain is a major component of the return on investment, investors are keen to find out the fluctuations in the prices of securities. Some of the stocks that are doing very well appreciate in value almost on a daily basis. Where the growth is consistent, there is also the chance that the company will declare good dividends. Together, the appreciation in the price of shares and the dividend declared by the corporation that issued the shares reflect the overall financial strength of the firm. Since these indexes are presented to the public on a daily basis, investors have the opportunity to see for themselves how well their shares are doing. It also shows the poor financial position of the firm as measured by the share price and earnings per share. Like the stock market where there are both the primary markets for new issues, and the secondary markets for existing securities, the Nigerian bond market is also divided into the primary and secondary category. Without a viable bond market where bonds can be sold before maturity, investors may be reluctant to hold unto an instrument for up to 20 years, except otherwise, the initial yield is very high. Bonds in the Nigerian capital market are of various types too with a variety of characteristics regarding the issuer or the buyer. They include the federal government bonds, municipal bonds (State and Local governments), corporate bonds, international bonds, as well as specialized bonds like the mortgage-backed bonds. Federal government bonds are backed by the full faith and credit of the Federal Republic of Nigeria. This particular feature along with their liquidity make federal government bonds very attractive to investors. The theoretical literature describes bonds that are issued by States and Local governments as municipal bonds. Here too, there are two distinct types of municipal bonds, namely, general obligations, and revenue obligations. The general obligations are backed by the

full faith and credit of the issuer, while the revenue bonds are backed by the income generated from the project for which the obligation was required to finance. During the last ten years, most of the municipal bonds in Nigeria are revenue bonds. Like stocks too, bonds are listed in the financial press to guide investment analysts and other players in the capital market. But a key difference exists between the stock listing and the bond listing. The difference is that while the stock prices are listed in naira and kobo (currency), the bond prices are listed as a percentage figure of the par value (₦1,000).

## RETURNS MODELS

In the theoretical and empirical literature the most recognizable way of determining the overall financial benefits accruable from investing in stocks and bonds, is the measure of the securities' total returns. According to Fischer and Jordan (1995) "return is the motivating force and the principal reward in the investment process, and it is the key method available to investors in comparing alternative investments" (p. 66). Returns from common stocks have two components, namely periodic cash receipts (dividends), and increase in price of asset (capital gains). Therefore, the correct measurement incorporates both dividends and capital gains and can be determined using the total returns concept.

Total returns can be measured for a given holding period, and is defined as:

$$\text{Total returns} = \frac{\text{Cash payments received} + \text{Price change over the period}}{\text{Purchase price of the asset}}$$

(The price change over the period is the difference between the beginning or purchase price and the end or sales price).

This definition can be applied daily, weekly, monthly, quarterly, and annually so long as there is an index showing the prior period prices and current prices, as well as the dividends. However, since the investors may have difficulty in applying this method for each stock over a longer period, there is also the need to describe a series of returns statistically. The statistical approach may be achieved by calculating either the arithmetic or geometric return on the investment. The return model for bonds is similar to that of stocks. The two key measures of returns are the current yield and the yield to maturity. Although the financial press would report the current yield (a bond's annual coupon divided by the current market price) the current yield is not a true measure of return principally because it does not capture the difference between the purchase and redemption prices. The yield to maturity (the promised compounded rate of return on a bond purchased at the current market price and held to maturity) captures both the coupon income and the capital gains/losses.

### Bonds V Stocks

Ideally, the choice between stocks and bonds should not be too difficult to make given the distinct characteristics of each instrument. But a number of researchers have pursued the search to determine the overall strength of one instrument over the other in a number of ways. The dearth of literature on the Nigerian bond market and the scanty literature on the Nigerian stock market forced us to look outwards for empirical evidence on the subject of stocks v bonds. In his attempt at making such a determination, Kahl (2002) evaluated the United States Federal Reserve's model which involves a simple comparison between the earnings yield of the S&P 500 Composite Index, using forecasted earnings for the next 12 months, and the yield on the ten year U.S. Treasury bond. Having identified some of the limitations of this model, they developed a modified version of the Fed's model for their research. The model trailed (most recent twelve

months) earnings to calculate the earnings yield because information was available from Standard & Poor's on reported earnings but not forecasted earnings. The 5 year U.S. Treasury bond was substituted for the ten year bond. Total return calculations and year-end yields for the 5 year and 20 year U.S. treasury bonds only were obtained from Ibbotson Associates' data base. The 5 year bond was used as the duration (a measure of sensitivity to changes in interest rates) which is closer to that of the S&P 500 Index. At the end of this research exercise, Kahl (2002) noted that "when establishing asset allocation, investors should consider how the relative valuations between stocks and bonds have changed over time". Thus, it was inferred that the valuation model adopted by the U.S. Federal Reserve has poor predictive ability. Consequently, the study recommended that investors should consider modifying their asset allocation when there are large differences between the earnings yield and bond yield.

The obvious implication of this recommendation is that although the actual result of the research showed that stocks yielded superior returns over the ten year period covered in the study, the methodology was not strong enough to permit any reasonable generalizations. This assertion is amplified by the evidence from other studies such as the one carried out on Switzerland's capital market. In a 2004 study of the volatility of both, the bond and stock markets, the authors attempted to examine the changes in Switzerland bond and stock market volatility over the period between 1964 and 2003 as represented by the IMF Switzerland Long-Term Government Bond Total Return Series and the MSCI Switzerland Equity Total Return Series. In doing so, they employed a methodology that allowed them measure performance of both instruments by comparing the volatility of one instrument against the other. To examine bond market volatility relative to stock market volatility, the authors computed a) the ratio of moving standard deviations of monthly rates of return for 12-month calendar periods for bonds to stocks, b) the ratio of standard deviations for discrete, non-overlapping 12-month calendar-year time periods for bonds to stocks, c) a moving measure of systematic risk (beta) for long-term Switzerland government bond returns relative to returns for the MSCI Switzerland total return series, and d) the correlation coefficient between the returns on long-term Switzerland government bonds and the MSCI Switzerland total return series for moving 36-month calendar periods.

These measures were used to examine and test for changes in bond market volatility relative to stock market volatility during the period of study. According to the authors, because the bond market return series predates the stock market return series by approximately 6 years (February 1964 vs. January 1970), comparisons between bond market and stock market volatility were based on the 30-year overlapping time period from January 1973 through December 2002. The results showed that although the Swiss bond market volatility moderated recently, during the entire 39-year period bond market volatility actually trended upward and the swings in bond market volatility became more pronounced. The stock market volatility on the other hand spiked in 1974, moderated in the late 1970s and early 1980s, and then became more volatile again in the late 1980s and 1990s. Unlike the bond market therefore, the stock market did not exhibit a trend in volatility during the period of study. During the 30-year period of the study, Swiss stock market volatility averaged nearly four times that for the bond market. The inference that we draw from this study is that the stock market out-performed the bond market particularly because volatility is a function of awkward price movements, and such unstable price regime is not good for earnings. But the absence of trend in stock market volatility is a clear indication of a stable price regime which in our view is good for overall stock returns.

## DATA SET AND METHODOLOGY

Due to the nature of this study, we decided to adopt an event study design which is in the same tradition as the historical case study design. This enabled us identify and isolate the core

components of each investment option. Consistent with historical case study design, this study relied exclusively on document review for research data. Therefore, most of the data used for this study were obtained from the Nigerian Stock Exchange records covering cases selected as our sample. Data were also obtained from banking sources, the academic literature, and the financial press. The population of the study is 261 listed securities that traded in the Nigeria Stock Exchange at the end of the period covered in this study (2003). Of this number, there are 197 equities, while fixed income securities accounted for the remaining 64. The fixed income securities sub-group comprises 9 government stocks and 55 industrial loans. The choice of this population is informed by the fact that there is only one index covering all the afore-mentioned securities in Nigeria, namely, the Nigerian Stock Exchange All-Share Index. The sample for this study was stratified along sectoral lines, and then judgmentally selected within each sector of the Nigerian economy. The approach was considered desirable because of the socio-economic implications of disregarding the issue of sectoral bias by a cross-section of investors. Therefore, our study data consisted of four listed securities that were judgmentally selected along industry lines based on their perceived performance within their respective industries. We believe that the selection along industry lines would provide a reasonable basis for generalization. Thus, for the stocks, we selected First Bank of Nigeria Plc., Total Nigeria Plc, United African Company of Nigeria, and Nigerian Breweries Plc., each representing the banking, petroleum, conglomerates, and manufacturing sub-sectors of the economy. For the fixed income securities, we selected, one federal government development stock, Lagos State floating rate bond, representing municipal bonds. We also selected Cadbury Nigeria Limited and CFAO Nigeria Limited, both representing the corporate bonds category. We believe that in spite of the size of the sample ( $\approx 3\%$  of the population), their sectoral distribution, and their relative strength in each sector will permit generalization. What informs this assertion is the fact that each security has remained an active player in the Nigerian Capital Market for upwards of twenty years. For example, Nigerian Breweries Plc., was listed on the exchange since 1973. Also, the representative securities in the bonds sector may very well be rated as high grade securities. Although there is no official rating of Nigerian bonds, we strongly believe that the selections made for this study would rank above Baa ratings. To enable us analyze our study data, we adopted a combination of descriptive statistical technique and correlation analysis. This is against the background that descriptive statistics facilitates the display of cross-sectional as well as time-ordered data while Correlation analysis on the other hand is a measure of both relationship and causation (see Brightman & Schneider, 1992). The correlation coefficient allows the researcher to measure statistically, the extent to which two variables are associated.

## RESULTS

Given the uneven distribution of the ages of the securities, and the dearth of data in the bond market it was difficult to present identical sets of data for analysis. To circumvent this obvious disparity, we introduced dummy variables where averages were considered inadequate, and implanted periodic averages where necessary. Table 4.1 shows the ten-year comparative trading activities (by value) between government stocks and all categories of bonds and the equities market 1994 to 2003. By inspection, there is a clear indication from the table that the activities in the equities market far out-performed those of the fixed income securities market by a wide margin. This disparity in trading activities cannot be used to draw conclusions regarding the rate of returns on either sub-sector of the Nigerian capital market. Table 4.1 below shows that the industrial equities sector completely dominated the Nigerian capital market by as much as 100 per cent in some years. For example, in 1995, there was no single activity in the government stocks/bonds sector of the market, thus living the industrial equity sector to contribute the entire N1.8b to the capital market. The obvious implication here is that the investing public had no inclination whatsoever in pursuing investments in that sector. Due to the nature of this research,

our endeavor did not include the investigation of the cause of this apparent apathy by investors who only favored industrial equities. But we inferred from this data that the geometric growth of the industrial equities market signaled the confidence of investors in that sector. Such confidence can only come from the level of returns enjoyed by the investors.

Table 4.1: The Nigerian Stock Exchange: Comparative Trading Activities (1994 – 2003)

S/N	Year	Govt Stock/Bonds (Nm)	Industrial Equities (Nb)	Total (Nb)
1	1994	15.2	0.971	0.986
2	1995	0	1.84	1.84
3	1996	90	7.00	7.1
4	1997	140	11.00	11.1
5	1998	15.6	13.60	13.6
6	1999	0.8	14.10	14.1
7	2000	8	28.10	28.2
8	2001	24.6	57.60	57.6
9	2002	n/a	n/a	60.3
10	2003	n/a	n/a	42.7

Source: Compiled by Author

Table 4.2: Annual Capital Growth & Returns Summary – 1994 – 2003 (1994 = N100k)

Security	Opening Volume	Closing Volume	Bonus	Mkt. Value	Dividend or Interest	Total Returns	ACR %
First Bank	25,540	77,942	52,402	N1,169,128	N370,462	N1,439,590	69.9
Nigerian Breweries	7,256	48,371	41,115	N1,064,167	N379,399	N1,343,566	60.1
Total	11,402	17,736	6,334	N1,061,329	N507,379	N1,468,708	66.8
UACN	15,883	39,708	23,825	N124,682	N94,703	N119,385	16.8
FGN 18 <sup>th</sup> DS 2004	1,108.4	1,108.4	0	N110,840	N70,000	N80,840	8.1
Lagos State Bond	1,000.0	1,000.0	0	N100,000	N40,000	N40,000	10.0
Cadbury	1,000.0	1,000.0	0	N100,000	N165,000	N165,000	17.9
CFAO	1,000.0	1,000.0	0	N100,000	N190,000	N190,000	21.2

Source: Compiled by Author from Various Sources

ACR = Annual Compounded Rate

When an investment returns as much as 50 percent on the invested sum over a period one year, there is always the inclination to stick with that investment vehicle unless the investors find another “safe” investment vehicle that provide higher returns. But as Table 4.2 above indicates, three of the four stocks in our sample provided returns in excess of 60 percent per annum. For example, over the ten year period covered in our study, the actual returns for investing in First Bank shares stood at 1440%, which is decomposed to 69.9% annual compounded rate. When compared to the risk-free rate of 12% over the same period, the First Bank investor obvious had a very good return on investment. As the table shows too, there were some poor performers. The coupon on the Federal Government of Nigeria 18<sup>th</sup> Development Stock stood at 7%, some 5 percentage points below the risk-free rate. The same can be said of the Lagos State Government Floating Rate Bond with a coupon of 4% (held to maturity). We infer from this table that while the industrial equities shares in our sample performed very well based on their annual compounded rates of return, the fixed income sector did not do as well as the best performer in that sector posted a 19% return. The gap between the shares and the bonds returns on Table 4.2 can be explained from two standpoints. The first is the growth in stock holding due to bonus issues. As can be seen in Table 4.3 below, both First Bank and Nigerian Breweries constantly

gave bonus shares to their investors thus increasing their accumulated shareholding. The other reason is the rather astronomical change in prices. The positive change in price together with the accumulated shareholding due to bonus issues completely distorts the total returns equation. Whereas the total returns model captures price change and dividends, it ignores the accumulated shareholding brought about by bonus issues. In other words, the annual accumulated rate of return exhibited in Table 4.2 above captures all the components of returns.

Table 4.3: Annual Growth Analysis – Sample Data 1994 – 2003

Year	First Bank of Nigeria			Nigerian Breweries			Total Nigeria			UACN		
	Price	Div	Bonus	Price	Div	Bonus	Price	Div	Bonus	Price	Div	Bonus
1994	4.71	0.50	1:4	9.25	1.50	1:1	9.30	4.50	1:3	6.35	0.60	0
1995	3.75	0.70	1:4	13.2	0.85	1:1	8.40	5.00	0	6.03	0.80	1:4
1996	9.56	0.56	1:4	19.89	1.0	0	29.68	2.00	1:6	13.60	0.70	0
1997	12.6	1.00	0	19.30	1.0	0	58.00	4.00	0	7.40	0.60	0
1998	12.6	1.00	0	13.50	1.35	2:3	46.50	2.00	0	10.50	0.60	0
1999	9.5	1.00	1:4	21.00	1.50	0	43.50	4.00	0	6.70	0.00	1:1
2000	11.93	1.25	1:4	26.3	0.79	1:1	59.84	4.54	0	3.14	0.00	0
2001	15.0	1.30	1:4	32.1	1.12	0	61.9	6.00	0	n/a	n/a	0
2002	19.2	1.30	1:4	33.9	2.10	1:1	102.4	7.00	0	n/a	n/a	0
2003	22.7	1.50	1:1	38.4	1	1:1	157.7	7.00	0	n/a	n/a	0

Source: Equity Research Various Years

Table 4.3 is designed to show the three core components of return, namely, price, dividend, and bonus. Although the four companies in our sample do not have a uniform returns protocol, the figures on that table points to the fact that all the companies in our sample employed all three components of the annual accumulated returns model. The implication here is that investments in equities have the potential for growth from these three standpoints. In other words, any of the factors in the mix can provide the highest return as the account of Total Nigeria Plc shows. The case of UACN appears to be unique and fit for further analysis. In 1999 the aggregate equity price dropped from N10.50 to N6.70 (a whopping 36.2%). But the decline in price is complemented by the 1 for 1 bonus issue that increased the investor's shareholding capacity by 100 percent. By this increase, the net return on investment retains the momentum that arose from the rise in price from N7.40 in 1997 to N10.50 in 1998. It is this inclusion of bonus issues in the calculation of total returns that provides a clearer picture and indeed shows the true return on investment. On the other hand, fixed income securities presented in Table 4.2 carry the same closing volume of securities as the opening volume. Thus, there is no increase in total equity holding beyond the initial holding at the beginning of the investment process. This lack of growth in the total volume



of securities beyond the original holding as indicated in the 3<sup>rd</sup> column on Table 4.2 accounts for the gap between the total return on stocks and the yield to maturity on fixed income securities.

In order to validate the findings of this research effort, we formulated two hypotheses. Our results are thus presented in two segments corresponding with the two hypotheses propounded for this study. The first segment deals with our attempt at determining if there are differences between bond market volatility and the stock market volatility in the Nigerian capital market during the period covered in our study. **Hypothesis 1 (Ho1):** There is no significant difference between stock market volatility and bond market volatility over the ten-year period 1994 to 2003. This hypothesis was informed by the fact that bond market volatility has significant impact on yield spreads and security values. While a section of the financial press contends that stock market volatility in the developed economies of the West have increased over time, other segments of the same financial press tend to believe otherwise. We therefore considered it important to examine the volatility patterns in both the stock and bond markets due to the impact of the volatility of both markets on yields and returns. Table 4.5 shows total return series for both stocks and bonds containing annual returns over the period 1994 to 2003. In the case of the bonds, we computed these returns using yields assuming that a single bond with 10 years to maturity is bought at par at the beginning of each period. The bond is “held” during the period and assumed “sold” at the end of the period at a price calculated based on the coupon, and the prevailing market yield. The capital appreciation (return in excess of yield) is then derived as the change in price over the period, divided by the beginning-of-period price. Because total return is equal to the income return plus the return in excess of yield, we converted the yield to an income return by (dividing it by 12) lagging it one period. In order to examine bond market volatility we computed the standard deviation of annual rates of return for 10 years. This measure was used to examine how bond market volatility had changed over the 10-year period. Also, to examine bond market volatility relative to stock market volatility, we computed the ratio of standard deviations of annual rates of return for the 10-year period for stocks and bonds. This measure enabled us to examine and test for changes in bond market volatility relative to stock market volatility during the period covered in our study. As our charts indicate below, there are variances between the market volatility of bonds and those of stocks.

Table 4.4: Annual Returns Summary – (1994 – 2003)

<b>Equity Securities</b>	<b>ACR%</b>	<b>Bonds</b>	<b>ACR%</b>
First Bank	69.9	FGN 18 <sup>th</sup> DS 2004	8.1
Nigerian Breweries	60.1	Lagos State Bond	10.0
Total	66.8	Cadbury	17.9
UACN	16.8	CFAO	21.2
<b>Average</b>	<b>53.4</b>	<b>Average</b>	<b>11.6</b>

Source: Compiled by author

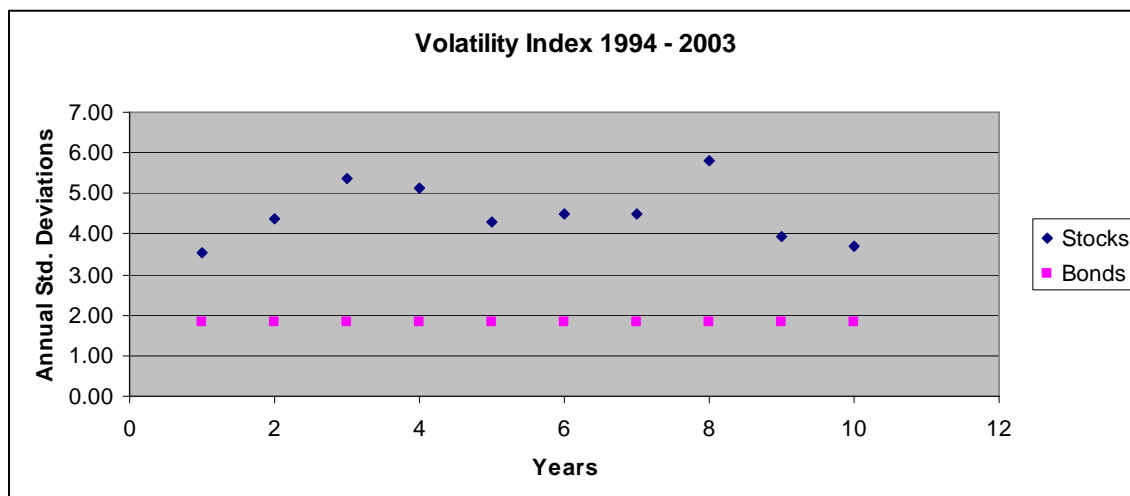
Table 4.5: Comparative Returns/Yields and Standard Deviations

Year	Average Stock Returns	Standard Deviation	Average Bond Yields	Standard Deviation
1994	29.72	3.54	12.68	1.82
1995	24.5	4.39	12.81	1.81
1996	160.6	5.37	12.48	1.84
1997	28.1	5.12	12.55	1.83
1998	4.6	4.29	12.39	1.82
1999	4.0	2.41	12.44	1.84
2000	15.7	4.50	12.40	1.82
2001	76.5	5.81	12.92	1.82
2002	40.1	3.94	12.50	1.82
2003	33.5	3.71	12.61	1.83

Source: Calculated by Author from NSE Fact Book (Various Years)

The standard deviations of annual yields for the bonds in our study sample provided a dynamic view of the Nigerian bond market volatility over the 10-year period covered in our study. Beginning in 1994, the bond market remained stable in spite of the dearth of activities in that sector during that period. Similarly, the standard deviations of the annual rates of return for the stocks identified in our study provided a clear view of the Nigerian stock market volatility over the same 10-year period. As Figure 1 shows, the volatility of the standard deviations of both stocks and bonds point to the fact that the period of relative quiet in the bonds market in Nigeria impacted negatively on the overall performance of the Nigerian Capital market during the period under review. Not only did the bond market stagnate during the period 1995 and 1998, the dispersion between the intervening periods flattened out, causing the return streams to also grind to a near-stagnant position too.

Figure 1: Volatility Index of Standard Deviations



The pattern of volatility in the Nigerian stock market on the other hand, as indicated in the chart above, tend to present a distorted picture of the true happenings in the Nigerian capital market. The extreme values in 1994 and 2001 seem to suggest that the returns from stock market investing produced unusual numbers during those time periods. Whereas the bond market

volatility peaked in both 1996 and 1999 that of the stock market peaked in 2001. The relationship between the measures of volatility in the Nigerian bonds and stocks markets shows that the two markets are not quite stable. While volatility is consistently lower in the bond market during the 10-year period covered in this thesis, there was no time that the bond market volatility approached the stock market volatility. Rather, bond market volatility during that period was but a small fraction of stock market volatility. Since volatility drives income streams, this result corroborates the annual compounded rates results given below. We also hypothesized that total average returns on bonds did not outperform total average returns on stocks over the ten-year period 1994 to 2003. Our results show that there are indeed differences in the returns between stocks and bonds. Table 4.4 shows that during the period under review (1994 -2003) the average annual compounded rates of return on stocks in our sample data outperformed those of bonds by as much as 78.3%

Figure 2: Annual Compounded Rates

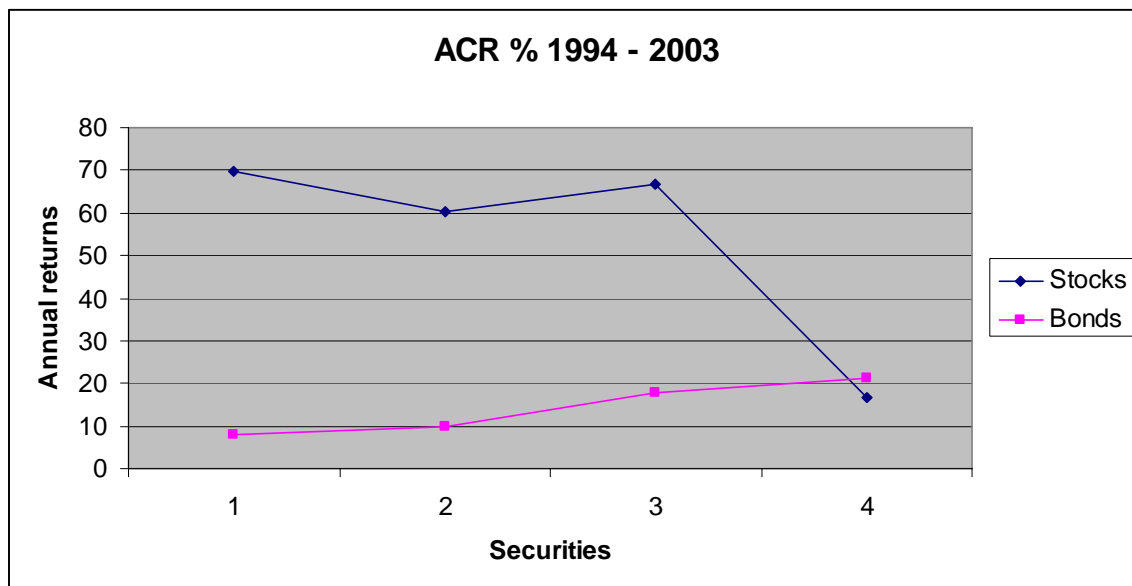
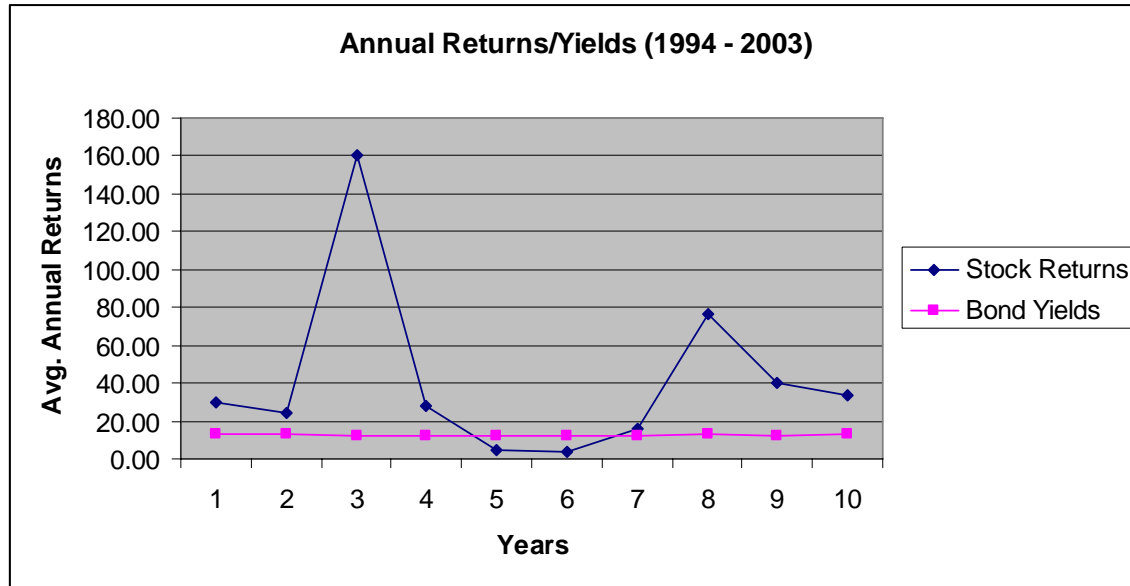


Figure 2 is a graphic depiction of the performance of each of the securities in our study group. It is indeed clear from this standpoint alone, that there is a difference between the returns recorded by stocks and bond yields. By inspection, it is clear that over the ten-year period ending in 2003, three of the four stocks selected for analysis recorded returns far in excess of Nigeria's risk-free rate (12% in 2003). For instance, First Bank recorded an annual compounded rate of 69.9% which exceeds the risk free rate (RFR) by about 82.8%. By contrast, the highest performing bond recorded a return of 19%. Although this outcome also exceeds the risk-free rate, the margin of the difference is 36.8%. This figure is 46% short of the 82.8% earned from investing in First Bank shares during the ten-year period under review. This result corroborates the disparity in investment pattern shown in the comparative trading activities between government stocks and bonds, and industrial equities (see Appendix II). For example, in 1994 the volume of bonds and government stocks stood at N15,202,218 while that of industrial equities stood at N970,679,018. Our results tend to reveal that in Nigeria, the higher the volume of investment the higher the returns as the average returns on equity securities in our sample data far outperform the returns on bonds. Chart 2 above shows annual compounded rate for both stock returns and bond yields. It shows the plot of the compounded annual returns for each of the stocks selected for this study. From this result, we inferred that stocks outperformed bonds during the period under review.

Figure 3: Comparative Annual Yield/Return Profile



We decided to extend the analysis by developing a graph that enabled us compare the annual yields on bonds to the annual returns on stocks for the period covered in our thesis. The result is indicated in Figure 3 above. The result is consistent with other studies covered in chapter two. In particular, we state that based on the data used in this investigation, stocks did outperform bonds in the Nigerian capital market. Two reasons are considered to have been responsible for this result. First is the fixed income nature of bonds and the fact that it is principally a market for government securities in developing economies. The second reason is that speculation is a cardinal part of capital market activities especially in the emerging markets of Africa. Under this assumption, investors (speculators) pay greater attention to market volatility in the belief that market efficiency does not exist. Therefore, investors are most likely to benefit from market swings where they exist. And the stock market in Nigeria provided enough swings during the period covered in our study. This is evident in the stock market volatility index in Chart1 above, where the market volatility peaked in 2001. Based on the results stated above, we observed that the relationship between stocks and bonds seems to be consistent with earlier observations made in the Ibbotson (1991) research, where they concluded that stocks offer higher total returns than bonds. During the 10-year period covered in this thesis, at no time did aggregate bond returns exceed stock market returns. At the individual security levels, the result was similar except for yield on the CFAO corporate bonds that exceeded that of UACN. It is safe therefore, for us to conclude that given our data and period covered in the investigation, stocks outperformed bonds in the Nigerian Capital Market during the period 1994 – 2003.

## SUMMARY AND CONCLUSION

This paper attempted to analyze the growth and return levels of both stocks and bonds in the Nigerian capital market, and by extension determine if stocks offer higher returns than bonds and vice versa? In attempting to address this core objective, we defined common stocks as equity security representing the ownership interest in a corporation, and defined bonds as long term debt instruments representing the issuer's contractual obligations. We indicated that these instruments are traded in the capital market, and clearly provided the distinguishing factors of both the bond and stock markets. We also paid due attention to Nigeria's macro-economic environment because

of its overriding influence on the activities of the capital market. By examining the Nigerian capital market, we observed that the stock market enjoyed relative boom during the period under review while the market for bonds and other fixed securities was relatively docile. In particular, we observed that the Nigerian bond market actually went to sleep during the period under review. But due to the putting in place of a rejuvenation plan by the federal government, the bond market received a new lease of life. In spite of this success at revamping this sector, this research did not benefit from this rebirth due to the dearth of data on account of the prior period of near-collapse of the sector. In order to circumvent the absence of data in this sector of the market, we decided to mine for comparable data from government stocks, and redeemable debenture stocks. In our attempt at determining the relative strength of one instrument over the other (bond v stock) we identified all the securities listed in the Nigerian Stock Exchange as our study population.

To facilitate the determination of the relative strength of one instrument over another, we propounded two hypotheses, and tested both using descriptive statistical techniques. Our results indicate that the stock market experienced increased volatility during the period under review, peaking in 2001. It also shows that the bond market was less volatile than the stock market. A comparative analysis of return/yield streams over the same period confirmed the relative strength of stock returns over bond yields during the 10-year period ending in 2003. Whereas the highest performer in the stock category provided about 70% annual compounded return during the period covered, the highest in the bond category only returned an annual compounded yield of 21.2%. Our conclusion arising from our findings recognizes the disparity between total market activities between stocks and bonds as indicated in Table 4.1 above that compares the volume of trading in both markets. It also recognizes the fact that the bonds market went to sleep at some point in the life of the Nigerian capital market, and that the Nigerian Stock Exchange All-Share Index was dominated by stock market activities. In spite of all these, the analysis of the return streams of stocks and those of bonds provided a good enough measure of market performance. Also, the standard deviations of both bonds and stocks also provided evidence of market volatility for both instruments. In summary, based on the trading volume and value of shares, it is very clear that the stock market is overwhelmingly stronger than the bonds market. From the return-yield standpoint, our results also show that investment in stocks provide much higher returns than bonds. Therefore, the two hypotheses advanced for this paper are rejected. We believe that the methodology employed in this study, which is in the same tradition of as those adopted by other researchers in this field of research provides sufficient grounds for guided generalization. Since this paper corroborates the Ibbotson's study that concluded that stocks outperformed bonds in the United States, we make bold to opine that the capital markets of less developed economies tend to function in much the same way as those of the developed countries of the West.

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# **DID THE SARBANES-OXLEY ACT IMPROVE AUDITOR EFFECTIVENESS IN ISSUING GOING- CONCERN OPINIONS FOR CLIENTS FILING BANKRUPTCY?**

Paul Wertheim, Abilene Christian University  
William Fowler, Abilene Christian University

## **ABSTRACT**

The research question that is addressed in this study is: Did the Sarbanes-Oxley Act (through an effort to increase auditor independence) have an impact on the effectiveness of audit reports? The “effectiveness” of audit reports is measured as the propensity of an audit firm to issue a going-concern opinion on corporate clients that subsequently filed for Chapter 11 bankruptcy. It is hypothesized that as independence is decreased, the audit firm would be less likely to issue a going concern opinion if there were questions about the ability of the client to continue as a going concern. Thus, if the provisions of Sarbanes-Oxley have been effective, one would expect an increase in the effectiveness of audit firms in issuing a going-concern opinion for clients who subsequently filed for bankruptcy. This study specifically examines audit firm effectiveness in issuing going-concern opinions for two distinct time periods: (1) pre-Sarbanes-Oxley, and (2) post-Sarbanes-Oxley. This allows for an analysis of any change in audit firm effectiveness in issuing going concern opinions.

For a sample of companies filing Chapter 11 bankruptcy between 1997 and 2005, SEC filings are examined to determine the existence/non-existence of a going concern opinion for the fiscal year immediately preceding the year containing the filing of the Chapter 11 bankruptcy. Analysis is performed to examine any change in audit effectiveness for the time period prior to Sarbanes-Oxley versus post-Sarbanes-Oxley. The analysis includes a descriptive summary of differences among audit firms based on audit firm size, client size, year of bankruptcy filing, and length of time between audit report date and bankruptcy date. The results of this study give evidence on the impact of changes in auditor independence on the effectiveness of the auditor to issue going concern opinions for clients who subsequently file Chapter 11 bankruptcy.

# TECHNICAL EFFICIENCY OF COMMERCIAL BANKING SYSTEMS IN GULF COOPERATION COUNCIL GCC COUNTRIES: AN INTERNATIONAL BENCHMARKING

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## ABSTRACT

*This paper analyzes the technical efficiency of banking systems in Gulf Cooperation Council (GCC) countries, and identifies international benchmarks for them among the Organization for Economic Co-operation and Development (OECD) countries. The data used in the study is compiled mainly from two sources: the data published by the central banks of GCC countries and the data set "BANK PROFITABILITY: FINANCIAL STATEMENTS OF BANKS, 1994-2003, 2004 EDITION" published by the OECD. We use Data Envelopment Analysis (DEA) as methodology and intermediation approach as theoretical background, to assess the technical efficiency and identify benchmarks. The choice of the intermediation approach is justified by the fact that commercial banks in GCC are still playing the traditional role as main vehicle for the transfer of funds from depositors to investors. This is clear from the high ratios of contribution of commercial banks to national investment activities in these countries. Malmquist index is then used to analyze the evolution of the relative technical efficiency of GCC commercial banking systems compared to that of other OECD countries commercial banking systems. Conclusions are then made about current level of performance and benchmarks for future are identified. However, it is worth to mention that the data set, used in this study, does not cover the recent economic booming period generated by the high increase in oil prices and characterized by a relative stability in the banking sector. More recent data are hence needed to know the effect of this boom on the performance of banking systems. Also, further research is needed to reflect the dichotomy in commercial banking systems created by the sustainable increase in non-interest commercial banking activities.*



# **A DESCRIPTIVE STUDY OF DIFFERENCES AMONG AUDIT FIRMS WHOSE CLIENTS ISSUE FINANCIAL STATEMENT RESTATEMENTS**

Paul Wertheim, Abilene Christian University

## **ABSTRACT**

*This research study addresses the question: Are there differences among audit firms in their effectiveness in auditing clients who later restate financial statements? For example, do differences in audit firm size impact the likelihood that the client will restate financial statements? Are there differences among the Big Four audit firms in the likelihood that their clients will restate financial statements? How do audit firms differ as to the “reasons” that their clients incur restatements?*

*Data for this study was drawn from the Audit Analytics database of financial statement restatements. For the period 2001 through 2005, the database contains 4,537 restatements for 3,467 unique registrants. The database also categorizes these restatements based on a taxonomy of over 40 different accounting error categories. For each of the companies involved in a restatement, I gather information on the period covered by the restatement, date of the restatement announcement, auditor (audit firm) during the restatement period, client size, audit firm size, and audit fee structure. The results of the analysis include a descriptive summary of differences among audit firms based on audit firm type, audit firm size, client size, year of misstatement, year of restatement, and length of time between misstatement and restatement. The results of this study give evidence on differences among audit firms on the effectiveness in auditing clients who later are required to restate financial statements.*

# OCCUPATIONAL STRESS IN PRIVATE AND PUBLIC ORGANIZATIONS IN PAKISTAN

Hina Rehman, Foundation University

## ABSTRACT

*In this research paper it was checked that there was any relationship between management-employee relationship and occupational stress. The study is essentially a correlation study. A randomly selected sample of 20 private and public organizations. The alpha reliability of the scale was calculated which was significant. Results show that it shows that management-employees' relationship was not strongly correlated. There is a more stress in Software sectors, pharmaceutical company, telecommunication sector, bank, welfare organizations, and least stress in service sector respectively.*

## INTRODUCTION

Occupational stress is becoming increasingly globalized and affects all countries, all professions and all categories of workers, as well as families and society in general. (Ahmad & Ahmad, 1992) Job stress can be defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health and even injury. (NIOSH)

When the demands and pressures placed on individual workers do not match the resources which are available, either from the organization or within the individual, stress can occur and endanger that person's health and well-being". (Employment Relations & Union Services: Health and Safety- Workplace Stress, 2004)

Stress has been defined in different ways over the years. Originally, it was conceived of as pressure from the environment, then as strain within the person. The generally accepted definition today is one of interaction between the situation and the individual. It is the psychological and physical state that results when the resources of the individual are not sufficient to cope with the demands and pressures of the situation. Thus, stress is more likely in some situations than others and in some individuals than others. Stress can undermine the achievement of goals, both for individuals and for organizations.

If key staff and large number of workers are affected, work stress may challenge the healthiness and performance of their organization. Unhealthy organizations do not get the best from their workers and this may affect not only their performance in the increasingly competitive market but eventually even their survival (Causes and Management of Stress at Work, S Michie, 2006)

When affected by work stress people may:

- Become increasingly distressed and irritable.
- Become unable to relax or concentrate.
- Have difficulty thinking logically and making decision.
- Enjoy their work less and feel less committed.
- Feel tired, depressed, and anxious.
- Have difficulty sleeping.
- Experience serious physical problem such as heart disease, increases in blood pressure, head aches.

Work stress thought to affect organization by:

- Increasing absenteeism
- Decreasing commitment to work
- Increasing staff turn-over
- Increasing complaints from clients and customers
- Increasing unsafe working practice
- Adversely affect staff recruitment
- Damaging the organization image both among its workers and externally (Leka, 2003)

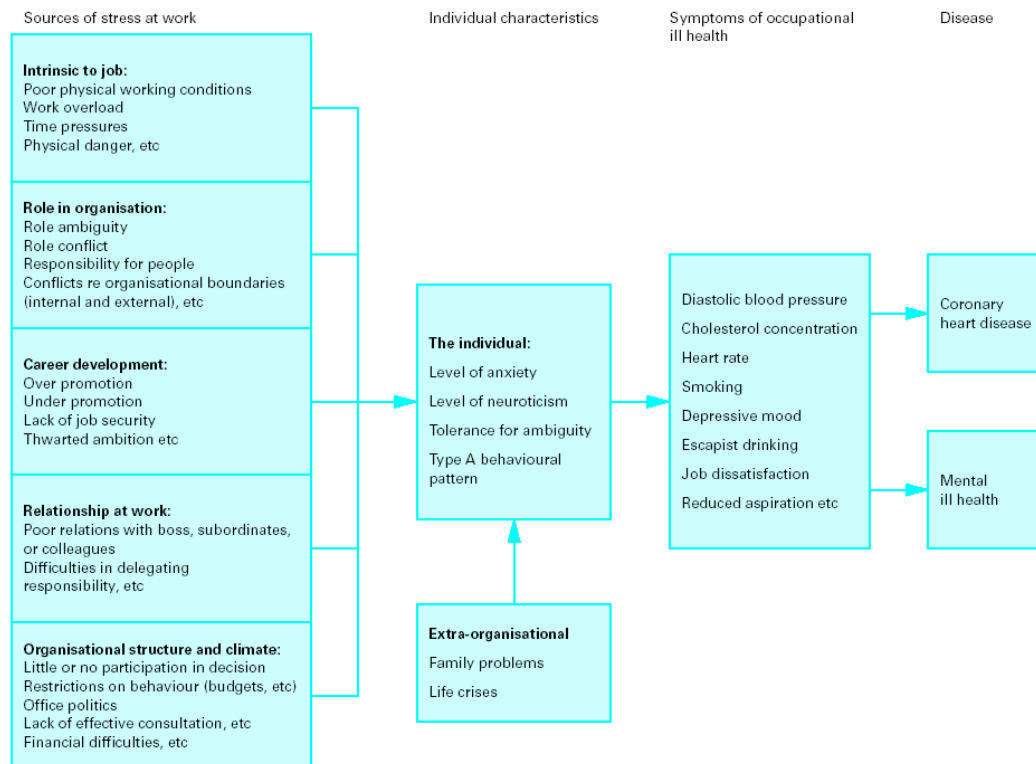


Figure 1 A model of stress at work.<sup>1</sup>

## Workplace Factors Causing Stress

The workplace is an important source of both demands and pressures causing stress and structural and social resources to counteract stress. The workplace factors that have been found to be associated with stress and health risks can be categorized as those to do with the content of work and those to do with the social and organizational context of work. Those that are intrinsic to the job include long hours, work overload, time pressure, difficult or complex tasks, lack of breaks, lack of variety and poor work conditions (for example space, temperature, light)

Under work or conflicting roles and boundaries can cause stress, as can having responsibility for people. The possibilities for job development are important buffers against current stress, with under promotion, lack of promotion, lack of training and job insecurity being stressful. There are two other sources of stress or buffers against stress: relationship at work, and the organizational culture. Managers who are critical, demanding, unsupportive create stress, whereas a positive social dimension of work and good team working reduces it. (Causes and Management of Stress At work, S Michie, 2002)

## LITERATURE REVIEW

Finance, insurance and real estate, with 12 % of the cases and services with thirty five percent (35%) had higher proportions of occupational stress cases than they did of all occupational injury and illness cases involving days away from the work, and 23% respectively.

In 1997, four industries accounted for the bulk of occupational stress cases: services, manufacturing, retail trade, and finance, insurance, and real estate. Thirty-five percent of cases of occupational stress involving days away from work were in the services industry. In comparison, 23 percent of all nonfatal occupational injuries and illnesses occurred in services in 1997.

Manufacturing accounted for 21 percent of occupational stress cases and retail trade for 14 percent. These proportions were lower for these industries than the comparable proportions for all injuries and illnesses.

Like the services industry, finance, insurance, and real estate had a higher proportion of occupational stress cases than of all nonfatal injury and illness cases.

Report published in May 2004 named “Employment Relations And Union Services: Health And Safety- Workplace Stress” discuss factors which causes stress at work place in which poor relationship with the managers and unsympathetic management.

Report on occupational stress policy by Health and Safety Executive (HSE) 2004 has identified six key areas that can be causes of work related stress. In which the support staff receive from managers and colleagues is of the one factor that lead to stress in work place.

(<http://www.napier.ac.uk/depts/has/stress.htm>)

A survey of 1,299 employees from 37 organizations<sup>1</sup>, identified ten factors as the most important contributors to employee stress. In order of importance, these were:

- Employees not being free to talk with one another
- Personal conflicts on the job
- Employees not being given enough control over their work
- Inadequate staffing or budget
- Management and employees not talking openly
- Management perceived as being unsupportive
- Below-average sick and vacation benefits
- Reduction in employee benefits
- Having to deal with bureaucratic red tape
- Lack of recognition or reward for doing a good job

A 2½ year study<sup>2</sup> involving almost 28,000 employees in 215 organizations showed that poor teamwork and ineffective supervision were the two most important factors leading to employee stress, with poor teamwork issues having the strongest influence on job burnout, health problems, and performance problems. (Managing Employee Stress and Safety: A guide to minimizing stress-related cost while maximizing employee Managing Employee Stress and Safety by David lee, 2000)

While no occupation is immune, violence at work tends to be more of a risk in certain occupations than in others. Health care is prominent among the sectors which are at high risk. In

particular, workers who perform certain types of task appear to be at special risk. These tasks include:

handling money or valuables (cashiers, transport workers, bank and post office staff, shop assistants);

providing care, advice, education and training (nurses, ambulance staff, social workers, teachers);

carrying out inspection or enforcement (police and traffic wardens, ticket inspectors)

working with mentally disturbed, drunk or potentially violent people (prison officers, bar staff, mental health workers); working alone (home visitors, taxi drivers, domestic repair workers).

(safe work: Introduction to violence at work, ILO)

Different stressors in work can be categorized to be caused by job content, working conditions, employment conditions and social relations at work. In following table some general job-related stressors are presented.

#### Categories of Job Related Stressors

Category	Stressor
Job content	Work over/under load
	Complex work
	Monotonous work
	Too much responsibility
	Conflicting/ambiguous demands
Working conditions	Poor conditions
	Work posture
	Physically demanding work
Employment conditions	Low pay
	Poor career prospects
	Flexible labor contract
	Job insecurity
Social relations at work	Poor leadership
	Low social support
	Low participation in decision making
	Liberties
	Discrimination

( resource: Information Technology-Related Stress, Reetta Raitoharju)

Researches indicate that nearly a third of the working population in developed countries report high to very high levels of stress. Similarly, evidence for newly industrialized countries is also indicative of the prevalence of stress. Time pressures, excessive demands, role conflicts, ergonomic deficiencies, job security and relationship with customers are particularly common stressors amongst employees in the financial services sector . Furthermore, new stressors such as computer breakdowns, computer slowdowns and electronic performance monitoring, have developed as a result of increased human interaction with computers. (Violence and stress at work in financial services, Sabir I. Giga and Helge Hoel, 2003)

The hospitality industry provides employment inter alia to socially weaker groups of workers such as young workers without working experience, women with family responsibilities or migrants with little knowledge of local conditions. These groups are particularly vulnerable to acts of violence by customers and co-workers. Particular source of stress in the hospitality sector is seen in unclear situations at work arising due to the strong presence of customers and personalized services offered. Employees including managers indicate that the distribution of

responsibility and a lack of control over their work create stressful situations. (Hotels and catering: Sector-specific information on violence and stress, ILO)

## METHODOLOGY

### Sample

Sample consisted of 94 employees and middle level managers from different private and public (20) organizations located in Islamabad and Rawalpindi. The subjects were selected at non stratified sampling. Employees and middle level managers were chosen as subject because they are the one who really know the significance of the stress.

### Instruments and Measure

The study was aimed to check relationship between occupational stress and managerial relationships of an organization as well as stress in private and public organizations. Data was collected from middle level managers and employees from private and public organizations. In this research “Chronic Work Related Stress Evaluation” instrument had been used for the measurement of occupational stress. This instrument was invented in 1972 by a division of American Management Associations (J.R.P. French, Jr., and R.D. Caplan, 1972). The occupational stress scale consists of 25 statements falling into 11 sub scales: organizational security (1 item), organizational satisfaction (1 item), behavioral symptoms (3 items), physical symptoms (1 item), relationship (4 items), control (1 item), personal responsibility (4 items), drive (2 items), life-work (3 items), work load (3 items) and job satisfaction (2 items). The overall alpha reliability co-efficient of the scale was 0.623 indicating that the questionnaire was consistent and reliable. The occupational stress was designed in such a manner that its scoring was placed on a 5-point scale ranging from always to never. The score assigned to always was 1, often was 4, sometimes was 3, infrequently was 2 and never was 5. Statistical analysis was conducted to test the relationship between occupational stress and functional area of an organization.

In the first step relevant information collected from internet and from various other resources to know about the indicators of the stress. Non probability sampling was done since a specific group of people were chosen for study. The study specific groups were employees and middle level managers. The managers and employees were assured that all information provided by them would be kept confidential and would be used only for research purpose. They were requested to fill the stress questionnaire.

### Hypotheses

- H1: Services industry experienced more stress than finance (bank)
- H2: Bank sector experienced more than welfare sectors
- H3: Poor employee management relationship increase occupational stress

Finance, insurance and real estate, with 12 percent of the cases and services with 35 percent, had higher proportions of occupational stress cases then they did of all occupational injury and illness cases involving days away from work, 2 and 23 percent, respectively. The proportion of occupational stress disorders was lower in all others industries than comparable proportions of all injuries and illnesses. Four industries accounted for the bulk of occupational stress cases: services

(35 percent), manufacturing (21 percent), retail trade (14 percent), and finance, insurance, and real estate (12 percent).

(Issues in labor statistics, U.S. Department of Labor, Bureau of Labor Statistics, Summary 99-10 September 1999)

#### Hypothesis 2

A systematic review of the evidence for work factors associated with psychological ill health and associated absenteeism found the key factors to be:

- long hours worked, work overload and pressure
- the effect of these on personal lives
- lack of control over work and lack of participation in decision making
- poor social support
- unclear management and work role and poor management style (S Michie, 2006)

## RESULTS AND DISCUSSION

Table 1: Multiple Comparison

Organization Type	Organization Type	Mean Difference
Telecommunication	service industry	10.0509
	Software house	-1.7233
	Bank	0.9485
	Pharmaceutical	-1.4887
	Welfare	-0.4559

According to the results in table, reflected that more stress was experienced in telecommunication sector as compared to service industry and bank sector.

Table 2: Multiple Comparison

Organization Type	Organization Type	Mean Difference
Service industry	Telecommunication	-10.0509
	Software house	-11.7742
	Bank	-9.1024
	Pharmaceutical	-11.5396
	Welfare	-10.5068

Comparing service industry with telecommunication, software house, bank, pharmaceutical sector and welfare organization reflected that service industry experiencing less stress.

From the results given in table null hypothesis was rejected because bank sector was experiencing more stress than service industry.

Table 3 Multiple Comparison

Organization Type	Organization Type	Mean Difference
Software house	Telecommunication	1.7233
	Service industry	11.7742
	Bank	2.6718
	Pharmaceutical	0.2346
	Welfare	1.2674

This table shows that software house experiencing more stress as compared to telecommunication, service industry, bank, pharmaceutical and welfare organizations because their values were 1.72, 11.77, 2.67, 0.23 and 1.26 respectively.

Table 4: Multiple Comparison

Organization Type	Organization Type	Mean Difference
Bank	Telecommunication	-0.9485
	Service industry	9.1024
	Software house	-2.6718
	Pharmaceutical	-2.4372
	Welfare	-1.4044

This table shows that bank sector was experiencing more stress as compared to service industry sectors.

From the results given in table null hypothesis was accepted because bank sector was experiencing more stress than welfare organization.

Table 5: Multiple Comparison

Organization Type	Organization Type	Mean Difference
Pharmaceutical	Telecommunication	1.4887
	Service industry	11.5396
	Software house	-.23462
	Bank	2.43720
	Welfare	1.03278

This table shows that pharmaceutical sector was experiencing more stress as compared to telecommunication, service industry, and bank and welfare organization.



Table 6: Multiple Comparison

Organization Type	Organization Type	Mean Difference
Welfare organization	Telecommunication	.45594
	Service industry	10.50682(*)
	Software house	-1.26739
	Bank	1.40443
	Pharmaceutical	-1.03278

This table shows that welfare sectors experiencing more stress as service industry.

Table 7 shows the results for Hypothesis 3

Table 7 Correlations

Variables	N	Correlation	P-value
Employee management relationship	94	0.443	0 .000

\*\* Correlation is significant at the 0.01 level (2-tailed).

Since 0.484 is not relatively close to 1 or -1 this indicates that management employee's relationship is not strongly correlated. From this result it may concluded that there may be other factors which contributed in occupational stress other than management relationship.

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# APPENDIX

## STRESS QUESTIONNAIRE

**Gender** Male Female  
**Age** Under 25 26-35 36-45 45-55 55-over  
**Job Level** Manager Clerk Secretary Other  
**Educational Level** Intermediate Bachelor's Master Other  
**Department** Human Resource Marketing Accounting  
Admin IT Other

Please indicate your level of agreement with each of the following statements

1= Always 2= Often 3= Sometimes 4= Infrequently 5= Never

No		Always	Often	Sometimes	Infrequently	Never
1	I consider myself in good or excellent health					
2	I seem to tire quickly					
3	Problems associated with my job have kept me awake at night					
4	I often take my job home with me in the sense that I think about it when doing other things					
5	I feel relax in home					
6	I feel relax when spending time with my friends, family and relatives.					
7	I cannot think about work when I am spending time with my family, friends and relatives.					
8	Time at work flies by quickly.					
9	There is threat of layoff or demotion.					
10	Do you solve your work problem easily					
11	I have differences of opinion with my superiors					
12	There is situation where I interrupt my work for new priorities					
13	Difference of opinion exists between my unit and others					
14	I get feedback only when I can't achieve my target or done my job at given time					
15	Management tell me about important changes or decision					
16	I have too much to do and too little time in which to do it					
17	This job match with my qualification					
18	I must go to other departments to get my job done					
19	I have good relations with my co-workers					
20	I interact with my co-workers					
21	I use my knowledge and skills to do routine work					
22	I have authority to change my job according to circumstances					
23	This job is not suitable with my qualification					
24	I carry out only that decision which are directed towards management					
25	My supervisor check my performance					

# ENTERPRISE INTEGRATION IN METADATA ENVIRONMENT

Raymond Cheng-Yi Wu, Enterprise Architect, IBM Software Group

## ABSTRACT

*The main purpose of this paper is to conduct a research in the enterprise architecture issue as a means of addressing the vertical gap with new knowledge contributions in the vertical integration of the interconnectivity of cross-layers; these layers include direction, business, process, service and information.*

*We all understand that in this new computing age of large scale, high complexity and dynamic development, a common weakness in the interoperability between business and IT leaves IT far behind the direction business is taking; poor business responsiveness and IT governance makes it even harder to achieve the enterprise goal. This overall tactical was identified issue that emits from the vertical gap as the “invisible enterprise issue” and these are the findings in our early analysis stage. The methodology used in this research as progressed was multi-phases driven with different focus in each phase which consists of - technical environment setup, business semantic study and enterprise integration.*

*In the first phase - the technical environment setup of metadata and repositories identified the master data and transaction aggregation as foundation of metadata repository to build the technical capability of vertical integration foundation.*

*The second phase - semantic repository which communicate with lower service repository holding the “intelligence” of strategic analysis of taking enterprise goal into business semantic direction, and how to derive semantic message through “semantic injection micro process” in forming the vertical skeleton. Unfortunately this area is still new in the industry, common industry repository for semantic integration to streamline the vertical integration is demanding for future development.*

*In the third phase, the realization of enterprise Integration deriving a “loosely coupled” mediation in creating configurable linkages between business and IT which were leveraged to those common methodologies and architecture practices such as Zachman (John Zachman framework), RUP (IBM methodology in Rational Unified Process), SOA (Service Oriented Architecture) and MDA (Model Driven Architecture). Minimizing the gap between business and IT by using enterprise vertical integration is the originality of this paper.*

## INTRODUCTION

The IT industry became pervasive in the 21<sup>st</sup> century due to its significant growth in terms of huge volume transactions and sophisticated businesses. Enterprise architecture mainly mediates between business and IT to minimize the gap by improving governance, agility and business integrity.

The indicator from our common practice shows that once the enterprise spends time *tba* to complete its business analysis, they should be able to complete the whole project within an additional two to three times of *tba* followed by the first *tba*; otherwise the organization is likely to be encountering an enterprise problem.

The other indicator shows that a well-controlled enterprise has the capability of directing the business context and working effectively with KPI (key performance indicator) and metrics

within those enterprises. This clearly shows that they know how to adjust the business and IT parameters by using precise mapping and semantic messaging to direct service implementation and fulfill KPI and metrics.

Unfortunately, these common issues exist in most organizations; over 90% of medium to large scale IT users are suffering from bottleneck and indeed this is growing worse on a daily basis.

In the past five years SOA (Service Oriented), MDA (Model Driven), EDA (Event Driven) and many other leading technologies have been launched for the purpose of solving related problems. Their solutions have already given us significant improvements; however, the gap is still too massive to cope with the challenges of large scale and high complexity over the next ten years. Diagram 1 show the evolution of the challenge and our goal is to smooth down the challenge.

Two key processes were used to achieve this objective. The first process relates to how the enterprise goal may be achieved by impacting business process and its service components level, which will be called “business semantic.” This process extends the concept of “separation of concerns” of service-oriented enterprises to impact all of the above elements.

The second process follows one level below the first one and is called “information metadata.” It constitutes the repository of metadata storing information and its process of moving information between service and data; it thus supports the upper layers by repository synchronization.

As mentioned above, the approaches being used in this paper are 1) “business semantic injection” which was working on the gap between strategic direction, business, process and service; and 2) “information metadata” which is based on the application of existing metadata theory and repository solution.

Between these two processes, the SOA which has been mature in the industry, plays cohesive mediation between semantic and metadata was service repository.

The integrated solution of coherence of approaches which form the basis of this paper plays skeleton in vertical integration addresses the enterprise gap and is expected to provide further insights into micro process integration across enterprise layers.

The micro process integration was initiated by the domain context analysis process. H. Lee & J. Lee in their domain analysis - “Analyzing Business Domain: methodology and repository system” pointed out, once sets of use case scenarios are formulated, the next step will be the extraction of verbs and nouns for identifying domain objects. This semantic analysis concept was applied in supporting the theory of vertical integration, so the analysis of the scenario and the extraction of noun and verb form the common components in process, object and interface as domain asset [1].

When an example in banking industry for how the theory applied in the scenario is taken – “create a banking account” is a composite service formed by atomic services of; “application handling”, “open account”, “check non-exist”, “check credit”, “create service account”, “create billing account”, “sync marketing DB”, “issue card” and “adjust floor limit” and all of these services are analyzed for their semantic objects – The use case analysis generate a descriptive sentence of composite services like this, customer send request form (or request trough web), administrator processes *application handling*, and *open account* for the requester .

The semantic analysis extract noun and verb from atomic services and form lists like this, in the semantic repository, noun list store customer name, id, phone, account number, status ... and verb list store, open account (type), check non-exist (db), create account (type), credit check (code).

Once the semantic analysis work is done and both verb and noun list are stored in semantic repository, an asset validation of common objects need be done before further development in vertical (downward) direction, asset validation is a process for duplicate check, merge and final decision before all of these common objects become valid to stay in semantic repository for reuse.

## METHODOLOGY

This integration research was focused on the existing enterprise issue which is the misalignment between business and IT, with a deep dive of the root issues, the impact analysis, the nature of interference between business and IT, conceptual resolution and ended up by a strategic direction.

The methodology used in this research as progressed was phase driven with different focus in each phase. This has been divided into 3 phases in the areas of –

- Technical environment setup
- Business process study
- Enterprise integration.

The architecture methodology applied in this paper was, DCRP (will be discussed later), Zachman, RUP and SOA service modeling methodology. The integration methodology was related to “semantic injection micro process” and repository integration.

The reason that “technical setup” was arranged in phase I was because technical environment need be built first, before taking the business process forward; in other words, business process was built on top of a well-built metadata repository foundation.

The three different types of repositories (metadata, services and semantics) collaborate each other; the strategy of “enterprise vertical integration” was based on the processes which build up these repositories in early stage, and the methods in achieving inter-operability between repositories in later stage.

### Phase I

In the first phase, the focus was on technical environment setup of metadata and repositories, and looked at the master data, staging database, transaction aggregation, cursor computing and data partition as foundation of metadata repository to build the technical capability of vertical integration foundation. These assets were introduced in details regarding their linkage and how the technical environment was built in this phase.

First, the concept of “centric master data and single view of information” to consolidate all fragmentation into master data which called “single source of truth”, this was actually the initiatives of metadata repository design as data fragmentation and duplication need be removed before any development of data aggregation and metadata design. This step was actually completed by a huge effort of enterprise ETL project (extract, transformation & loading) and data cleansing processes to identify those randomly distributed data be aggregated toward the metadata-oriented design which was the initial step within metadata concept.

Second, to build up the metadata. Before the built, the metadata was categorized into two groups - system and transaction, the transaction metadata was related to those business transaction while

system metadata was related to those system configuration and DDL (data definition language) which supported parameterization in metadata computing.

The concept of transaction aggregation was supported by data and business object that any record-level manipulation will be recorded and logged into a “summary” record in reflecting the meta level business transaction. The meta information, stored in the metadata repository, provides upward provision of summarized business intelligence with linkage to upper layers’ repositories for their collaboration and vertical inter-operability against any business change or adds-on. Since in step 1, focus was limited to one-time job master data built, the investigation was continued to work on the on-going data validation, to design a staging functions for data cleansing of on-going data verification and validation toward master data.

Third, metadata computing was followed by the built of metadata repository, the reason of the introduction of recursive metadata iteration (self-built scripting and execution) and cursor computing (“join-query execution” within memory) was an intention to build the metadata engine in communicating with other repositories in Java/XML/SQL formats [6], the other purpose was using metadata in dynamic iteration, combined with cache memory computing, to produce a high integrity and high performance output in a real-time operational environment [13]. One of the examples was by allocating summarized “course” information in metadata repository as driving force in extracting associated students’ study plan gained the query response time from several seconds down to one nanosecond [8].

So far, the technical environment was discussed based on the system consolidation, data aggregation, metadata repository and metadata computing, the focus is now preceded to Phase II – Business process design, and starting from whatever built in this phase to extend the vertical integration concept upward to the business process layer.

## Phase II

Before commencing Phase II, one needs to understand that the completion of Phase I outlined the conceptual skeleton of robust inter-operability between 3 repositories – IT (metadata), Business (semantic) and Mediation (service) – which will be discussed in next phase. Then, business semantics areas will be discussed.

“Componentization and mapping” was the key process of this phase, and “active map” and “semantic injection” were both the new concepts in supporting this area, the main objective was to create fine-grained messaging carrier - service component, through decomposition, semantic injection and multi-mapping rules, to build up a high visibility environment with linkage to metadata of previous phase. In this phase, my focus was to build up a process framework as a foundation to achieve this objective, this need creative works in areas of process decomposition, event driven technology, semantic injection, active map design and common component implementation.

First, “componentization” concept will be explained for its importance in supporting business layer vertical integration. It is argued that traditional silo implementation aimed end-to-end business process, it supported project architecture but also caused many problems of fragmentation in enterprise architecture. Many concepts of service components, common interfaces, shared services, customer insight, single view of data and technical assets were unable to achieve and reuse due to n:n issues and their consequent misalignment, therefore, the first step of this phase was to build the methodology and process to identify all “atomic level” element in business process for further development.

This step was mainly to decompose the business by using “separation of concern” concept and “componentization” approach to produce the common components and interfaces which was one of the creative works in building the foundation of this phase. The concept of componentization takes the identified business component(s) into decomposition process and produce common elements, the process use litmus test for its boundary decision.

Second, when the componentization concept is taken into realization, the key of this phase was using DCRP reuse methodology [12] in achieving this goal and was the important creative work in this phase. The DCRP reuse methodology was intended to address the vertical integration concerns which were currently labor-intensive development and maintenance issue inherent in multiple instances of the enterprise architecture. As in Java, the method grows more powerful over time as more and more components were built and become available for reuse. DCRP was primarily intended for the construction of computer programs. The mere fact that DCRP brokers reusable components need be made only once and all of the programs that use the component can be quickly identified (through the Register) and recompiled to obtain programs containing the new requirements. The new requirements may necessitate changes to other components, but these need be identified through the register and applied in a uniform manner. This reuse methodology driving the componentization concept toward the direction of vertical enterprise integration as this concept contribute significant knowledge in the visibility of componentization and support the identification of each enterprise element and their linkage to service oriented architecture principles.

Third, when the realization concern is extended in operational environment. Although DCRP methodology is present in supporting componentization, that was still not enough to handle the production environment for those real-time batch initiated from users’ front-end channels. To cope with this concern, an implementation of event driven technology using time, volume & condition control was created in addressing those process issues which has sensitivity in time, volume and status by using parameter control. The batch trigger takes the whole batch and submits the background process once the floor limit is triggered. The event driven new implementation was aimed to supplement service oriented architecture’s shortage in the situation that optimization between batches and real-time was needed.

After completing the decomposition process and its realization as mentioned, the next step of this phase was further extended to the upper business layer – the context and semantics, for how to automate the mapping from upper layer to business process. This key process is called – “Semantic injection micro process” was the creative concept of this phase in producing an “active map” to identify the impacted business components and derived elements to produce a mapping in choreographic matrix environment. The active map specify the decomposition process and associated service components which were produced by micro injection process, store its associated semantic message in the map’s derivation, so each business impact (either change or adds-on) had its own active map to identify the impacted areas and associated technical assets in a clear linkage picture within the map. The active maps, and its high level inter-maps’ linkage of meta information, were stored in semantic repository for further development, maintenance and vertical integration.

M. Gruninger in his “Model-theoretic approach to semantic integration” pointed out interoperability means two groups of applications share the semantics of the terminology in their corresponding theories which is equivalent to sharing models of their theories. Model-theoretic invariants of an ontology can be used to specify semantic mappings translation definitions between application ontology and an interlingua such as Process Specification Language (PSL) ontology as the neutral medium in integration. The sets of models for the core theories of PSL are partitioned into equivalence classes defined with respect to the invariants of the models. Each

equivalence class in the classification of PSL models is axiomatized using a definitional extension of PSL. Semi-automatic generation of semantic mappings between an application ontology and the PSL Ontology actually shift the integration direction from horizontal to vertical in supporting the concept in this paper.

The horizontal (application) integration need an interlingua as mediation solution, the constraints and dependency of interoperability between two applications and tendency that the integration has been moving downward as the high complexity combination of application, process and database integration enforce the mapping between theories, and these require separate mediation between each individual integration, if the integration happen at semantic repository and streamline the vertical integration and mapping between business, process and object, there is no injection process and all of the downward development follow same sharable theory in semantic repository for layer to layer integration [4].

So the semantic repository, communicate with lower service repository, holding the “intelligence” of strategic analysis of how to take enterprise goal and KPI into business semantic direction, and how to derive semantic message through “semantic injection micro process” in decomposition to build the message carrier – service components in forming the vertical skeleton.

### Phase III

In the previous paragraph, it was explained how the goal of the enterprise vertical integration intended to solve the issue of misalignment between business and IT, and the objective in phase I was a review of IT direction to create a solid metadata repository with alignment to business process in phase II, that the data and system were developed toward a “vertical” direction. In phase II, the business context and semantic direction were all developed through the decomposition process by means of “active map” and “semantic injection” downward to service component which was the focus in this phase.

In this phase, the realization of enterprise Integration initiatives started from the outcomes of previous two phases in deriving a “loosely coupled” mediation (which leveraged to service oriented architecture’s principles) in creating configurable linkages between business and IT. In this final stage, the resolutions and approaches were leveraged to those common methodologies and architecture practices (such as Zachman, RUP, SOA and MDA, to proceed the verification and validation of the approaches taken.

If a closer look at these methodologies is taken and common practices, it’s not difficult to find out that the concept of vertical integration were already in an early stage of prototype even the trend was not specified yet, the evidence were;

Zachman was almost the frontier of enterprise framework, it never focus on any architecture layer only, instead it introduced the cross-mapping between dimensional matrix and was considered the first indication that vertical integration existed

RUP (rational unify process) was used as a methodology of abstraction in identifying boundary to look at use case in each small derivation and iteration and guided its architecture development in vertical direction

SOA and MDA (model driven architecture) were all architecture style further provided indication that “loosely coupled” was actually a vertical alignment of business and IT as foundation for further business lines’ development



Further development of service component was achieved in this phase which plays a key role in linkage between business and IT based on what was built in phase I and phase II. Each service component was a unique common component which performs a well-defined, specific task inside a particular business area; the critical process of “semantic injection” and “metadata aggregation” enabled the service component’s capability in mediating the inter-operability of each vertical element in coping with each business change or adds-on in a high speed development environment. The governance of operability between business and IT need to configure existing services within a newly configured active map in each change, this need to be done by using graphic mode, however in case that existing service component cannot provision full function of a new business requirement and need to develop new service component, this need be done in a design mode with linkage to business process and metadata repository.

*Desmond DSouza* define vertical integration in his “Model-Driven Architecture and Integration Opportunities and Challenges” said, vertical Integration came from different levels of abstraction of the same system, from physical data models, logical data models, networks, applications specifications, component assemblies, business process models, and business goals and strategies [3].

An interface specifies observable behavior; a class provides a particular implementation of that interface. A large-grained component might abstract multiple tiers and specify a single entity with *Vertical* variation realized by a composition of a thin-client, a stateless business-tier component, and a database. A high-level business action has its abstract specification; it is realized by a particular detailed process involving collaboration between multiple software systems and people. Summary or aggregate information from a data warehouse can be “drilled down” to see detailed constituents. These “vertical” points must relate correctly to each other (“integrated”) if the detailed levels are to faithfully provide what their more abstract levels promise, and for platform-independent verification or compliance test suites can be well defined.

## DISCUSSION

After the three phase transformation, an ontology view is required for how the tactical issues impacting the common IT practices:

### *Issue 1 – Responsiveness toward a direction*

Lack of a robust mechanism to effectively adapt the enterprise to a business change or strategic decision

### *Issue 2 – Business semantic visibility*

Poor knowledge of the business semantic to implement semantic messages into business process and services

### *Issue 3 – Information metadata collaboration*

Weakness in data architecture adjustments toward the above service changes resulting in integrity and performance issues

### *Issue 4 – Ontology approach*

It is now time for the integrated vertical solution called the ontology approach, though the launch of this theory is late

First *Issue 1* is observed within enterprise architecture - currently there are very few well-defined business maturity models with a pre-built mapping matrix for the business modeler to develop the upward linkage to corporative direction (such as enterprise goal, KPI and metric setting) with downward linkage to business process and services by using translated business semantic in micro process. This makes it difficult for cutting-edge technology (such as service oriented and model driven solutions) to derive the expected results. Many industry leaders launched solutions in industry framework and industry architecture, but these are related to common industry components in horizontal end-to-end solutions instead of coping with dynamic business change which consists of

cross-layered vertical integration

(the layers between “direction-business-process-service-information”).

We then move on to *Issue 2* which is related to Issue 1. As the current cross-layers linkage of “direction-business” is very weak and semantic translation is limited only to business rules and computing logics through one horizontal layer (such as modeling in the business layer, decomposition in the process layer and API/XML in the data layer) a robust vertical mechanism to transmit semantic between cross-layers with further streamlining of the interoperability between business and IT is lacking.

A simple example of this is a “rent-a-car” company which acquires a “prepaid-card” subsidy to launch pre-paid options in car renting. The weakness in modeling those business components of “customer-care-option”, “payment-option”, “cost-analysis” and cross-components linkage makes business movement very rigid because the business layer does not translate the context -- “ROI, return-on-investment 180% by year-end and cut car cost 17% by the end of 2008” and “bonus-point service account aggregation” impact the business semantic which is related to Issue 1. Instead of business modeling and mapping, trial and error was used. Rather than providing “auto-routing-and-saving” in sales-marketing and “customer-insight-packaging” in the loyalty program, the semantic messages used were generated in formats such as “computing for the least value option” and “the historical analysis for grouping consumer’s category”. Thus, a misleading semantic translation resulted that lacks fine tuning as defined in Issue 2. [5]

By using a mathematical model, the output from each layer denoted by a capitalized alphabetical letter is taken (D: direction, B: business, P: process, S: service, I: information)

$$\mathbf{D} = \sum \mathbf{d}_n, \quad \mathbf{B} = \sum \mathbf{b}_n, \quad \mathbf{P} = \sum \mathbf{p}_n, \quad \mathbf{S} = \sum \mathbf{s}_n, \quad \mathbf{I} = \sum \mathbf{i}_n$$

The conventional vertical integration can be expressed by the following union -

$$\tilde{\mathbf{O}}_{\text{output}} = \mathbf{D} \cup \sum (\mathbf{b}_n \cup \mathbf{p}_n \cup \mathbf{i}_n) \cup \mathbf{S}$$

means integration between business, process and information is a “merged” type without micro visibility; the vertical integration seldom occurs at the semantic level and there is neither micro integration extendable to direction layer nor linkage to the service layer for non-service-oriented development. Moreover, there is no driving discipline for its output, as any small change in strategic direction can cause a macro change without micro insight.

The ontology can be expressed by the following Cartesian product –

$$\tilde{O}_{\text{output}} = \sum \tilde{O}_n = \sum ( \mathbf{dn} \times \mathbf{bn} ) \times ( \mathbf{pn} \times \mathbf{sn} ) \times \mathbf{in}$$

means micro referential integrity occurs in each layer with a loosely-coupled alignment between d-b and p-s. The ontology allows architects to apply d-b as a business-driven top-down approach or p-s as a service-driven bottom-up approach and **i** is simply independent; however, metadata is needed to coordinate the service layer by repository.

We continue to investigate *Issue 3*. Information metadata is the information stored in a repository which defines the data in terms of schema, system location, ownership, security, access, information semantic and aggregation of summary information.

“Dublin Core” is the current standard for capturing descriptive information containing content essence; unfortunately, it has limited support for semantic metadata. Semantic metadata is the other type of high value information which may be stored in a metadata repository. An example is aggregating a class-student database schema into a new structure by creating “class” as a driving force in the metadata form pointed to the “student”. The agility of this new structure is ten times better than a conventional database and a thousand times faster in run time query performance.

The final issue – *Issue 4* – is the skeletal basis which is required in order to have an ontological vision in solving the above-mentioned issues utilizing a realization process in the governance of each process [2]. Before the ontology skeleton is investigated, an understand of the five layers identified in this ontology structure [10, 11] is needed.

Layer 1.	Direction layer - strategic context mapping from goal and KPI to business
Layer 2.	Business layer - business component and semantic mapping to process
Layer 3.	Process layer - process decomposition and service orchestration
Layer 4.	Service layer - atomic level service and aggregated services
Layer 5.	Information metadata – high value condensed data and meta information

The tactical issue in the ontology skeleton is that currently there are no principles to direct each layer when working on the above-mentioned three issues using vertical integration. In other words, when one is looking for the principle of “separation of concerns” in vertical integration, to maximize the output from equation –

$$\tilde{O}_{\text{output}} = \sum \tilde{O}_n = \sum ( \mathbf{dn} \times \mathbf{bn} ) \times ( \mathbf{pn} \times \mathbf{sn} ) \times \mathbf{in}$$

Each  $\tilde{O}_n$  needs to be a concatenation from an assembly of “atomic” level components; each component can be the assembly of a semantic sub-context (**dn**), a business sub-component (**bn**), a decomposed sub-process (**pn**), a fine-grained service component (**sn**), or a piece of metadata (**in**). The routing of  $\tilde{O}_n$  forms a map for approaching a business context.

Before approaching the resolution, one needs to have an insight into the ontology principles in order to determine the framework for directing the ontology approach [7].

#### Decide Foundation for Ontology Approach Is the First Step

Among the five mentioned layers, the business layer needs to be the foundation in the ontology approach, as this is the effective driving point in producing the ontology approach skeleton.

For this reason there is a need for extending the SOA (service oriented architecture) scope upward to a business component. Thus, the first step is that all of the business blocks should be decomposed into a business component (a unique business unit to perform a group of business functions) and further into a business element (atomic business function or use case) in the linkage of the service component which is the result of process decomposition.

The reason the SOA approach is required in this foundation and should be extended to the business layer is to create a broad “loosely-coupled” and “separation of concern” ontology environment covering all business, process and service layers. In this way the foundation gains maturity and readiness for upward linkage to the strategic direction through means of the decomposing and composing process and then downward to the service and information layer. By this method the skeleton foundation of the ontology approach may be achieved.

#### Survey the Expectation Based on the Foundation

From enterprise vision, chief executives can expect an ontology approach (including the method, foundation and roadmap) to direct the enterprise using common terminology so that the context can be translated into business semantic for execution.

From business vision, business managers are looking for a foundation of agility in service-oriented so that the affected business component, the associated element and the roadmap are all identified and specified in domain before moving into realization.

From IT vision, chiefs of information seek a mechanism to turn the business context into semantic and thus impact the associated service component (or process area if the linkage between business and process is ambiguous) in a precise and timely manner.

From architect vision, a robust mechanism of choreograph in carrying micro semantic metadata transported between process and service with upward alignment to macro direction-business semantic and downward to information is required.

From user (external and internal) vision, each request for change needs to be operationally effective in order to maximize the productivity with less outage, change requests need be closed immediately, operation needs to be easy and performance needs to be excellent.

From development vision, the vertical ontology skeleton needs to be built first using the framework guide horizontal development in the process, service or information layer. The precondition is that all IT assets and resources are well-defined in alignment.

#### Direct the Driving Force According to the Expectation from Different Roles

After the survey of each individual expectation in the previous paragraph, the author have a better understanding of how to use the following key words to form the portfolio ontology approach – *“context, semantic, metadata, common terminology, vertical ontology skeleton, agility, performance, business component and element, service component, SOA, micro process and element, fine-grained, choreograph”*.

As mentioned above, the business layer needs to be the driving point of the foundation. The driving force plays an active choreograph role in providing business component and element asset upward to the strategic direction, downward to drive the decomposition to service component and reassembly to process. The driving force needs to maintain a visibility and tracking record; usually a repository for semantic context and metadata is necessary to hold the path and map of the driving force in each decomposition activity.

#### Plan the Solution in Order to Streamline the Driving Force

The driving force needs to “carry” context, semantic and metadata between the repositories of D-B node (direction-business) and P-S node (process-service). Currently there is almost none in the industry for the D-B node and a very limited amount for the P-S node. As the driving force from D-B node to P-S node is a one-way direction, one may call the driving force which carries context and semantic messages the “business semantic injection” process. Conversely, the choreograph between P-S node and S-I node is a two-way direction which is called “information metadata collaboration.” The combination of “business semantic injection” and “information metadata collaboration” form the skeleton of the “ontology semantic metadata” approach.

#### Build up the Ontology Approach by Realization of Individual Solutions

The integrated ontology approach was reviewed by walking through the attached diagrams to help the understanding.

#### Ontology Skeleton

Referring to Diagram 2 – the concept of the ontology approach is based on the driving force of the business layer which takes the business context and translates it into a semantic message. The semantic message stored in the repository further directs the decomposition and input of the element message to the service component which is called “business semantic injection.” This micro process works in parallel with “information metadata” as there is no significant dependency between them; however, certain synchronization work is required. These two processes form the skeleton of ontology vertical integration in the micro process level.

#### Business Context Translated Into Semantic

Referring to Diagram 3 - the business component in each cell denotes a unique and independent business entity with an individual function. The horizontal column indicates an individual function such as CRM (customer care, multi-channel, promotion), ERP (ap, ar, hr, asset, logistics, accounting) and SCM (shipping, manufacturing, supply chain) while the vertical line indicates the stage of the enterprise operation.

The map matrix is coordinated with business context so that each strategic direction impacts the business component map and generates an “active map” to provision that specific task. In the context repository there is a routing mechanism that works on the context input by parsing through the active map and routing and chaining the semantic direction. The output receives further optimization from multi-active maps and is stored in the semantic repository. This is the first step in the micro process of vertical integration as each corporative direction will impact the associated business component and element for further action.

By using an active map the referential integrity between direction and business become firm so that a map understandable by both human and machines holding content; e.g., “Launch multi-channel services”; “Increase revenue by 25% in 2006”; and “alpha account promotion” is created.

#### Process Refining and Semantic Injection

Referring to Diagram 4 – a driving force in creating a common foundation of “semantic injection” downward to a service component so that each service component holds an associated business semantic element from micro process is searched for. This foundation needs an “active map” consisting of an impacted business component and an element. Directing the mapping from a sequential process mapped from a choreographic environment to the referring active map, the mapping will direct the decomposition to produce a service component which is “fabricated” by the micro injection of the associated semantic message; thus when the component is directed back to the position inside the process, it already has the capability of performing a specific service inherited from macro semantic.

For an overview of how the business context and semantic message can be transmitted to the component, please refer to Diagrams 5, 6 and 7. Diagram 5 shows that the business component and its element decomposition are accomplished by means of a parallel process; one is “logical” and is a class object element while the other is a “physical” component which carries the message. The class object element has linkage to a higher hierarchical element and inherits the semantic subset from the context property. The component coordinates with the object element that is stored in the semantic repository. Mapping the class information to the assembly of components is shown in Diagram 7. The assembly of components form the process and performs the choreograph of individual services in an orchestrated environment. This completes the semantic injection process by using Service Oriented Architecture as its foundation.

### Metadata Collaboration

There are two main groups of information metadata -

a) A top down matrix mapping of semantic messages in which the mapping information is stored in a metadata repository

A bottom up data aggregation and system abstraction from the infrastructure

The database partition shown in Diagram 8 is an efficient way to achieve a “separation of concern.” By storing the partition information in a metadata repository with linkage to service metadata, the system integrity and performance will be improved dramatically. Each pending record can be centralized in 1% of the database for further service until completed. By this means each query hit-ratio is nearly 100% and greatly improves SLA (service level agreement) efficiency.

### CONCLUSION

The concept of “enterprise vertical integration” covered many aspects of technology and knowledge, already discussed, the issue was from misalignment of business and IT, so the business context and semantics cannot effectively impact IT development and cause all development, change and maintenance very difficult.

The nature of “enterprise vertical integration” differentiate itself from traditional integration or a no “architecture layer”, instead one’s saw how business context and semantics transform into service component and communicate with metadata through micro componentization process, this transformation totally change our concept from previous layer-to-layer integration to components’ collaboration, from the A2A (application to application), B2B (business to business), D2D (data to data) to the interoperability of semantic-service-metadata repository, the new vertical integration follow the nature of the business implementation, so each new development or change of business easily identify the impacted elements for either configuration change or producing new component.

The lack of interconnectivity between context, semantics, service and data is the tactical issue with the clear implication that enterprise architecture needs a robust micro-mechanism of semantic messaging and metadata to coordinate across layers. In this way the strategic direction will then have an opportunity to impact the business process to streamline successful services and information components.

Figure 1 - The IT Evolution and Requirements in New Age

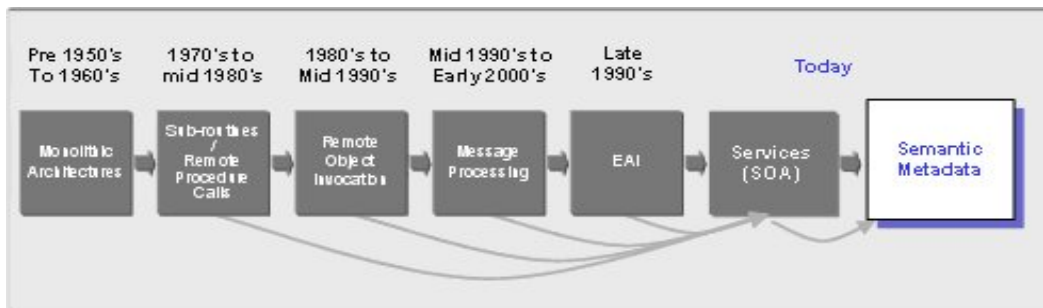


Figure 2 – Conceptual Ontology Interoperability between Layers by Using “Semantic Injection” and “Metadata” AP

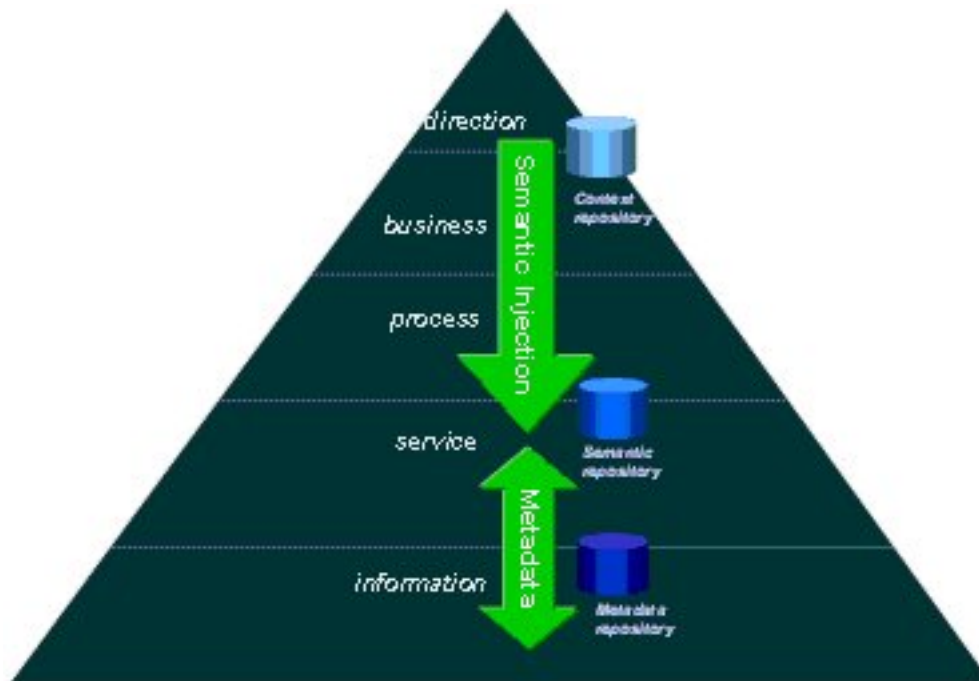


Figure 3: Mapping between Context and Semantic Notation

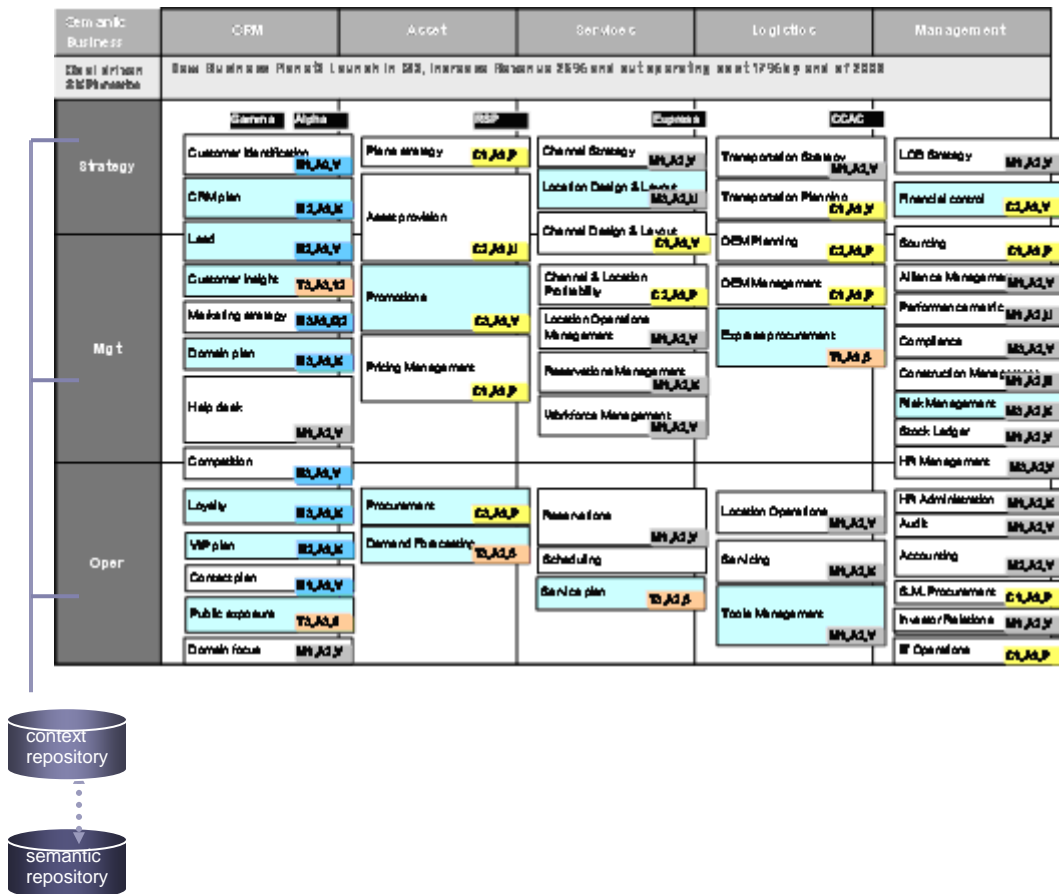


Figure 4 – Through Business Component Modeling, Each Business Element Is Identified as a Strategic Direction Element to Provision a Specific Business Goal

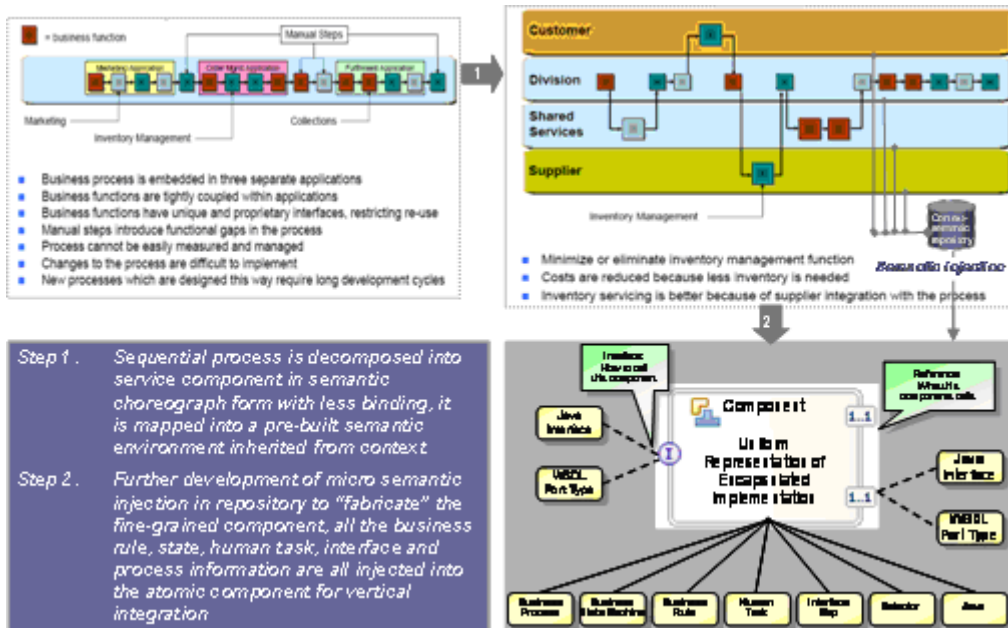




Diagram 5 – Business Semantic Injection into Object Model

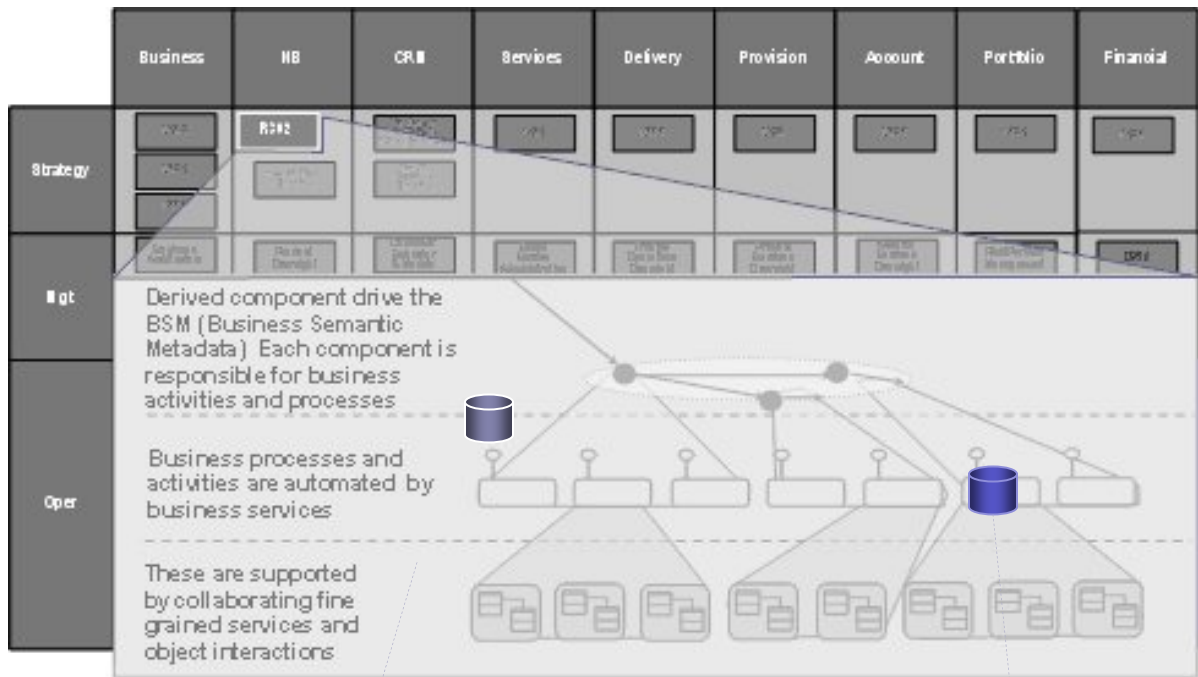


Figure 7 – Service Component Inherited Semantic Micro Properties and Assembly into Process by Using Business Rules

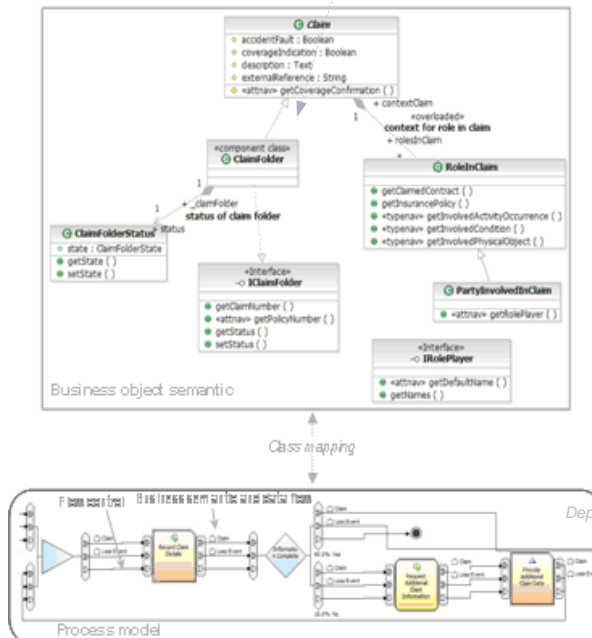


Figure 6 – Service Component Used as a Dynamic Micro Repository Holding Business Semantic

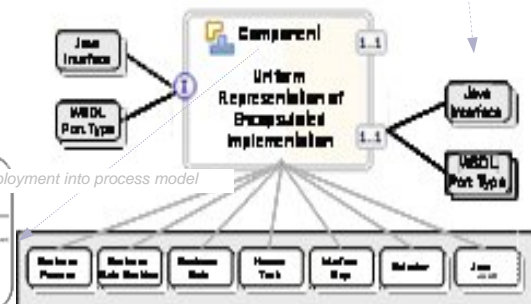
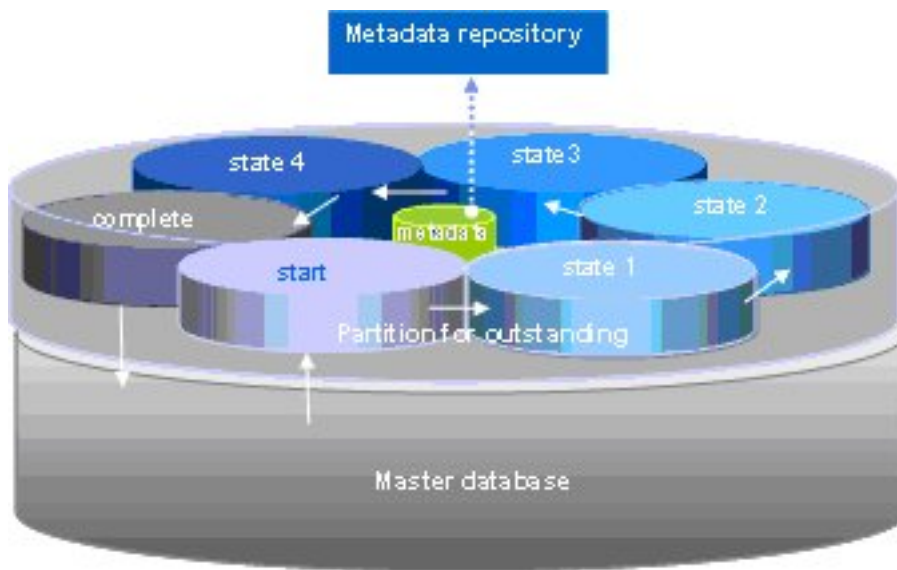


Figure 8: Database Partition in Metadata Environment



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# **SPANISH PROCEEDINGS**

Global Conference on Business and Finance Proceedings

Volume 2, Number 1

January 2007

# **COMPORTAMIENTO ÉTICO GERENCIAL: LA INDUSTRIA AUTOMOTRIZ DE CIUDAD JUÁREZ**

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## **ABSTRACT**

*Este estudio descriptivo examina la relación entre el comportamiento ético, códigos de ética, género, edad, experiencia laboral y educación de los gerentes de la industria automotriz. El comportamiento ético fue medido utilizando la prueba de definición de criterios (DIT). Los resultados sugieren que los códigos de ética no impactan el comportamiento ético gerencial. Se encontró que estadísticamente existe el mismo nivel de comportamiento ético en relación al género, la edad, la experiencia laboral y el nivel de educación formal de los gerentes en las empresas del sector automotriz de Ciudad Juárez. Las consideraciones finales en esta investigación, así como las sugerencias para futuras investigaciones en este campo, tienen valor teórico y metodológico para los especialistas quienes tienen la responsabilidad en la enseñanza e investigación sobre problemas organizacionales. Este estudio se llevó a cabo en una época de profunda crisis económica por lo que sus resultados podrían ser investigados en otro momento para conocer posibles diferencias. Futuras investigaciones dada la complejidad del ambiente en el cual se realizó el estudio, podrán evaluar otro tipo de factores que afectan el comportamiento ético.*

# **EVALUACIÓN DE LA OFERTA BRINDADA POR EL SISTEMA FINANCIERO MEXICANO PARA PEQUEÑAS INVERSIONES A CORTO PLAZO**

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## **ABSTRACT**

*Fomentar el ahorro es considerado medular para el desarrollo económico de México, los planes gubernamentales discurren en la exigencia de un mercado eficiente con oportunidades de financiamiento e inversión seguras y transparentes. El pequeño ahorrador debe tener las mismas posibilidades de los grandes capitales para elegir instrumentos o instituciones que permiten la inversión. Este documento pretende mostrar y evaluar, opciones de ahorro dentro del sistema financiero mexicano actual con un capital de hasta \$10,000 a un año de plazo, donde, conjuntamente de generarle provecho económico al inversor asista al financiamiento empresarial y social; alternativas en: Bancos, sociedades de ahorro y crédito, fondos de inversión y para el retiro. Asimismo, inversiones que contribuyan al incremento del ingreso personal: Metales y divisas. Sustentados en la tesis sobre la importancia que tiene dicho sistema para el pequeño capitalista.. La metodología empleada para estimar riesgos financieros incluye herramientas estadísticas como desviación estándar, paquetería relacionada e información de empresas especializadas. Para pronosticar datos: Método de mínimos cuadrados, promedio móvil ponderado e información de empresas experta. Se concluye tomando decisiones sobre posibles rendimientos económicos de manera específica e independiente, permitiendo al interesado visualizar los beneficios que cada opción le representa para su oferta financiera.*

# **ANALISIS DEL PROCESO DE TOMA DE DECISIONES VISION DESDE LA PYME Y LA GRAN EMPRESA DE BARRANQUILLA**

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## **ABSTRACT**

*El presente documento trata de analizar como se desarrolla el proceso de toma de decisiones en las empresas barranquilleras desde un punto de vista netamente descriptivo. Inicialmente se define la toma de decisiones, presentando a su vez una breve explicación de cada uno de los modelos utilizados dentro de las organizaciones, haciendo una breve introducción a los conceptos de simulación y modelación en este campo. Más adelante se exponen los resultados obtenidos en encuestas realizadas a una muestra de 77 empresas PYMES de la ciudad, en las cuales se percibe una alta tendencia a utilizar la intuición y la experiencia del decisor como herramientas fundamentales para resolver problemas. Palpándose por las respuestas obtenidas la necesidad de contar con modelos de simulación que contribuyan o aporten información que les permita tener más certeza a la hora de tomar un curso de acción ante una situación problemática. Por ultimo se plantean dos modelos de toma de decisiones para la gran empresa, utilizando el análisis por conglomerados, basados en los resultados de una segunda encuesta aplicada a 51 empresas ubicadas en la misma ciudad.*

## **INTRODUCCIÓN.**

La toma de decisiones es indispensable para las empresas pues una decisión mal tomada, puede conllevar a una situación comprometedoras. Por tal razón, las personas encargadas de la toma de decisiones, deben estar capacitadas y saber ampliamente todas las características y pasos que constituyen este proceso, y que las obliga a escoger entre dos o más alternativas.

Se parte, de la premisa de que la diversidad de información que recibe un gerente y el poco tiempo que tiene para tomar decisiones hacen que en muchas ocasiones se elija la primera opción que satisfaga sus aspiraciones, sin seguir un proceso racional para la resolución de sus problemas. Esta característica hace necesario que este cuente con algún sistema que lo ayude a procesar información y a expresarlo de tal manera que el proceso decisorio sea más simple.

Este documento busca por un lado mostrar como se desarrolla el proceso de toma de decisiones en las empresas barranquilleras, y por otro lado definir un modelo para la gran empresa utilizando para esto el análisis multivariado de datos, utilizando el método de conglomerados para generar grupos con comportamiento semejante dentro de los funcionarios entrevistados.

## **A MANERA DE MARCO DE REFERENCIA**

Herbert Simon, el teórico más reconocido en el tema, define el proceso de toma de decisiones empresariales como un proceso grupal: "un esfuerzo planeado y cooperativo, en el cual cada participante tiene un papel reconocido que cumplir y unas obligaciones o tareas por ejecutar. Se le asignan a estas obligaciones para lograr el objetivo de la organización más que para satisfacer preferencias individuales, aunque frecuentemente coinciden ambos efectos" (Navia Nuñez, 1999)

Los fundamentos de la toma de decisiones entran en juego cada vez que en una organización se realizan actividades de planeación, organización, dirección y control. Sin embargo, para que un proceso de toma de decisiones pueda considerarse completo es preciso que existan ciertas condiciones. Estas son: separación entre el hoy y lo que se desea ser, conciencia de que se debe tomar una decisión, adicionalmente debe existir motivación para eliminar la diferencia y determinar si la empresa y el decisor cuentan con los recursos necesarios para eliminarla.

La importancia y trascendencia que tiene para las organizaciones el proceso de toma de decisiones ha conllevado a la creación de modelos que sirvan de ayuda para disminuir la probabilidad de error, sobre todo el generado por la subjetividad, y así solucionar los problemas de la mejor manera y en el menor tiempo posible. Entre estos se encuentran: el modelo racional, modelo de racionalidad económica, modelo de racionalidad limitada, modelo de comportamiento organizacional, modelo de los cubos de basura, modelo de Kepner y Tregoe, modelo de Mintzberg, Raisinighani y Theoret, modelo de racionalidad política, modelo incrementalista, modelo de Vroom-Yetton

Para el desarrollo de la segunda parte de la investigación se utilizó una técnica de estadística multivariable denominada Análisis por Conglomerados o también llamado análisis de Cluster. Por medio de éste método se buscó detectar que tipo o combinación de modelo de toma de decisiones usan las grandes empresas de Barranquilla. Esto se logró por medio de la división en grupo de quienes asumen estas decisiones, tomando como referencia los criterios que estos utilizan a la hora de actuar. Detectando de esta forma características semejantes que permitan generar o crear un modelo de decisión particular.

En la investigación se tuvieron en cuenta los criterios involucrados en cada uno de los diez modelos de toma de decisiones citados anteriormente. Por ende, se adoptaron dichos criterios como las variables de análisis de este trabajo. Para este análisis se tendrán en cuenta dos situaciones debido a las medidas de agrupamiento o distinción utilizadas: 1) Se identificará el grado de similitud entre los procesos de toma de decisiones y 2) grado de diferencia entre los mismos. Para medir estos dos aspectos se tendrá en cuenta que entre mayor valor tenga, mayor diferencia existirá entre los elementos y entre menor valor tome, mayor similitud existirá entre ellos. Como la herramienta que se utilizó fue el SPSS, solo se citarán los aspectos relativos con la operación del “SPSS13.0 para windows. Lnk”.

## RESULTADOS ENCONTRADOS A NIVEL DE LA PEQUEÑA Y MEDIANA EMPRESA (PYME).

Los modelos de toma de decisiones de las PYMEs de Barranquilla se componen en su mayoría por una serie de pasos a seguir que le indican al decisor como actuar de forma ordenada y coherente en pro de tomar la decisión que resulte más favorable para la organización.

Por lo general, las empresas encuestadas no han recurrido al uso de modelos empresariales para la toma de decisiones, sin embargo, es alto el número de organizaciones que consideran que la modelación es un recurso que facilitaría este proceso haciéndolo más rápido y efectivo.

Para solucionar problemas es necesario determinar y analizar las causas de éstos, de lo contrario se podría convertir en una situación repetitiva que obstruiría el óptimo desempeño de la empresa.

Algunas organizaciones, especialmente las de ámbito familiar mantienen la creencia de que únicamente el gerente es quien toma las decisiones, disminuyendo la participación y, por ende, la motivación de los empleados, aumentando a su vez la probabilidad de decidir de forma



incorrecta, debido a la existencia de un único concepto, en este caso, el del gerente quien difícilmente podrá abarcar los problemas de todas las áreas de la empresa.

En la mayoría de empresas encuestadas, según los resultados obtenidos en la muestra, no existen procesos estandarizados y escritos para tomar decisiones, más bien el proceso a seguir depende de los rasgos del decisor, por lo que es difícil que se pueda generar un modelo de simulación que se adapte a las características de personalidad de cada uno de los que realiza este proceso dentro de la organización.

Un paso necesario para lograr la implementación de modelos de simulación es lograr generar formalmente procesos a seguir al momento de tomar decisiones, más en el caso de aquellas decisiones que pueden afectar altamente la estabilidad de la organización. Gran parte de las empresas siguen procesos de toma de decisiones que consisten en analizar la situación, estudiar las alternativas, determinar el costo-beneficio y tomar la decisión. Siendo notoria la falta de una mayor precisión y especificación de procesos según cada área. Las empresas no están presentando procesos comunes para la toma de decisiones, cada una maneja los procesos de acuerdo a las características propias de la organización.

Finalmente, un porcentaje elevado de empresas encuestadas no tienen definidas las necesidades de modelos de simulación para la toma de decisiones, Podemos concluir con base en esto que las empresas no manejan criterios definidos en la toma de decisiones, no tienen claridad en los requerimientos de simulaciones, pero si se les brindara si los utilizarían.

Como el objetivo de este estudio era tratar de realizar una aproximación del comportamiento de las empresas en los procesos de toma de decisiones, podemos ver que si es necesario profundizar en estos estudios y diseñar modelos acordes a las necesidades de los sectores y características de cada organización. Es de resaltar que estadísticamente bajo un 95% de confianza y un error del 11.12%, la muestra es representativa considerando una población infinita lo cual nos permitiría realizar las inferencias, pero consideramos que es importante profundizar más y depurar un poco la información recopilada antes de generalizar.

## RESULTADOS RELACIONADOS CON LA GRAN EMPRESA.

En el desarrollo de la investigación se observó que los modelos planteados en el marco de referencia no son excluyentes, lo cual llevó a tratar de definir un modelo particular para las grandes empresas de Barranquilla, lográndose definir dos modelos mediante el análisis de conglomerados y análisis factorial denominados “Conglomerado Racional y Conglomerado Pragmático” El cumplimiento de las características de cada modelo por parte de los dos grupos generados por la técnica de conglomerados se resume en las siguientes tablas:

Tabla # 1: Variable Modelo Teórico / Modelo Conglomerado Racional

MODELO	Características Modelo	Características Grupo	Porcentaje Cumplimiento
Racionalidad Económica	7	5	71.42%
Racionalidad Limitada	7	4	57,14%
Comportamiento Organizacional	3	0	00.00%
Cubos de basura	5	0	00.00%
Kepner- Tregoe	4	0	00,00%
Minztber	6	2	33.33%
Racionalidad Política	4	0	00.00%
Incrementalista	3	0	00.00%
Vroom – Yetton	4	1	25,00%
Auto. Organización	5	4	80.00%

Fuente: Autores con resultados de la encuesta

Se observa al analizar la tabla 25, que el modelo 1, definido como de conglomerado racional, se aproxima en gran manera al modelo de racionalidad económica, mostrando de alguna manera que los resultados obtenidos al aplicar, la anterior técnica estadística, son muy similares a las obtenidas por medio de la técnica de la Estadística descriptiva.

Tabla # 2: Variable Modelo Teórico /Modelo Conglomerado Pragmático

MODELO	Características Modelo	Características Grupo	Porcentaje Cumplimiento
Racionalidad Económica	7	0	00.00%
Racionalidad Limitada	7	0	00.00%
Comportamiento Organizacional	3	1	33.33%
Cubos de basura	5	1	20.00%
Kepner- Tregoe	4	1	25.00%
Minztber	6	0	00.00%
Racionalidad Política	4	0	00.00%
Incrementalista	3	0	00.00%
Vroom – Yetton	4	1	25.00%
Auto. organización	5	0	00.00%

Fuente: Autores con resultados de la encuesta

Con respecto a la tabla 24, se confirma que *ningún modelo es seguido* de manera significativa por los tomadores de decisiones y que mas bien, el modelo seguido por estos es *una mezcla de los modelos* de: Comportamiento organizacional, Cubos de basura, Kepner-Tregoe y Vroom Yetton, lo cual lo convierte en un modelo pragmático.

El 41% de los encuestados no siguen ninguno de los modelos esbozados en el marco teórico, es decir contestaron no en todas las variables de cada uno de los modelos.

El 41% de los que aplican algunas características de los 10 modelos siguen el siguiente modelo: Define y diagnostica; descubre las causas del problema; establece metas; busca la información necesaria para la toma de decisiones; compara y analiza las soluciones alternativas; implementa la solución y hace seguimiento y control. Como se observa este es un modelo de carácter racional.

El 21% de los que aplican alguna de las variables siguen el siguiente modelo: pospone otros problemas mas complicados que al momento no son tan importantes, escoge la primera

alternativa que satisfaga los niveles de aspiración, ya que no cuenta con suficiente información; define políticas que lo llevan a alcanzar los logros y neutraliza las necesidades individuales de los demás, con dadas o cualquier otro medio para lograr la aceptación y aprobación de la solución. Este método es de tipo político manipulador para aplicar e implementar la solución a la alternativa seleccionada.

Los encuestados son personas con madurez profesional (14 a 16 años de experiencia) y con edades entre los 38 y 40 años. Es importante mencionar que existe una gran cercanía o similitud entre el tiempo de experiencia de los profesionales y el tiempo de antigüedad de la empresa en donde laboran, el cual se encuentra entre los 11 a 18 años. Es de resaltar que los tomadores de decisiones adquirieron experiencia en otras empresas antes de llegar a la organización en donde se encuentran actualmente, pero con menos de 10 años. Entre el 60% y 78% de los encuestados ocupan cargos de Gerente general o Jefe de Área en las empresas. En relación con los encuestados que ocupan la posición de presidente, no cumplen con uno de los 10 modelos definidos, pero cumplen algunas de las características definidas en las mismas.

De manera más específica, en cuanto a la presencia de los modelos, se pudo concluir que: Al tomar en cuenta el área funcional de las empresas, la forma de tomar las decisiones en cada una de estas es más o menos uniforme por modelo y área. Por ejemplo, el área de administración es la que sigue más variedad de modelos (siete de los diez); el área de producción se caracteriza por seguir tres con mayor frecuencia, entre los cuales, el modelo racional económico, se presenta con mayor asiduidad, mientras que en las áreas de Mercadeo y Recursos Humanos no predomina ninguno de los 10 modelos.

Con respecto al sector económico, el sector manufacturero se caracteriza por presentar la mayor frecuencia en todos los modelos, resaltándose el modelo Incrementalista, Cubos de basura y el de Componente organizacional. En cuanto al sector comercial, se puede decir que los modelos más utilizados son el modelo de Mitzberg, el de Cubo de basura y Componente organizacional. Por ultimo, en el sector servicios se halló que los modelos mas utilizados son: el modelo de Racionalidad Positiva y Racionalidad Económica.

Independientemente del modelo que se sigue en la toma de decisiones, se encontró que son de vital importancia la “participación” del conocimiento, seguido por la experiencia.

Los modelos de simulación son poco utilizados (las personas que aplican el modelo de la racionalidad política son los que más lo utilizan), así como también el incrementalista y el de Minztberg.

Las variables económicas, políticas y técnicas (en ese orden) son las que se tienen en cuenta para la toma de decisiones, independientemente del sector económico, modelos de toma de decisión y área funcional.

Los criterios más utilizados para la toma de decisiones son: las leyes y decretos, análisis de la competencia, inflación, DTF, devaluación y decretos ambientales, los cuales se utilizan en ese orden.

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# **ANÁLISIS COMPARATIVO DE LAS PRÁCTICAS ERGONÓMICAS EN LAS ESTACIONES DE TRABAJO DE PLANTAS MAQUILADORAS Y EMPRESAS DE SERVICIO EN ENSENADA, B.C., MÉXICO**

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## **RESUMEN**

Este trabajo pretende demostrar la importancia que desde siempre ha tenido la Ergonomía, misma que en los últimos años ha incrementado su impacto en el mundo de los negocios, dada su relación con los resultados de productividad y calidad, debido a que la carencia de su enfoque en el diseño de las estaciones de trabajo incide en fatiga y por lo tanto afecta el rendimiento del trabajador. Por ello el presente resalta la importancia de la ergonomía y se muestran resultados de un estudio comparativo efectuado entre instalaciones de plantas maquiladoras y oficinas de empresas de servicio; los cuales denotan que en Ensenada las empresas no le han dado la importancia debida a la disciplina de la ergonomía, desconocen sus beneficios, así mismo no se cuida al factor humano, dada la excesiva oferta de trabajadores.

## **INTRODUCCIÓN**

El trabajador mexicano de acuerdo a lo estipulado por la Ley Federal del trabajo debe laborar una jornada diaria de 8 horas, es decir un tercio del día lo invierte en desempeñar actividades laborales, ello afecta su calidad de vida, la cual según la Organización Mundial de Salud (OMS) se define como la percepción que tiene el individuo de su situación de vida, dentro del contexto cultural y de valores en los cuales vive y en relación con sus objetivos, expectativas e intereses. (OMS, 1994) Es decir, el salario percápita que percibe un trabajador incide en el nivel de calidad de vida, al igual que las prestaciones sociales, y el ambiente donde se desenvuelve en lo personal y laboral; todo incide en su comportamiento y rendimiento. Por ende y dado que los trabajadores pasan por lo menos un 30% de su vida desempeñando tareas en los centros de trabajo; producto de su trabajo obtienen el dinero con el cual adquieren sus bienes y los satisfactores básicos; entonces, podemos decir, que la calidad de vida esta ligada a la calidad de vida laboral, y ésta última depende en un alto grado, de la aplicación de la Ergonomía, la seguridad e higiene de los centros de trabajo, la motivación y reconocimiento, estas tres áreas de estudio inciden directamente en la confianza, el sentido de pertenencia y el desempeño del trabajador.

## **ANTECEDENTES**

La industrialización en principio y posteriormente la era de los servicios, vinieron a crear un nuevo ambiente laboral para el hombre, del cual se deriva la aplicación urgente de la ergonomía, que busca encontrar la concordancia entre las posibilidades físicas de las máquinas y las propiedades psicofisiológicas del individuo. La ergonomía se desarrolló debido al interés mostrado por un gran número de profesionistas de diversas disciplinas permaneciendo todavía como un campo de estudio multidisciplinario. Cruza los límites entre muchas disciplinas

científicas y profesionales, reúne sus datos, sus hallazgos y los principios de cada una de ellas, por ello se considera una disciplina integradora.

“La ergonomía es la disciplina científico técnica y de diseño que estudia integralmente al hombre (o grupos de hombres) en su marco de actuación relacionado con el manejo de equipos y máquinas, dentro de un ambiente laboral específico, y que busca la optimización de los sistemas hombre-máquina-entorno, para lo cual elabora métodos de estudio del individuo, de la técnica y de la organización del trabajo.” (Ramírez, 1991) La idea fundamental de la ergonomía es mejorar el rendimiento del hombre en el trabajo, efectuando para ello un estudio profundo y detallado sobre las características, peculiaridades, necesidades y dificultades que presenta cada uno de los elementos sensoriales del ser humano.

Además, la tecnología moderna visualiza la integración de los fundamentos tradicionales de la técnica, a saber: productividad, fiabilidad y economía, con los índices de orden ergonómico y ecológico que faciliten el bienestar y la seguridad del trabajador y de la organización empresarial en el marco del desarrollo social. Por lo que, el trato ergonómico del bifactor hombre-máquina incrementa la productividad, rendimiento, calidad, seguridad y bienestar del sistema como tal, en un marco económico positivo. Para la ergonomía el medio ambiente de trabajo es uno de los elementos fundamentales de clara incidencia en el comportamiento, el rendimiento y la motivación del trabajador, afectándolo directamente en su salud, su desempeño y su comodidad. El medio de trabajo es el resultado del clima laboral, de la tecnología, de los medios y procedimientos de trabajo y del entorno del puesto, en el cual confluyen una serie de condiciones visibles que el trabajador no ve, pero percibe, siente y asimila o rechaza.

La disposición física de los puestos de trabajo y de los componentes materiales, así como la ubicación de servicios al personal y al público no debe omitir la consideración de aquellos factores físicos que contribuyen a la creación de un ambiente de trabajo favorable. Bien reconocido es que la productividad se reduce, debido entre otras cosas, a una iluminación incorrecta, coloración inapropiada, ruidos excesivos, temperatura inadecuada, etc. Requisitos que deben cumplirse para eliminar o disminuir, en lo posible, los efectos negativos provocados por factores ambientales.

Razón por la cual, el ambiente de trabajo es factor esencial en el rendimiento humano. Este tiende a deteriorarse a medida que transcurre el tiempo, unas veces como consecuencia de la fatiga física y otras como resultado del aburrimiento y la falta de motivación. Es necesario controlar que el hombre no trabaje más allá de sus límites de resistencia, y que las condiciones ambientales sean adecuadas para evitar cansancio prematuro y fatiga crónica, producto de la convivencia del trabajador entorno a problemas de eliminación de temperatura, humedad, ruido y vibraciones, iluminación y fuerzas de aceleración y desequilibrio. Por lo tanto se argumenta que la ergonomía contribuye a la productividad y calidad del trabajo como diseñadora de las estaciones de trabajo y del entorno en general de las plantas, cuidando los detalles a fin de obtener el ambiente propicio. La normatividad ergonómica posee, una importancia trascendente para hacer calidad y obtener productividad, debido a que sus normas se aplican y orientan al ser humano, a los materiales, a las funciones, a la maquinaria y equipo y al medio ambiente laboral. (Llaneza, 2004)

## METODOLOGÍA

La manera natural de realizar los estudios ergonómicos es por medio de la observación de las instalaciones, razón por la cual se diseñó un estudio observacional, transversal comparativo entre una muestra de empresas de servicio y maquiladoras. Se utilizó un voltímetro de ergonomía para cuantificar variables, el uso de instrumentos y listas de verificación.

## RESULTADOS

La triada ergonomía-calidad-productividad, se vive diariamente al interior de las organizaciones, son variables co-dependientes, que conjuntamente modeladas en sentido estratégico pueden constituir una fortaleza; empero la carencia de una de ellas limita los resultados y a mediano plazo se presentarían los costos ocultos motivados por su ausencia.

Entre los resultados más sobresaliente se encuentran las malas posturas que adoptan los trabajadores de ambos sectores, en gran medida debido al inadecuado mobiliario y equipo con el cual trabajan, la silla de trabajo suele ser uno de los elementos más dañinos, cuyo diseño inapropiado es causa frecuente de lumbalgias, mismas que al no atenderse van provocando malformaciones y/o daño en la columna vertebral, ello provocará la incapacidad del trabajador y afectará el grado de riesgo de la empresa que incidirá en el incremento de su prima de riesgo ante el Instituto Mexicano del Seguro Social, incrementándose con ello los costos de operación.

## CONCLUSIONES

La ergonomía es una disciplina que puede apoyar a resolver los problemas de calidad y/o costos en las organizaciones, además de favorecer el cuidado y protección del factor humano empresarial. Es la estrategia clave para desarrollar productividad y poder responder competitivamente a las demandas del mercado.

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# **APLICACIÓN DE UN MODELO DE GESTIÓN TECNOLÓGICA EMPRESARIAL BUSCANDO INCREMENTAR LOS BENEFICIOS EMPRESARIALES**

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## **RESUMEN**

*En el ámbito de las empresas industriales es común observar que se cuenta con tecnología en maquinaria, equipos y procesos que regularmente no se utilizan en toda su capacidad original; motivo por el cual es necesario investigar la posibilidad de utilización de esta tecnología en el incremento de los beneficios empresariales. En este trabajo se busca conocer el grado de integración tecnológica en una empresa de servicios, con esta finalidad se hace un diagnóstico de la situación actual de la empresa y posteriormente se desarrolla un modelo para conocer el tipo de problemática que se tienen en la empresa mediante cuestionamientos simples que llevan a la empresa a descubrir si los problemas planteados son de tipo administrativo o tecnológico, y se proponen algunas recomendaciones como consecuencia del análisis realizado a la misma.*

## **INTRODUCCION**

La tecnología actual busca satisfacer las necesidades que se suscitan, principalmente, en la economía de operación, desde luego que las innovaciones agregadas a los procesos, equipos y maquinaria son costosas. Renovar la tecnología es una carga demasiado onerosa para las empresas, especialmente para las micro, pequeñas y medianas quienes se tienen que conformar con hacer innovaciones a sus procesos agregando únicamente aditamentos o equipos que en algunos de los casos representa mas problemas que incremento en los beneficios esperados.

De acuerdo con un estudio realizado en la región Córdoba-Orizaba respecto a la adquisición de tecnología (Machorro, 1999), se observó que las empresas adquieren tecnología sin estudios previos, dando como resultado que las empresas gasten sus recursos financieros en comprar tecnologías que no están en la misma dirección de los objetivos empresariales. En este estudio se propone estructurar un modelo que proporcione al empresario una guía de estudio para adquirir tecnología optimizando el uso de sus recursos financieros.

El alcance que este trabajo tiene en la sociedad de la región donde se desarrolle la investigación es, de gran importancia por los siguientes puntos:

- Al contar con un modelo de optimización de los recursos de aplicación a la adquisición de tecnología, las empresas podrán obtener mayor margen en utilidades y consecuentemente pagarán más impuestos, los cuales al ser traducidos en servicios y subsidios beneficia a la sociedad.
- Realizar estudios detallados para la compra de tecnología permite la participación de egresados de las diferentes universidades obteniendo empleo adecuado a sus expectativas de desarrollo profesional.

- Al tener fundamento técnico por parte de los empresarios en sus proyectos de inversión dará mayor credibilidad y sustento para negociar créditos con las instituciones financieras tanto privadas como gubernamentales.

En el entorno nacional se puede observar que las organizaciones se mueven hacia parámetros cada día más elevados de desempeño, esto obedece a un impulso generado por la globalización de la economía, cuya apertura a la importación y exportación de bienes y servicios propicia en los países involucrados la necesidad de homogeneizar las características de las organizaciones para estandarizar los productos y poder ofrecerlo en cualquier parte del mundo con las mismas características, así, los consumidores pueden obtener la misma satisfacción al adquirir productos provenientes de cualquier parte del mundo. Es asimismo, muy importante reflexionar acerca de la obtención de los beneficios, sin ellos las organizaciones no tienen motivo de realizar el esfuerzo hacia el logro de la competitividad y permanecer en el mercado, entonces los empresarios buscan eficientar el uso de los recursos disponibles para aplicar en sus procesos.

Son diversas las variables que influyen en la utilización racional y eficiente de los recursos entre los que podemos mencionar; la explotación de los materiales y materias primas, agua, generación de energía, y en general los recursos naturales que dependen de la situación geográfica de los diferentes países, sin embargo dos variables de gran influencia en la explotación de los recursos son; por un lado las tecnologías disponibles en el mundo y por el otro los recursos humanos, ambos instrumentos son considerados como divergentes en los procesos productivos industriales, ya que la automatización que en muchos de los casos implica los cambios tecnológicos lleva a la reducción de horas-hombre en las operaciones, engendrando despidos de trabajadores que a su vez llena de recelo a los recursos humanos que permanecen en las organizaciones.

La transmisión del conocimiento es considerado esencial a la tecnología, y el conocimiento explícito o codificable es apenas una de las formas que asume el conocimiento tecnológico, la tecnología resultante no solo invade toda la actividad industrial, sino también participa profundamente en cualquier tipo de actividad humana en los diferentes campos de acción. El hombre, moderno utiliza en su quehacer cotidiano casi sin percibir, una inmensa avalancha de contribuciones de la tecnología como el automóvil, el reloj, el teléfono, las comunicaciones, entre otros.....pero a pesar de que exista conocimiento que no pueda ser considerado conocimiento tecnológico, la tecnología es un determinado tipo de conocimiento que a pesar de su origen, se utiliza en el sentido de transformar elementos materiales, materias primas, componentes, o símbolos, datos, información, aplicados a bienes o servicios, modificando su naturaleza o sus características.

Aquí se define la tecnología como algo más que un conocimiento aplicado, se define como un saber científico, como una hipótesis comprobada empíricamente, tecnología y Ciencia son términos ligados y complementarios, la ciencia sirve de fundamento para la tecnología, esta a su vez aplica y genera nuevos interrogantes y necesidades. Lo anterior permite entender como la tecnología posibilita la adecuación del entorno, crea artefactos e instrumentos que nos dan mayor capacidad de transformación e innovación, permite el progreso y el cambio, facilita el aprendizaje, transforma las culturas, es decir, penetra en todos los sectores de la sociedad.

Para las empresas preocupadas por la mejora continua y obtención de la máxima calidad en los servicios ofrecidos, utilizar sus recursos al máximo para medir la eficiencia de las actividades administrativas, así como el estudio objetivo de situaciones problemáticas que se presentan durante la ejecución de las funciones en las diversas áreas de servicio, es su mayor prioridad, sin embargo, no es posible realizar análisis técnicos debido a que comúnmente las empresas de servicios no cuentan con sistemas o procedimientos de evaluación, que permitan la detección e

investigación de problemas organizacionales, como es el caso de la empresa objeto de este estudio.

## OBJETIVO DEL ESTUDIO

Diseñar un modelo para la identificación de problemas administrativos y/o tecnológicos, en la gerencia de la unidad deportiva en estudio de Córdoba; que sirva como base para el análisis, planteamiento y clasificación de una situación problemática, y al mismo tiempo proponga alternativas de solución a dichas deficiencias.

## PLANTEAMIENTO DEL PROBLEMA

La unidad deportiva en estudio, no cuenta con un sistema de investigación administrativa, que valore el manejo de los problemas empresariales y defina si se trata de una falla en los recursos tecnológicos y/o administrativos; situación que ha provocado deficiencias en la conducción y optimización de los recursos organizacionales.

Respecto al problema se plantean las siguientes hipótesis:

H1 “En la unidad deportiva en estudio no se analizan los problemas en aspectos tecnológicos o administrativos”

H2 “Ignoran que la resolución optima de problemas proporciona beneficios empresariales es motivo de dejar de tener beneficios potenciales”

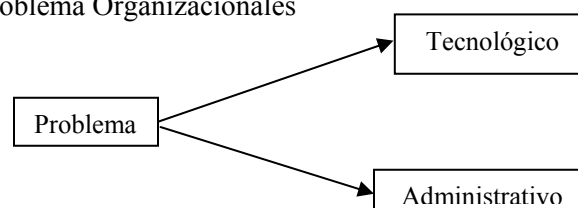
H3 “En la unidad deportiva en estudio no existe un modelo de identificación de problemas tecnológicos y/o administrativos, para diagnosticar, resolver y apoyar a la toma de decisiones en la solución de dificultades”

## DESARROLLO DEL ESTUDIO

Con la finalidad de obtener datos para la elaboración de un diagnóstico preeliminar sobre la situación actual de la empresa objeto de este estudio, en relación con el manejo e importancia que existe entre las variables tecnológicas y el proceso administrativo, se seleccionaron criterios tecnológicos primordiales para la organización, así también se diseñó una matriz que abarca los aspectos de correlación tecnología-proceso-administrativo, para corroborar los puntos observados se elaboraron cuestionarios adecuados para los casos en estudio.

Cuando se suscita una situación u obstáculo que disminuye la productividad organizacional, se dice que se tiene una situación problemática, para su identificación y solución precisa, es recomendable primero establecer el tipo de problema que se trata mediante una clasificación, por lo que el siguiente diagrama ejemplifica los dos tipos de problemas organizacionales que frecuentemente suelen presentarse:

Figura 1: Tipos de Problema Organizacionales



Un problema tecnológico es aquel que se presenta cuando existe alguna deficiencia en el manejo y control de los recursos que involucren directamente a la tecnología, y puede tratarse de un problema de innovación o de adquisición. Donde el problema de tipo administrativo, es aquel que surge de la ineficiencia gerencial o la incorrecta ejecución de los principios básicos del proceso administrativo: planeación, organización, dirección y control, los problemas de innovación surgen cuando bajo el pretexto de mejoras se hacen actividades ajenas al propósito que se persigue y desperdicia el tiempo y/o los recursos de la empresa, y en el caso particular de adquisición surgen diversas dificultades, entre otras; adquirir equipo o maquinaria en exceso a las necesidades reales, que la adquisición rebase las posibilidades de la empresa y no se aproveche al las potencialidades de la inversión.

Tomando como base la clasificación de problemas mencionada anteriormente y con la finalidad de evaluar la manera en que se maneja un problema en la organización analizada, para este trabajo se han definido los factores tecnológicos y administrativos, que sirven como parámetros de evaluación en la investigación; los cuales son:

Tabla 1: Factores de Evaluación en Un Problema Determinado

Factores de evaluación en un problema determinado		
Problema	Tipo de factor	
	Tecnológico	Administrativo
	<ul style="list-style-type: none"> <li>• Aplicación y utilización de la tecnología.</li> <li>• Análisis y conocimiento de los beneficios que brinda la tecnología.</li> <li>• Aplicación de recursos tecnológicos en la administración.</li> <li>• Administración tecnológica de insumos.</li> <li>• Actualización o innovación tecnológica.</li> <li>• Capacitación a través de la tecnología.</li> </ul>	Planeación Organización Dirección Control

## LA EMPRESA

La unidad deportiva en estudio es una Asociación Civil que ha venido desarrollando su administración de manera empírica, a través de patrones, formatos y procedimientos que no se han renovado, o ha incorporado nuevas herramientas administrativas que maximicen su efectividad en el momento de aplicarlos. Esta circunstancia ha provocado un bajo desempeño gerencial, que se ve reflejado en el momento que ocurre una situación conflictiva o problemática, ya que se recurre al desarrollo de soluciones ineficaces para dichos problemas, mismos que en un periodo de tiempo vuelven a presentarse. Se puede mencionar que en el momento que surge un problema se desconoce su origen y posibles causas por lo que no se toman las medidas preventivas ni correctivas adecuadas para solucionarlo, y se termina resolviéndolo de manera experimental y a merced de los resultados que puedan darse, sin tener control sobre ello y sus consecuencias.

Hasta el momento la unidad deportiva no cuenta con un modelo administrativo o procedimiento, que permita detectar, analizar y determinar las causas y naturaleza de un problema específico; y además indique si se trata de un problema de índole administrativo o tecnológico así como también permita el desarrollo de propuestas e implantación de soluciones.

### Definición de Causas, Efectos y Relaciones del Problema con Otras Áreas de la Organización.

Con base al análisis del problema planteado en la primera etapa, se llevó a cabo una reunión con el personal del área y subgerente, en la cual se tuvo una lluvia de ideas para especificar las causas y efectos potenciales de dicha situación problemática; la información obtenida se agrupó en un diagrama de causa-efecto para su mayor comprensión, el diagrama cuenta con las siguientes categorías: personal, métodos, equipo tecnológico, políticas. A través del diagrama puede deducirse que las causas potenciales del problema son la falta de capacitación y comunicación con la gerencia por parte de los empleados del área de control de acceso, así como la falta de controles y documentos que permitan manipular información actualizada, detallada y oportuna cuando el socio pretenda ingresar a las instalaciones y verificar si puede hacerlo o, en caso contrario, conocer el porqué y hacerlo del conocimiento de la persona con bases reales. En cuanto a la relación que existe entre el área crítica con los otros departamentos, se tiene que existe relación directa con la subgerencia, ya que es ésta quien le proporciona la información necesaria para el desarrollo de sus funciones.

## TIPIFICACIÓN DEL PROBLEMA

En esta etapa tomando los análisis realizados en las etapas anteriores, se llega a la conclusión que el problema estudiado es de naturaleza administrativa- tecnológica, ya que involucra aspectos relacionados con el personal, documentación y el manejo ineficaz de la tecnología disponible.

### Análisis de los Recursos Administrativos y Diagnóstico Preeliminar

Para obtener información confiable en cuanto al manejo de recursos tanto administrativos como tecnológicos en el área crítica, se diseñó un cuestionario que permitió realizar la evaluación, con cuyo resultado se identificó de manera clara la ausencia de controles eficaces para el manejo de información, ya que los controles actuales son obsoletos y han perdido su eficacia dado el incremento en el volumen de información, ya que son alrededor de 850 socios y resulta imposible mantener la información actualizada, sin olvidar la falta de capacitación del empleado.

### Análisis de los Recursos Tecnológicos y Diagnóstico Preeliminar

En cuanto a los recursos tecnológicos en el área de control de acceso la situación presenta en la siguiente tabla:

Tabla 2: Recursos Tecnológicos Control de Acceso

<b>Recursos tecnológicos</b> <b>Control de acceso</b>		
<b>Elemento tecnológico</b>	<b>Componente</b>	<b>Función</b>
Equipo de cómputo	Subgerencia	El equipo de computo y sistemas en la subgerencia es obsoleto, por lo que es lento y poco confiable ya que se producen perdidas de información
	Control de acceso	No se tiene equipo y sistemas de cómputo para el funcionamiento del área
Capacitación tecnológica	-	No existen programas de capacitación tecnológica que permita al empleado conocer el funcionamiento de una computadora y las ventajas de un sistema informático para el manejo de información.

De acuerdo a la tabla anterior se diagnostica como factores determinantes la carencia de equipo y sistemas de cómputo y capacitación tecnológica que propician la presencia del problema organizacional.

#### PLANTEAMIENTO Y FACTIBILIDAD DE SOLUCIONES

Dadas las causas potenciales de dicho problema encontradas en el proceso de evaluación, se tiene el planteamiento de las siguientes propuestas de solución:

- Desarrollar un programa de capacitación para el personal del área de control de acceso, que involucre la explicación de sus funciones, derechos y obligaciones en la organización.
- Diseñar un programa de capacitación tecnológica en el manejo de equipos y sistemas de cómputo, como base para la optimización de sus funciones.
- Desarrollar un programa que permita mejorar la comunicación empleado-subgerente para el manejo y solución de conflictos organizacionales.
- Diseñar un sistema de información computarizado que controle la información relacionada con los socios desde sus datos generales hasta su historial y control de pagos, para garantizar la confiabilidad de la información y el control de acceso a las instalaciones.

En cuanto a la factibilidad de los programas administrativos, no se requiere destinar recursos económicos para su creación, ya que el subgerente puede diseñarlos e implementarlos, al contar con la información administrativa (políticas, normas, procedimientos, definición de puestos) para su elaboración y conocimiento del sistema..

Para realizar la propuesta referente al diseño de un sistema de información computarizado, dadas las características del equipo de cómputo utilizado en la subgerencia, se sugiere reemplazar el equipo por uno del centro de cómputo de mayores prestaciones con mayor velocidad y capacidad de almacenamiento para el desarrollo del sistema, ya que los equipos del centro de cómputo son utilizados como equipos de consulta únicamente, por lo que puede darse un uso más eficiente en el área administrativa y no representa el reemplazo un problema. En el área de control de acceso es importante asignar una computadora que mantenga la información sincronizada con la subgerencia para evitar el descontrol en el acceso de los socios. Al contar con un encargado del mantenimiento de los equipos de cómputo, esta persona será la acreditada para capacitar al

personal en el uso de equipos de cómputo, así como el diseño del sistema, basándose en los requerimientos estipulados por el subgerente.

## IMPLEMENTACIÓN DE SOLUCIONES

Se le presentaron las propuestas de mejora donde se incluyo el modelo a implantar para hacer el análisis de la problemática, sin embargo para continuar con la investigación e implementación de las propuestas de solución y la evaluación de resultados debe pasar por un proceso de aprobación por parte de la alta administración de la empresa en estudio, debido a cambios de autoridades no se dio autorización y este estudio llevo únicamente hasta la etapa correspondiente al planteamiento, redacción y factibilidad de soluciones.

## CONCLUSIONES

A través de la información generada en el marco teórico se manifiesta la importancia del proceso administrativo y la administración de la tecnología en el desarrollo y desempeño óptimo de toda organización, mediante la correlación de ambos conceptos para incrementar la calidad y competitividad en la ejecución de las tareas en cada una de las áreas funcionales que integran a la empresa.

Con la aplicación de los cuestionarios de diagnóstico y el análisis de los factores administrativos, tecnológicos y la evaluación del manejo de los problemas laborales, a nivel gerencial y subordinados, se obtuvieron resultados que dieron fundamentos para la realización de conclusiones sobre el manejo y control de éstos parámetros. En relación con la evaluación tecnológica se concluye que la empresa desconoce los beneficios que la administración tecnológica brinda y por consiguiente no se apoya en la tecnología para el control eficiente de los recursos. En cuanto a la evaluación de los factores administrativos, se encuentran como etapas críticas las correspondientes a dirección y control, al existir líneas de comunicación débiles entre los empleados y los jefes y no contar con mecanismos efectivos para medir el desempeño funcional.

Con base en el análisis correspondiente al seguimiento y solución de problemas organizacionales, se concluye que la organización no cuenta con un sistema especializado en la detección, análisis y solución de problemas, por lo que las soluciones que se dan a las situaciones problemáticas no son debidamente analizadas y objetivas dando lugar a su permanencia o reincidencia; por lo que el modelo planteado en este trabajo servirá como plataforma para el control y manejo eficiente de los problemas administrativos y/o tecnológicos.

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# OFERTEO CONSTANTE: FACTOR PRIMORDIAL EN EL INCREMENTO DE LAS VENTAS EN HIPERMERCADOS-TRES CASOS EN CIUDAD JUÁREZ, MÉXICO

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## ABSTRACT

*La mercadotecnia nos ayuda a concebir e implementar la función comercial o la relación de intercambio entre dos o más personas (Jacques, 2003) y el concepto de venta supone que es preciso estimular a los consumidores para que compren, por lo que las empresas deberán utilizar todo un arsenal de herramientas de venta y promoción para estimular más compras. (Santesmases et. al., 2003). La presente investigación se centra en vincular las estrategias de mercadotecnia de precios que utilizan tres de los hipermercados de Ciudad Juárez con el aumento en las ventas. A través de este estudio, se pretende dar a conocer las diversas tácticas que utilizan los hipermercados para acaparar más clientes en base a su imagen, descuentos, promociones, tipos de publicidad y otras actividades que ayuden a identificarlos de sus competidores, con el propósito de incrementar sus utilidades.*

## INTRODUCCIÓN

La mercadotecnia y las ventas, son temas que cuentan con cuerpos de literatura muy bastos y ampliamente estudiados, sin embargo en este anteproyecto de investigación se pretende encontrar el vínculo que hay entre el aumento de las ventas y las estrategias de mercadotecnia, en tres hipermercados de Ciudad Juárez que desde hace varios años compiten de manera agresiva por acaparar el mercado. Enfocar la investigación en hipermercados y no en otro tipo de establecimiento, se basa fundamentalmente en las características que tienen.

El hipermercado es un establecimiento comercial de venta detallista en régimen de autoservicio con un horario prolongado y un servicio reducido a los clientes (Mercado, 2000). Esta forma de comercializar los productos nació en Europa en 1960, cuando se abrió el primer hipermercado en el barrio parisino de Sainte Geneviève des Bois (Essonne) por Carrefour en 1963 (Frye, 1982)

Los hipermercados ofrecen una amplia gama de productos y al igual que los supermercados, contienen secciones de alimentación, farmacia, perfumería, ropa, zapatos y artículos para el hogar, pero lo que los distingue de ellos, es que los hipermercados además de estas secciones, también incluyen de papelería, maquinaria, electrónica, audio y video, electrodomésticos, juguetes y textil. Otra diferencia con los supermercados, es su tamaño, pues se establecen en superficies mayores a 2,500 m<sup>2</sup> y por poseer elementos de grandes almacenes o combinación con esta forma de tiendas. Habitualmente se sitúan a las afueras de las ciudades cerca de las vías de gran tránsito circulatorio. Cuentan con estacionamiento para clientes y suelen complementar su oferta con centros comerciales u otros grandes almacenes que suelen situarse en el entorno. Sus grandes dimensiones y el hecho de situarse a las afueras reducen los costos operativos y de instalación lo que se supone determina un menor precio de los artículos y cuya política de ventas se basa en la técnica del descuento con precios y márgenes reducidos, en la alta rotación de sus existencias y en la utilización continua de promociones y ofertas apoyadas en sofisticadas técnicas de merchandising (Stanton et. al., 2004).

Estos establecimientos están catalogados como grandes superficies de alimentación que dedican cada vez mayor espacio a las secciones de no alimentación. Trabajan con márgenes muy ajustados en lo que se refiere a productos de alimentación, lo que supone una minimización de costes y una gran rotación de existencias para poder ser competitivo, actuando esta política de precios como gancho para que los consumidores vayan al establecimiento y compren, además, otros productos con márgenes más altos en las secciones de no alimentación, lo cuál equilibra el margen global buscado y fomenta la formación de una clientela fiel y asidua (Belch, 2005).

Actualmente en México existen aproximadamente unos 100,000 hipermercados distribuidos en los treinta y dos estados de esta República, algunos ejemplos de estos son: en el estado de Sonora 35, entre los que se encuentran: Superval, Ley, Soriana, Wal-Mart, Vh, etc. En Sinaloa esta Ley, Soriana, Wal-Mart, Mz, Comercial Mexicana. En la Ciudad de México se encuentran conglomerados la mayoría de los hipermercados por ser la ciudad más grande de la república, algunos son: Bodega Aurrerá, Wal-mart, Soriana, Comercial Mexicana, etc.

El estado de Chihuahua (donde se ubica Ciudad Juárez) cuenta con una extensa gama de hipermercados, entre los que se encuentran: Al super, Wal-Mart, Soriana y S-mart. En la tabla 1, se desglosan la cantidad de establecimientos que tienen estos hipermercados en los diferentes municipios del estado.

Tabla 1: Cantidad de Establecimiento que Tienen los Hipermercados

Municipio	Establecimiento	Cantidad	Total
Chihuahua	Soriana	2	17
Cuauhtemoc		2	
Parral		1	
Delicias		1	
Ciudad Juárez		11	
Chihuahua	Wal-Mart	2	5
Ciudad Juárez		2	
Delicias		1	
Chihuahua	S-mart	4	23
Ciudad Juárez		19	

Elaboración propia sobre la cantidad de establecimientos por municipio, de tres de los hipermercados establecidos en el estado de Chihuahua. Esta información obtenida en entrevistas al personal y publicaciones internas de estas empresas. Por su confidencialidad, esta información se considera como datos no publicados

En Ciudad Juárez los tres hipermercados que luchan por acaparar la mayor parte del mercado local son: Smart, Soriana y Walmart. Smart y Soriana se instalaron en la ciudad en 1989 y actualmente cuentan con 19 y 11 establecimientos en la ciudad respectivamente. Walmart por su parte se estableció en la ciudad en 1995 y cuenta con dos establecimientos hasta la fecha.

## METODOLOGÍA

El problema central del presente anteproyecto de investigación es vincular las estrategias de mercadotecnia de precios que utilizan tres hipermercados de Ciudad Juárez con el aumento en las ventas. Para desarrollarlo, el diseño de la investigación será no experimental de campo, con enfoque mixto (cuantitativo y cualitativo), alcance descriptivo y correlacional y dimensión transversal. La población en la que se enfoca son los hipermercados de Ciudad Juárez, en México con una muestra de los tres hipermercados más representativos de la localidad: Smart, Soriana y Walmart. El muestreo será no probabilístico del tipo de Muestra de Casos típicos, la cual nos permite llegar a aquellas organizaciones que poseen claramente la situación que se desea analizar. Los métodos para la recopilación de la información de campo serán la observación, cuestionarios y entrevistas al personal directivo de las tiendas.

El anteproyecto maneja dos hipótesis de investigación (1) El tipo de mercado al que se dirige el hipermercado determina el tipo de publicidad y promociones que realiza y (2) el aumento de las ventas, es proporcional a las estrategias de mercadotecnia de precios que utilizan los hipermercados de Ciudad Juárez.

En la primera hipótesis se considera que es importante que los hipermercados identifiquen con claridad el tipo y segmento de mercado hacia el que dirigen sus productos, ya que esta información les ayuda a analizar el tipo de publicidad que será la mas propicia y certera, que les brinde la seguridad de que despiertan la inquietud del publico objetivo, así como también las promociones que motiven e influyan en la preferencia de este público, arrojando como resultado un alto índice de concurrencia y por consiguiente un gran volumen de venta, que les proporcione utilidades. Se ha detectado a la fecha que las principales promociones que estos hipermercados ofrecen a sus clientes, son: reducción de precios u ofertas, premios, cupones, muestras de productos, concursos, sorteos, juegos, reembolso por el total de la compra y recompensas por cliente frecuente (tarjeta de puntos), sin embargo no se detecta claramente si estas promociones están enfocadas a un tipo de mercado en particular o son solo promociones hacia el público en general para atraer su atención.

La segunda hipótesis considera que actualmente existe una lucha constante por ser el mejor ante los ojos de los clientes, por lo que estos hipermercados desarrollan diversas tácticas que les permite presentar a sus clientes un panorama tentador que satisfaga sus expectativas, que los incite a decidirse a comprar en sus tiendas al tiempo que les ofrecen algo mejor que sus competidores. Considerando esta y otras tácticas, se intenta vincular a las estrategias de mercadotecnia de precios, con el aumento de las ventas.

## CONCLUSIONES

El presente anteproyecto pretende vincular las estrategias de mercadotecnia de precios que utilizan los hipermercados de Ciudad Juárez con el aumento en las ventas, intentando determinar en el caso de las estrategias de mercadotecnia si la difusión de su imagen, tipo de promociones o incentivos que ofrecen a sus clientes (premios, cupones, concursos, reembolsos, etc.), ofertas que utilizan (reducción de precios, 2 x 1, etc.) artículos en que aplican las ofertas (departamento de perfumería, electrónica, blancos, etc.), así como ofrecer marcas reconocidas y propias, son algunas de las estrategias que despiertan el interés del cliente, por lo que al ir indagando si estas estrategias escogidas por los hipermercados son las que les permiten incrementar sus ventas y determinar su relación, son las adecuadas para su tipo y segmento de mercado. Por otro lado, la misma investigación nos permitirá determinar el segmento de mercado que acude con más frecuencia a estos hipermercados y por consiguiente el nivel adquisitivo que manejan, así como determinar el número promedio de personas que asistente a éstos, y examinar si estos factores contribuyen a elevar las utilidades de los mismos.

Es necesario mencionar que los hipermercados como parte de su preocupación por obtener mas ingresos, también se interesan porque sus clientes se sientan motivados desde el momento en que ingresan a sus instalaciones, cuidando detalles como es el tipo de música que consideran mas adecuada, los colores que utilizan para armonizar el ambiente, la cantidad de publicidad que se maneja en los anaqueles para atraer la mirada y atención hacia estos, haciéndoles saber de antemano que se preocupan por su bienestar y resaltando lo que los diferencia de sus competidores.

Finalmente, para determinar la vinculación de las estrategias de mercadotecnia de precios con el aumento en las ventas es necesario continuar la presente investigación en el campo, así como también será necesario realizar futuras investigaciones de tipo empírico que prueben la confiabilidad y validez de los resultados.

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# **LAS DIFERENCIAS CULTURALES Y SU IMPACTO EN EL DISEÑO DE PROGRAMAS DE MOTIVACIÓN LABORAL**

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## **ABSTRACT**

*Uno de los grandes retos de un administrador de recursos humanos es lograr mantener un nivel de motivación óptimo en los empleados que tenga impacto positivo en el desempeño de su trabajo, que es lo que permitirá alcanzar los objetivos tanto personales como organizacionales, por tanto, es importante identificar las necesidades de los empleados considerando los aspectos culturales al momento de diseñar los programas de motivación laboral. El presente trabajo pretende, a partir de una revisión de literatura, identificar la importancia de las diferencias culturales al momento de diseñar programas de motivación laboral, así mismo, observar qué teorías de motivación se rescatan en los diferentes trabajos para el estudio de este tema.*

## **INTRODUCCION**

Saber qué motiva a los empleados es complicado debido a que los estímulos tienen diferentes efectos de persona a persona, aún tratándose de la misma cultura. El problema se complica aun más cuando se trata de adoptar programas de motivación laboral que han sido probados en culturas distintas; por ello, es necesario tomar en cuenta la realidad cultural de la región en la que se quiere implantar dicho programa; es decir, los métodos para distribuir los estímulos que lleven a motivar a los empleados, deben depender de los aspectos culturales en los que se ven involucrados los trabajadores (Leung, 1997).

## **REVISIÓN DE LITERATURA**

El término motivación laboral, definido por (Robbins, 2002) como “La disposición de emplear grandes niveles de esfuerzo para alcanzar las metas organizacionales, a condición de que el esfuerzo satisfaga alguna necesidad individual”, surge en Europa, en el año de 1700, cuando los antiguos talleres de artesanos se convirtieron en fábricas, lugar en donde los trabajadores ocupaban su tiempo operando máquinas. El alto número de empleados originó problemas de comunicación entre los trabajadores y el patrón, lo que tuvo sus efectos directamente en la productividad por la falta de interés y la serie de conflictos que se presentaban entre los trabajadores (Aceves, 2000).

La época fructífera para el desarrollo del concepto motivación fue la década de los cincuenta, ya que se formularon principalmente tres teorías específicas las cuales siguen siendo consideradas como válidas: la teoría de jerarquización de necesidades de Maslow, la teoría de motivación-higiene de Frederick Herzberg y a Douglas McGregor con la Teoría X y Y. (Robbins, 1996).

En la teoría de Frederick Herzberg se identifican dos factores: Los de higiene y los motivadores: En los primeros se pueden encontrar elementos tales como supervisión, relaciones interpersonales, condiciones físicas del trabajo, salarios, políticas y prácticas administrativas, prestaciones y seguridad en el trabajo; mientras que en los segundos se incluye el logro, el reconocimiento a los logros, el trabajo interesantes, mayor responsabilidad del puesto, oportunidades de crecimiento y progreso. Según Herzberg, éstos últimos son los que conducen a

un mejor desempeño, pues los primeros únicamente actúan como neutralizadores, sin embargo, su ausencia provoca insatisfacción (Wren y Greenwood, 1999).

Un empleado que labora en un ambiente agradable desarrolla mejor su trabajo, así mismo, alguien que tiene una alta satisfacción laboral, puede involucrarse en la solución de problemas tanto con su supervisor como con sus compañeros de trabajo, y sugerir soluciones, además de influir positivamente en la lealtad así como disminuir la rotación de personal y la negligencia (Thomas, 2002), por lo tanto, "...es importante reconocer como prioridad el establecer sistemas formales de motivación, ya que las empresas que logren crear las condiciones para que cada uno de los empleados realice su trabajo con la mayor eficiencia posible, gozarán de ventajas evidentes frente a sus competidores" (Gellerman, 1992). Esto sirve de base para lograr las metas establecidas en cuestión de la ejecución del trabajo y de altos niveles de productividad, pues el éxito de las empresas dependerá en gran medida del valor del capital humano. Según (Gómez-Mejía, 2001), son dos los factores importantes que afectan a la productividad individual: capacidad y motivación. Aunque por otro lado, (Mill, 2001) señala que una adecuada comunicación, un efectivo reconocimiento y el entrenamiento oportuno permitirá que los empleados logren mayor productividad,

Thomas (2002) manifiesta que es de particular importancia considerar las dimensiones culturales tanto verticales (inequidad) como horizontales (enfatisa que las personas pueden ser similares en muchos de sus atributos, principalmente en cuanto al status social) para poder entender la relación entre los trabajadores y la organización. Considerar entonces las necesidades de los trabajadores tomando en cuenta las características propias de la cultura, ayudará a obtener mejores resultados en la implantación de programas de motivación laboral; por ejemplo, se debe tomar en cuenta si como parte de la cultura se tiende hacia el colectivismo o hacia el individualismo, pues según (Earley y Gibson, 1998), el individualismo y el colectivismo son quizá las dimensiones más útiles y de mayor alcance de la diversidad cultural al momento de explicar el comportamiento social. En sistemas de Estados Unidos se da mayor énfasis a los logros individuales, se valoran la competencia y el logro de metas personales, y por lo tanto, se opta por contar con sistemas de motivación en donde se reconozcan las contribuciones individuales (Fan, 2004).

En culturas más colectivistas, en donde se asume que el éxito está basado principalmente en el trabajo en equipo, se tiende más por la cooperación, la interdependencia y las metas grupales (Aguinis, 2002), por lo que los programas de motivación deben ser diseñados atendiendo el principio de igualdad. (Aguinis, 2002). Xu (2003) encontró que la relación positiva entre las características intrínsecas del trabajo y la satisfacción laboral es más fuerte en países individualistas y más débil en países colectivistas; también comprobó que esta relación es más fuerte en países con alta seguridad social y con una distancia más corta del poder.

Peterson (2003) relaciona la motivación intrínseca a la socialización, que considera valores y normas sociales, tomando en cuenta principios de la motivación intrínseca, la teoría cognoscitiva de la evaluación y la teoría de las características del trabajo, en donde se sugiere que la aceptación individual de valores y normas apoyan el comportamiento proactivo en el trabajo, lo que contribuye a la motivación intrínseca, por lo que la motivación intrínseca depende no solamente de las cualidades naturales comunes de los individuos sino también de la socialización en los aspectos culturales. Kanungo (1983) se dio a la tarea de realizar un estudio en cuatro países: Canadá, Francia, Japón y Reino Unido, en donde identificó patrones significativamente diferentes en la orientación hacia el trabajo y la satisfacción laboral entre gerentes de estos países, encontrando que los gerentes franceses tienen un nivel más alto de satisfacción en su trabajo que los británicos. También identificó diferencias significativas con respecto a la percepción de la importancia de los resultados en el trabajo, así, los británicos parecen dar mayor importancia al

logro individual y al alcance de metas que los franceses. En un estudio realizado por (Tang y Hamid, 1998) con empleados públicos de dos organizaciones, una de Estados Unidos y la otra de Egipto y Arabia Saudita, encontraron que, en los tres países, la satisfacción laboral intrínseca está positivamente relacionada con el altruismo, mientras que la satisfacción laboral extrínseca se relaciona negativamente con el altruismo.

Money y Graham (1999) concluyó que los componentes de la satisfacción laboral son diferentes entre los estadounidenses y los japoneses; la satisfacción con el pago es más fuerte en Estados Unidos, mientras que la promoción no es relevante. En japonés, por otra parte, manifestó satisfacción con los compañeros de trabajo, la felicidad con el trabajo. Lo anterior es reforzado por (Kondo, 1987) al decir que en Japón, el valor del dinero como incentivo ha disminuido considerablemente su eficacia, obligando a las empresas a buscar otras maneras de mejorar productividad y calidad.

Crabbs (1973) trató de dar respuesta a la pregunta ¿la motivación laboral en la República de Panamá es diferente a la de Estados Unidos?, para lo cual realizó un estudio comparativo considerando variables de satisfacción en el trabajo asociadas con factores de higiene; encontrando que los ciudadanos de Estados Unidos muestran un grado de satisfacción menor que los de la República de Panamá (19.3% contra 68%.7%), los resultados fueron obtenidos con la respuesta a un cuestionario aplicado a los empleados de estas dos nacionalidades.

Por otro lado, Eskildsen et al (2004) demostraron en un estudio realizado en países nórdicos, que los trabajadores daneses tienen un nivel de satisfacción más alto que en otros países nórdicos. En este estudio también se presentaron hipótesis relacionadas con el género, tamaño de la empresa, edad, nivel de educación de los empleados, entre otras. Mientras que Poza (2000), analizando un total de 15,324 empleados en 21 países nórdicos, Dinamarca obtuvo el primer lugar en satisfacción laboral, Suecia el lugar número 9 y Noruega fue ubicado en el décimo lugar.

## CONCLUSIONES

Saber qué motiva a los empleados atendiendo las características tanto individuales como grupales es una tarea difícil que los encargados de manejar los recursos humanos tienen que enfrentar día con día, pues la motivación debe ser una actividad permanente si se quieren alcanzar los objetivos planteados. Los estímulos tienen diferente impacto de persona a persona, por lo que es necesario conocer las necesidades de los trabajos para ayudarlos a satisfacerlas y de esa manera lograr un mayor nivel de motivación que se vea reflejado en el desempeño de su trabajo.

Considerar los aspectos culturales al momento de diseñar programas de motivación laboral en las empresas es elemental para el logro de objetivos organizacionales, no es posible tratar de implantar un sistema que posiblemente ha sido probado en otra realidad cultural. Las estrategias a utilizar para motivar van a depender de características tanto grupales como individuales, pues en la revisión de literatura realizada para este trabajo, se ha encontrado, por ejemplo, que los distintos países analizados tienen diferente nivel de satisfacción laboral, que es la variable en la que se han localizado más investigaciones.

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# **SISTEMA DE APOYO AL PROCESO DE TOMA DE DECISIONES DE INVERSION EN TECNOLOGIA ENMARCADO EN EL MODELO DE KEPNER Y TREGOE CASO: EMPRESAS DEL SECTOR DE TELECOMUNICACIONES DE BARRANQUILLA, COLOMBIA**

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## **ABSTRACT**

*Este trabajo de investigación está orientado al desarrollo de un modelo para la evaluación de proyectos de inversión tecnológica en las empresas del sector de Telecomunicaciones. Aportando un cambio novedoso a los tradicionales métodos de evaluación de proyectos, ya que introduce un modelo integral para evaluación cuantitativa de criterios cualitativos de reconocida importancia, pero poco investigados, tales como: Calidad, Know How, Diversificación, Innovación y Reposición. Así como la inclusión de análisis financieros que ofrecen una simulación de rentabilidad y riesgo. Presenta numéricamente el peso o grado de importancia de cada uno de los criterios anteriormente mencionados en el sector, datos obtenidos mediante encuestas y entrevistas a directivos de las empresas de Telecomunicaciones más importantes, así como sistemas de cálculos internos para la evaluación de estos criterios en cada alternativa de inversión.*

## **INTRODUCCION**

El proceso de evaluación de proyectos en inversiones tecnológicas en las empresas de telecomunicaciones en Barranquilla se realiza fundamentalmente con base en la experiencia del decisor, y en un sencillo análisis de proyecciones de rentabilidad con criterios muy conocidos como TIR y VPN. Pero el análisis financiero no constituye un estudio completo de las bondades de la inversión a realizar, ya que el servicio de telecomunicaciones tiene características propias muy esenciales que deben tenerse presente en el momento de analizar las alternativas de inversión, como pueden ser criterios de cobertura, calidad, innovación, diversificación, etc; lo cual requiere un mayor nivel de conciencia y estudio para enfocarse a la mejor alternativa.

El modelo generado en esta investigación es útil para la formación de directivos en el sector, ya que establece con detalle los principales factores que deben ser analizados constantemente, así como un nivel de importancia para cada uno de ellos. De la misma manera; los ejecutivos nuevos en el sector encontrarán un gran apoyo en este modelo, ya que proporciona un sólido soporte en el proceso de toma de decisiones.

## **MARCO CONCEPTUAL**

El modelo propuesto en este documento se fundamenta en el modelo teórico de Kepner y Tregoe, el cual enuncia: El proceso de toma de decisiones es una forma sistemática de unir los hechos y la experiencia, a fin de lograr un mejor juicio de parte del directivo. Según Charles Kepner y

Benjamin Tregoe, cualquier proceso de toma de decisión deberá desarrollarse sistemáticamente siguiendo los siete conceptos básicos siguientes: Establecer objetivos frente a los cuales elegir, clasificar los objetivos de acuerdo a su importancia, desarrollar alternativas entre las cuales escoger, evaluar las alternativas frente a los objetivos a fin de hacer una elección, elección de la mejor alternativa como decisión tentativa, Evaluar las consecuencias adversas de la decisión tentativa, controlar los efectos de la decisión final mediante la prevención de las consecuencias y una adecuada vigilancia.

## MODELO PROPUESTO PARA TOMA DE DECISIONES

El modelo propuesto parte de un estudio lógico del enfoque del proyecto de inversión hacia la Misión Empresarial. Este análisis comprende dos posibles resultados internos, SI y NO, lo que conlleva a la opción de continuar con el estudio del proyecto o su completa nulidad. La toma de decisiones debe estar primordialmente enfocada a proyectos que ayuden a encaminar el rumbo de la empresa hacia la MISIÓN establecida por la Gerencia, lo cual se puede establecer como el primer objetivo obligatorio de los proyectos de inversión. Los objetivos deseados se establecen con base a las siguientes variables: Rentabilidad (VPN, TIR); Riesgo (No. VPN negativos/ No. VPN TOTALES); Know How; Tendencias de Inversión; Poder de proveedores; Mejoras de calidad; Diversificación e Innovación. Se asigna un peso o ponderación a cada variable de acuerdo a su grado de influencia en la decisión final. La calificación de cada alternativa de decisión viene dada por la ecuación 1:

$$\text{Opción} = \frac{RENTn \times \text{peso1} - RIESGOn \times \text{peso3} + KNOW\ HOWn \times \text{peso4} + TEND\ INVn \times \text{peso5} + CALIDAD\ n \times \text{peso6} + P.\ PROVn \times \text{peso7} + \dots}{(1)}$$

Donde n representa el número de cada alternativa de inversión y  $\text{Peso}_i$  representa la importancia asignada por el decisor a cada una de las variables definidas. La alternativa que obtenga la mayor calificación será la sugerida por el modelo

## PRIMERA PARTE DEL MODELO: MODELACIÓN DE RENTABILIDAD Y RIESGO.

Para iniciar la operación del modelo se requiere que el administrador suministre la siguiente información: Inversión Fija, Inversión Diferida, Financiación, Número de Productos, Número de Unidades, Costos, Precio de Venta,

## DEFINICION DE LAS VARIABLES ALEATORIAS

Como se desea generar una gran cantidad de escenarios se seleccionó un tipo de distribución continua para modelar la aleatoriedad en aquellas actividades o eventos en los cuales los valores de las variables pueden estar dentro de un rango de valores reales. Las variables críticas para representación de ingresos y gastos que se establecen como aleatorias para la modelación del sistema, y que son críticas para el desarrollo y resultados de los flujos de caja se muestran a continuación

Las variable aleatorias para los ingresos son:: número de unidades iniciales de cada producto (u), incremento en numero de unidades ( $\Delta u$ ), precio inicial de cada producto (P), incremento en el precio inicial de cada producto ( $\Delta P$ ). Los ingresos de cada producto son calculados mediante la siguiente ecuación 2:

$$I = u_i * P_i * [(1 + \Delta u)(1 + \Delta P)]^{(y-1)} \quad (2)$$

Donde:

$i =$  Número de producto

$y =$  Numero de año

Los ingresos totales de cada periodo están representados por :

$$IT = \sum_{i=1}^U I_i \quad (3)$$

Donde U es el número total de productos del proyecto.

Se definieron como variables aleatorias de egreso :Costo de Insumos iniciales (cv), Incremento en costos insumos ( $\Delta cv$ ), Mano de obra inicial (o),Incremento en mano de obra ( $\Delta o$ ), Costos indirectos del servicio (cis) y Incrementos en costos indirectos del servicio ( $\Delta cis$ )

Los costos de cada producto son calculados mediante la siguiente ecuación:

$$C = c_{vi} * (1 + \Delta cv)^{(y-1)} + o_i * (1 + \Delta o)^{(y-1)} + c_{isi} * (1 + \Delta cis)^{(y-1)} \quad (4)$$

Donde:

$i =$  Número de producto

$y =$  Numero de año

Los costos totales de cada periodo están representados por:

$$CT = \sum_{i=1}^U C_i \quad (5)$$

Donde U es el número total de productos del proyecto.

Tanto el ingreso total de la empresa como el egreso total, viene dado por la convolución de las variables antes mencionadas. Las variaciones en el precio, numero de unidades, insumos y mano de obra; van a demarcar el rango de utilidades que arroja cada alternativa de inversión.

Apoyándose en el teorema del limite central se puede atribuir una generación de valores aleatorios distribuidos normalmente para cada variable según la ecuación mencionada en el marco de referencia:

$$N_i = \left[ \sum_{i=1}^{12} r_i - 6 \right] \sigma + \mu \quad (6)$$

Donde  $\mu$  es la media de la variable que proporciona el decisor, y  $\sigma$  es la desviación de la media central que es definida por el decisor utilizando para esto como referente su conocimiento sobre el producto, el servicio y el sector.

En la figura siguiente se muestra la forma como el software generado para este proyecto, calcula los valores aleatorios para cada producto o servicio:

Tabla 1: Ingresos en el Modelo

	INGRESOS			
	PAUTA	VTR	ESTUDIO	GRABACIÓN
Número de Unidades Iniciales	54,98434	52,4805214	54,931957	44,7126751
Media	50	60	50	50
Desv uds	5	6	7	9
Precio Inicial	104,3256	102,6847	101,358	104,369
Media	100	100	100	100
Desv Precio	10	9	8	5
Incremento Estimado en Precio	0,05704878			
Media	6%			
Desv P Incre	0,50%			
Incremento Estimado en Unidades	0,05770996			
Media	6%			
Desv uds incre	0,50%			

El valor generado para “Numero de Unidades Iniciales” va a estar dado según la ecuación 7 de la siguiente forma:

$$\begin{aligned} \text{Unidades Iniciales} = & (\text{Media}) + (\text{Desvuds}) * (\text{ALEATORIO}() + \text{ALEATORIO}() + \\ & \text{ALEATORIO}() + \text{ALEATORIO}() + \text{ALEATORIO}() + \\ & \text{ALEATORIO}() + \text{ALEATORIO}() + \text{ALEATORIO}() + \\ & \text{ALEATORIO}() + \text{ALEATORIO}() + \text{ALEATORIO}() + \\ & \text{ALEATORIO}() - 6) \end{aligned} \quad (7)$$

De la misma manera se calculan las variables “precio Inicial”, “Incremento Estimado en precio” e “Incremento estimado en Unidades”. Los ingresos totales de cada periodo van a estar calculados según las ecuaciones 1 y 2.

El valor generado para “Materia Prima Inicial” va a estar dado según la ecuación 8 de la siguiente forma:

$$\begin{aligned} \text{Materia Prima Inicial} = & (\text{Media}) + (\text{Desv}) * (\text{ALEATORIO}() + \text{ALEATORIO}() + \\ & \text{ALEATORIO}() + \text{ALEATORIO}() + \text{ALEATORIO}() + \\ & \text{ALEATORIO}() + \text{ALEATORIO}() + \text{ALEATORIO}() + \\ & \text{ALEATORIO}() + \text{ALEATORIO}() + \text{ALEATORIO}() + \\ & \text{ALEATORIO}() - 6) \end{aligned} \quad (8)$$

De la misma manera para las variables “Mano de obra Inicial”, “CIF Inicial”, “Incremento Estimado en Materia Prima”, “Incremento estimado en Mano de Obra, e “Incremento Estimado en CIF”. Los egresos totales de cada periodo van a estar calculados según las ecuaciones 3 y 4.

## SIMULACIÓN DEL PROYECTO DE INVERSIÓN

El flujo de caja se realiza con cada lectura de los valores aleatorios generados mediante el criterio de distribución normal, y los establecidos como fijos por su poco impacto o previsible variación. El número de ciclos de flujos de caja va a ser determinado por el criterio de simulación normal que se estudiará más adelante. En el desarrollo del modelo se utilizó el criterio de flujo de caja libre.

El rubro de Depreciación, incluye todos los valores solicitados por el software al decisor en el detalle de la inversión total inicial, e incluye: Maquinarias, Edificaciones, Vehículos, Equipos de computo y Muebles y equipos de oficina, como estos valores son altamente previsibles no se introducen en el cálculo de variables aleatorias.

## ANÁLISIS DE LA RENTABILIDAD

El Costo de Capital (CK) es evaluado por la ponderación de los costos de cada fuente de financiación de la empresa, es decir pasivos y patrimonio. En el caso del patrimonio, está representado por el Costo de Oportunidad del inversionista; mientras que en los pasivos está representado por las tasas de financiación de las deudas adquiridas por la empresa. La rentabilidad marginal se calcula dividiendo el incremento de UODI entre el incremento de los activos netos de operación, como se plantea en la siguiente ecuación:

$$\text{Rentabilidad Marginal} = \Delta \text{ UODI} / \Delta \text{ ANO} \quad (9)$$

Donde ANO = Activos Netos de Operación.

Con miras a evitar las distorsiones que puede generar la Tasa Interna de retorno en la evaluación de factibilidad de oportunidades de inversión, en el proyecto se decidió trabajar con la TASA INTERNA DE RETORNO MODIFICADA (TIRM), la cual plantea que los flujos netos de cada periodo deben ser proyectados hasta el último periodo de consideración de la inversión, al costo de capital de la empresa. Posteriormente se calcula la TIR con dos únicos valores, la inversión inicial y la totalidad de flujos proyectados en el último periodo, todos los valores de flujos intermedios son tomados como nulos.

$$\text{Rentabilidad} = \text{TIRM} - \text{CK} \quad (9)$$

El inversionista puede incorporar el CK como una entrada al software que ejecuta el modelo planteado en este proyecto, o permitir que el sistema calcule el mínimo costo de patrimonio establecido en el sector de las Telecomunicaciones para su empresa en particular. Según el Dr. Robert Hamada, el costo del patrimonio queda definido por :

$$K_e = K_L + R_m * \beta_s * (1 + (1-t)D/P) + RP \quad (10)$$

Para el caso de las empresas de telecomunicaciones de Barranquilla se tiene que:

$K_L$	=	Rentabilidad libre del riesgo del mercado = 7.5%
$R_m$	=	Premio por riesgo del mercado = 6.07%
$\beta_s$	=	Beta del sector = 1.73%
$D/P$	=	Relación Deuda/Patrimonio en la inversión
$RP$	=	Factor riesgo país. En el caso de Colombia es 5.84%

$Ke1 = 7.5\% + (6.07)(1.73)(1 + 0.615(D/P)) + 5.84\%$  Expresada en Dólares Corrientes

$$Ke2 \text{ (en Dólares Constantes)} = \frac{1 + Ke1}{1 + I. \text{ Ext}} - 1 \quad (11)$$

Donde, I. Ext = Inflación Americana = 3.3% en 2005

$$Ke \text{ (pesos)} = (1 + Ke2)/(1 + I. \text{ Int}) - 1 \quad (12)$$

Donde, I. Int = Inflación Colombiana = 5.4 % en 2005

$$CK = [Ke * (P) + Kd * (D)] / (D + P) \quad (13)$$

Donde Kd = Tasa de Financiación de la deuda

La rentabilidad queda expresada como

$$R = TIRM - CK \quad (14)$$

Debido a la naturaleza probabilística de los sistemas donde se utiliza la simulación, se hace imprescindible crear modelos cuyos resultados sean estadísticamente iguales a los sistemas reales. Uno de los factores que afectan en forma directa esos resultados es el tamaño de la corrida de simulación o bien el número de corridas de simulación realizadas para encontrar resultados confiables. Al realizar una corrida de simulación, el resultado promedio de las variables del sistema tienen un periodo de inestabilidad y, conforme transcurre el tiempo, esas variables tienden a un estado estable y es entonces cuando Los valores de las variables de respuesta son confiables. Mediante la aplicación de la ecuación planteada por Azarang:

$$N = \frac{\sigma^2(Z\alpha/2)^2}{k^2} \quad (15)$$

donde:

- Z = estadístico normal estándar para cierta  $\alpha$
- K = desviación absoluta máxima permitida sobre la media de la distribución a simular.
- $\sigma^2$  = Varianza de la distribución a simular.

El valor de  $Z\alpha/2$  se obtiene de la tabla de distribución normal acumulada, donde se observa que para una confiabilidad del 95%, se establece una  $Z\alpha/2 = 1.96$ .

Si se plantea establecer un error máximo permisible de  $K = 5\%$

$$N = \sigma^2(1.96)^2 / (0.05)^2 = 1536 * \sigma^2 \text{ simulaciones}$$

Este cálculo del número de simulaciones óptimo no asegura del todo que se cumpla con las condiciones de estabilidad.

## ANALISIS DE RIESGO

Se define el Riesgo como la probabilidad de encontrar VPN de valores negativos entre los calculados en cada iteración, es decir:

$$\text{Riesgo} = \text{No VPN} < 0 / \text{No VPN} \quad (16)$$

Se sigue el siguientes procedimiento para el cálculo de RIESGO: Se fija una varianza y una media en las cifras de ventas y costos, se establecen variaciones aleatorias en estos valores siguiendo una distribución normal. se calculan los diferentes valores de VPN, para estas entradas aleatorias. Un número superior a  $1536 \cdot \sigma^2$ , se grafican y calculan las distribuciones acumuladas de los diferentes valores de VPN. y por último se calcula el valor del riesgo mediante la ecuación mencionada. En la figura siguiente se muestra la distribución acumulada de los valores VPN para la población seleccionada, generando los valores aleatorios mediante una distribución normal

En la gráfica anterior se puede observar la distribución normal de los diferentes VPN asociados por números aleatorios centrados en un valor medio, para ventas, costos, unidades y precios.

## EVALUACIÓN DE FACTORES CUALITATIVOS

Los resultados obtenidos de la aplicación de una encuesta aplicada a los gerentes financieros de las empresas de telecomunicaciones de Barranquilla se resumen en la siguiente tabla:

Tabla # 5: Grado de importancia de Diferentes Variables en la Toma de Decisiones

VARIABLE	EMPRESA COMUNICACIÓN CERRADA		EMPRESA COMUNICACIÓN ABIERTA	
	PRIVADA(%)	PUBLICA(%)	PRIVADA(%)	PUBLICA(%)
Rentabilidad	31.25	31.25	31.25	31.25
Riesgo	15.00	0.00	15.00	0.00
Know How	13.33	0.00	0.00	0.00
Calidad	10.00	23.33	23.33	23.33
Innovación	13.75	0.00	13.75	0.00
Diversificación	15.62	15.62	15.62	15.62
Reposición	0.00	18.75	0.00	18.75
Otras	1.05	11.05	1.05	11.05
Total	100.00	100.00	100.00	100.00

Fuente: Resultado investigación directivos empresas de telecomunicaciones

## ANÁLISIS DE LA INFORMACIÓN

Hasta este punto se ha establecido un modelo usado actualmente que considera las evaluaciones de importancia de cada uno de los criterios claves para toma de decisiones en las empresas de Telecomunicaciones, lo cual proporciona un esquema cuantitativo válido en las decisiones de inversión en las empresas del sector. De acuerdo con el modelo propuesto cada alternativa de decisión viene evaluada de la siguiente manera: La calificación de cada alternativa de decisión viene dada por la ecuación:

$$\begin{aligned} \text{Opción1} &= \text{RENTAB.} \times \text{peso1} - \text{RIESGO} \times \text{peso3} + \text{KNOW HOW} \times \text{peso4} \\ &+ \text{CALIDAD} \times \text{peso5} + \text{INNOVAC} \times \text{peso6} + \text{DIVERSIF} \times \text{peso7.} \end{aligned} \quad (17)$$

Para la calificación de cada variable criterio se tomaron como referencia los siguientes criterios:

Rentabilidad = Numero de veces que la TIRM supera al CK.  
Riesgo = Nivel máximo re riesgo permitido.

Mejoras de Calidad	= Incremento de cobertura +Incremento de capacidad de transporte + Incremento en el portafolio de productos.
Innovación	= Numero de productos nuevos generados + Normas o estándares nuevos Generados +Compatibilidad con la tecnología de los clientes.
Know How	= Posibilidad de ofrecer nuevos productos + mejoras en los procesos actuales + Ahorro en costos en contrataciones de personal + Conocimiento adquirido.
Reposición	= Probabilidad de encontrar repuestos + Factor operaciones de Correctivo/Operaciones de mantenimiento preventivo mayor a 1

## EVALUACIÓN DE CADA ALTERNATIVA.

Como conclusión general del proyecto de investigación se determinaron cuatro ecuaciones dependiendo del tipo de empresa de telecomunicaciones:

Empresa de Comunicación Cerrada y Privada:

$$\text{Opción} = \text{RENTAB.} \times 31.25\% - \text{RIESGO} \times 15\% + \text{KNOW HOW} \times 13.33\% + \text{CALIDAD} \times 10\% + \text{INNOVAC} \times 13.75\% + \text{DIVERSIF} \times 15.62 + \text{Otras} \times 1.05\%$$

Empresa de Comunicación Cerrada y Pública:

$$\text{Opción} = \text{RENTAB.} \times 20\% - \text{RIESGO} \times 11.25\% + \text{KNOW HOW} \times 10\% + \text{CALIDAD} \times 23.33\% + \text{DIVERSIF} \times 15.62 + \text{REPOSICIÓN} \times 18.75 + \text{Otras} \times 1.05\%$$

Empresa de Comunicación Abierta y Privada:

$$\text{Opción} = \text{RENTAB.} \times 31.25\% - \text{RIESGO} \times 10\% + \text{KNOW HOW} \times 5\% + \text{CALIDAD} \times 23.33\% + \text{INNOVAC} \times 13.75\% + \text{DIVERSIF} \times 15.62 + \text{Otras} \times 1.05\%.$$

Empresa de Comunicación Abierta y Pública

$$\text{Opción} = \text{RENTAB.} \times 20\% - \text{RIESGO} \times 11.25\% + \text{KNOW HOW} \times 10\% + \text{CALIDAD} \times 23.33\% + \text{DIVERSIF} \times 15.62 + \text{REPOSICIÓN} \times 18.75 + \text{Otras} \times 1.05\%$$

## CONCLUSIONES

El análisis realizado para la toma de decisiones en proyectos de inversión en el sector de las Telecomunicaciones, debe contar con la experiencia del decisor y con una valoración de los principales criterios que deben ser tenidos en cuenta, como son: Análisis de Rentabilidad, Análisis de Riesgo, Know How, Mejoras en la Calidad, Diversificación, Innovación y reposición de equipos. En cuanto a la valoración de los factores cuantitativos como Rentabilidad y Riesgo, se debe disponer de la información que permita realizar objetivamente las proyecciones financieras que arrojen una aproximación de las utilidades de la inversión, así como de su variación con el tiempo.

Para el caso de este modelo y la elaboración de la simulación del proyecto de inversión se tendrán en cuenta los ingresos por ventas, los costos fijos y variables así como los gastos, el costo de capital, la inversión en activos y su forma de financiación, todos estos como elementos de



entrada para el cálculo de ítems tales como el Flujo de Caja Libre, la Rentabilidad Marginal, y la Rentabilidad, la TIR Modificada y el VPN.

Para la valoración de los factores cualitativos se debe tener a disposición la información que permita estimar los parámetros de Mejora en la Calidad y Diversificación, como son : Incremento de cobertura, Incremento de capacidad de transporte de información y Incremento en el portafolio de servicios.

La información que complementa el análisis corresponde a la situación actual de los sistemas de operación de la empresa, lo cual corresponde al factor Reposición, mediante la observación de: sistemas redundantes, indicadores Operativos de mantenimiento y obsolescencia de los sistemas

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# ETAPAS HISTÓRICAS DE LA INDUSTRIA MAQUILADORA EN MÉXICO

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## ABSTRACT

*La Industria Maquiladora de Exportación (IME) surge en México a mediados de la década de los sesenta y a la fecha es considerada por algunos como una actividad importante por el desarrollo tecnológico, participación creciente en los mercados globales, balanza comercial y generación de empleo y para otros, como un deterioro salarial, laboral, sindical y ecológico, aunado a un escaso impacto productivo para el país. Estas características, hacen de la IME un campo fértil para la investigación y el presente estudio, es una investigación documental que se enfoca en las etapas o periodos que se han desarrollado desde su llegada a México y que dependen principalmente de los parámetros, factores y características que utilicen los diferentes autores para hacerlos, como crisis económicas, generaciones y fases, economía, sistemas de producción, relaciones laborales y crecimiento entre otras. En el establecimiento de estas etapas o periodos encontramos grandes coincidencias pero también, se encuentran algunas diferencias.*

## INTRODUCCIÓN

El INEGI (2005a) define a la Industria Maquiladora de Exportación (IME) como aquella donde las actividades productivas se realizan sobre la base de importaciones temporales, en las que la mayor parte de la producción se destina al mercado externo, por lo que su valor es equivalente al de las exportaciones totales que por este concepto se registran en la balanza de pagos que elabora el Banco de México. Además, se consideran establecimientos maquiladores aquellos que, sin ser los fabricantes originales, llevan a cabo alguna etapa del proceso de producción de bienes o servicios.

El surgimiento de la IME se remonta a nivel mundial a mediados de los cincuenta como respuesta a los planes de industrialización de posguerra de los Estados Unidos, Japón y Europa (Wilson, 1996). En México surge a mediados de la década de los sesenta como un proyecto de industrialización para la frontera norte. Este proyecto se tituló Programa de la Industria Maquiladora para la Frontera Norte de México, conocido desde 1965 como el Programa de Industrialización fronteriza (González y Barajas, 1989). En 1966, se formaliza el programa y se construye el primer parque industrial en Ciudad Juárez, Chihuahua, el cual atrajo una empresa maquiladora dedicada a la manufactura de televisores; en 1968 se funda el segundo parque en el municipio de Nogales, Sonora, con una empresa cuyo giro de actividad fue la manufactura de plásticos (INEGI, 2005b).

La finalidad del PIF era que las empresas maquiladoras se responsabilizaran de crear fuentes de empleo; fortalecer la balanza comercial del país, a través de una mayor aportación neta de divisas; coadyuvar a incrementar la competitividad internacional de la industria nacional y la capacitación de los trabajadores; así como impulsar el desarrollo y la transferencia de tecnología en el país. Actualmente estos objetivos siguen vigentes, en los términos del Decreto para el Fomento y Operación de la Industria Maquiladora de Exportación de fecha primero de junio de 1998 y sus Reformas. (INEGI, 2005b). Hoy día existen en el país alrededor de 2,820 plantas maquiladoras de las que aproximadamente el 65% están asentadas a lo largo de la frontera México-Estados Unidos, conformando lo que el INEGI ha denominado estados fronterizos: Baja California,

Chihuahua, Coahuila de Zaragoza, Sonora y Tamaulipas. A nivel nacional la IME emplea directamente a cerca de 1,200,000 personas entre obreros, técnicos de producción y empleados administrativos y de los cuales, cerca de 940,000 se encuentran geográficamente laborando en los estados fronterizos (INEGI, 2006).

## HISTORIA DE LA IME EN MEXICO

El 20 de mayo de 1965 se establece la Política de Fomento a la Industria Maquiladora de Exportación en el norte del país con la instrumentación del PIF, por parte del Gobierno Federal. Los objetivos del programa eran que la IME se responsabilizara de “crear fuentes de empleo, fortalecer la balanza comercial del país, a través de una mayor aportación neta de divisas; coadyuvar a incrementar la competitividad internacional de la industria nacional y la capacitación de los trabajadores; así como impulsar el desarrollo y la transferencia de tecnología en el país.” (INEGI, 2005)

A partir de las fechas en que se establece la política de fomento a la IME y la formalización del programa, la división en etapas o periodos de la IME, dependen principalmente de los parámetros o factores que utilicen los diferentes autores para hacerlos, como crisis económicas, generaciones y fases, economía, sistemas de producción, relaciones laborales y crecimiento entre otras y aunque encontramos grandes coincidencias en el establecimiento de los mismos, también se encuentran algunas diferencias.

### Primer Periodo

En su primera etapa (1965-1980 al 82) la IME es considerada como un modelo de integración complementaria de economías correspondiente a la nueva división internacional del trabajo, donde la política prioritaria fue la atracción de industria de exportación a la frontera norte orientada a generar empleos en forma masiva (Frobel, et. al., 1981; Carrillo et. al., 2005). Esta primera etapa se caracterizó por la preferencia en contratación de mano de obra femenina y trabajo de ensamblaje simple en las áreas de producción.

### Segundo Periodo

En su segunda etapa (1980 al 83-1990 al 94) hubo consenso acerca de la existencia de un proceso de reestructuración productiva en México, no solo en la IME, sino también en la industria no maquiladora. (Carrillo et. al., 2005). La expansión de la maquila en este periodo fue intensa y sistemática, lo que agotó la mano de obra femenina disponible, por lo que a finales de 1983, se inicia la contratación de hombres. Entre 1980 y 1989 el numero de establecimientos creció a una tasa nacional promedio del 12.1 %, el personal ocupado lo hizo a una tasa del 15.69%, convirtiéndose así en una de las industrias con mas empleos generados en este periodo. La contribución de la IME a la balanza comercial del país fue importante, ya que ocupó el segundo lugar como generador de divisas, después del petróleo (Barajas et. al., 2004).

### Tercer Periodo

La tercera etapa (1990 al 95-2000 al 01) se caracteriza por la entrada del Tratado de Libre Comercio en América del Norte (TLCAN). En la década de los noventa, la IME sufre nuevamente una sensible desaceleración con retrocesos de entre 5 y 7 por ciento. Entre 1990 y 1999 la creación de establecimientos industriales creció a una tasa nacional promedio de 7.26 por ciento, el empleo lo hizo a una tasa de 10.36 por ciento y el valor agregado presento un crecimiento de 10.36 por ciento (Barajas et. al., 2004). Para algunos autores esta desaceleración

no fue más que un ajuste del mercado de trabajo en el propio sector, ya que difícilmente podría haberse esperado que una industria mantuviera tasas de crecimiento de tipo exponencial (Gerber, 1999; Gerber y Blason, 2001). Pese al sostenido crecimiento que mostró la IME en la década de los noventa, no se puede pasar por alto la drástica caída que empezó a presentar desde 1998 y que culminó con otra aguda desaceleración en 2000-2002.

En los grandes números, se observa una segmentación entre la maquila fronteriza y la del sur, así como una mayor participación en el mercado internacional pero basada en la devaluación y la cercanía geográfica. Por otra parte se observa lo siguiente: (a) mayor presencia relativa de técnicos e ingenieros; (b) un proceso de aprendizaje de ingenieros; (c) surgimiento de empresas intensivas en conocimiento (enfocadas al diseño, investigación y desarrollo); (d) en escala local, un denso tejido de instituciones de apoyo públicas y privadas (educativas, de servicios, etc.) las cuales cumplen un papel clave y (e) el fortalecimiento de conglomerados productivos (clusters) y la conformación de sistemas nacionales de innovación (Carrillo et. al., 2005)

#### Cuarto periodo

En su cuarta etapa (2001-2004) la IME sufrió su más dramática desaceleración por un lado y por otro, las condiciones nacionales e internacionales la llevaron a la pérdida de ventajas competitivas. Y de 2004 a la fecha, se puede observar un periodo de recuperación y crecimiento económico relativo.

Dos factores se observan en esta etapa: primero, la magnitud de la desaceleración provocó que más de 800 plantas cerraran sus operaciones, desempleando al alrededor de 300,000 empleos directos. Barajas (2002) hace referencia además a que la pérdida real de empleo también ha impactado en la reducción de turnos y jornadas laborales. Las ramas de actividad más afectadas han sido las de ropa y electrónica, y las ciudades con mayor desocupación de empleados Juárez, Nogales, Tijuana y Matamoros. (Carrillo et. al., 2005). Entre noviembre de 2000 y junio de 2001 en la industria se presentó una drástica caída en la instalación de plantas, siendo solo 60 plantas instaladas durante los primeros seis meses de 2001, contra 146 instaladas en el primer semestre del 2000 (CIEMEX-WEFA, 2001). El segundo factor que se observa en esta época es que después del cierre las empresas tienen múltiples opciones: trasladarse a países asiáticos (China especialmente), o centroamericanos; adoptar otro régimen arancelario en México, o cerrar el negocio (Carrillo et. al., 2005)

#### CONCLUSIONES

La división en etapas o periodos de la IME en México, dependen principalmente de los parámetros o factores que utilicen los diferentes autores para hacerlos, como crisis económicas, generaciones y fases, economía, sistemas de producción, relaciones laborales y crecimiento entre otras y aunque encontramos grandes coincidencias en el establecimiento de los mismos, también se encuentran algunas diferencias.

Así por ejemplo encontramos que en el primer periodo comprendido entre 1965 y 1980 al 82, los diferentes autores coinciden en que es el periodo de arranque y crecimiento de la IME y solo uno de ellos menciona que la crisis de 1974 provocó la primera desaceleración y a partir de 1977 se inicia un nuevo crecimiento. En el segundo periodo, se da la segunda crisis pero vuelve su crecimiento y esta vez, con una reestructuración en las formas productivas del trabajo. En la tercera etapa, todos los autores coinciden que la entrada del TLCAN marca una nueva etapa en la IME, no solo por las ventajas arancelarias, sino por la introducción de nuevos sistemas productivos, así como el inicio de la investigación y desarrollo en algunas maquiladoras. En la

cuarta y actual etapa, ya no todos los autores escriben por ser la más reciente, pero aquellos que la estudian mencionan que su inicio lo marca la crisis económica mundial del 2000 trayendo no solo la contracción y desaceleración de la misma, sino también la pérdida de ventajas competitivas. Carrillo y Lara (2003) mencionan sin embargo, que es en este periodo en que se da la coordinación de múltiples actividades con base en tecnologías de la información en algunos de los corporativos, o en otras palabras, se empieza a realizar funciones de casas matrices.

Finalmente, en la división en etapas o periodos de la IME en México no se puede dejar de mencionar que aunque han transcurrido solo 40 años desde su instalación, el desarrollo tecnológico que se ha dado desde la primera etapa de ensamblaje al último de coordinación de múltiples actividades, es hablar de un aprendizaje y creación de empleos calificados, así como de especialización regional y evolución tecnológica, sin pasar por alto la crítica social hacia la maquila, por el deterioro salarial, laboral, sindical, ecológico y un escaso impacto productivo para el país. Es necesario mencionar por último, que para medir los impactos positivos y negativos que la IME ha traído a México y para caracterizar con más detalle la última etapa, es necesario realizar más investigación empírica y de campo para corroborar los hallazgos.

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# LA MESETA DE POPAYÁN: UN ESCENARIO PARA EXTERIORIZAR LA CULTURA CAFETERA DEL CAUCA - COLOMBIA

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## ABSTRACT

*La tradición agrícola en el Departamento del Cauca es una característica que envuelve factores históricos y sociales que diferencian a los habitantes de la región de aquellos que habitan otros entornos geográficos. Uno de los productos más representativos del departamento es el café y en forma dominante los cafés especiales, productos agrícolas de amplio reconocimiento a nivel mundial; sin embargo, no existen suficientes investigaciones que den cuenta de los saberes que subyacen al proceso productivo, ni de la estructura de los procesos organizacionales, ni de su impacto económico.*

*El deseo de vivenciar los mecanismos que utilizan las comunidades para reafirmar la identidad a través de sus prácticas ancestrales, además de las óptimas condiciones que ofrece el departamento en términos de biodiversidad, motivarían el desplazamiento de turistas desde muchos lugares del mundo hacia las localidades caucanas contribuyendo a fortalecer la dinámica económica y a incrementar la calidad de vida de los habitantes de cada localidad considerada. Esta característica ha sido ampliamente debatida por expertos al describir los perfiles del turista postmoderno, especialmente el que procede de Europa Occidental. Este trabajo presenta las características de la iniciativa comenzando por su contexto, continuando con la descripción del proyecto y finalmente muestra los resultados obtenidos.*

## INTRODUCCIÓN

El Departamento del Cauca tiene una connotación rural muy profunda que le ha permitido orientarse hacia la agricultura y otras formas de producción relacionadas. Algunas entidades se han especializado en la asistencia técnica a la población campesina que cultiva el café, estas organizaciones han desarrollado diversos estudios alrededor de la temática, sin embargo, su orientación está dirigida a favorecer el mejoramiento de las condiciones productivas y sociales que propenden por la generación de un producto transable. No se han abordado, otros campos como el diseño de servicios asociados a la producción del bien transable: café especial. En este sentido el presente proyecto aborda un objeto de estudio plenamente conocido en la región desde una óptica distinta.

## JUSTIFICACIÓN

Ejercicios sociales regionales como el proceso participativo Visión Cauca 2020, CaucaCyT y actualmente la construcción de la Agenda Interna, han demostrado que es posible realizar trabajos conjuntos entre distintos actores sociales del Departamento que redunden en el mejoramiento de las relaciones entre ellos, de tal manera que se pueda pensar en proyectos con alto grado de confianza. Ya se ha abordado la importancia del sector rural como uno de los más relevantes en la economía del Cauca, dado que gran parte de su población se dedica a esta actividad en condiciones de pobreza y marginalidad. Es indispensable por tanto coadyuvar en el logro de

mejores condiciones de vida para el campesino caucano desde las fortalezas de diversas entidades regionales involucradas en esta propuesta.

En el cluster del turismo se han planteado algunas reflexiones sobre la temática de esta propuesta: “si se analizan las condiciones de clima, biodiversidad, ubicación geográfica, cultura y conocimientos ancestrales del campesino caucano dedicado al cultivo del café, se puede encontrar una gran potencialidad para que los procesos productivos de los cafés especiales puedan posicionarse como productos turísticos altamente diferenciadores apelando al concepto de la tecnoculturalidad que está siendo propuesto y ha sido hasta ahora ampliamente acogido para reafirmar la identidad turística del Departamento del Cauca en el mercado global.

## DESCRIPCIÓN DEL PROBLEMA

La tradición agrícola en el Departamento del Cauca es una característica que envuelve factores históricos y sociales que diferencian a los habitantes de la región de aquellos que habitan otros entornos geográficos. Uno de los productos más representativos del departamento es el café y en forma dominante los cafés especiales, que es un producto agrícola por el cual somos reconocidos a nivel mundial, sin embargo, no existen suficientes investigaciones que den cuenta de los saberes que subyacen al proceso productivo, ni de la estructura de los procesos organizacionales, ni de su impacto económico.

## OBJETIVOS GENERALES Y ESPECÍFICOS

### Objetivo General

Determinar desde la gestión del conocimiento, si los conocimientos codificados (tecnologías inducidas) y los saberes ancestrales del campesino caficultor de la meseta de Popayán generan condiciones que permitan considerar el proceso productivo de los cafés especiales como un producto turístico altamente motivador para determinado segmento de mercado, agregando valor al producto final transable: café especial.

### Objetivos Específicos

Establecer el impacto socio - económico de la producción de cafés especiales en la meseta de Popayán.

Determinar el componente técnico y tecnológico involucrado en la producción de cafés especiales en la meseta de Popayán.

Identificar las estructuras organizacionales y los procesos administrativos entorno a la economía de los cafés especiales en la Meseta de Popayán.

Analizar los procesos de gestión de conocimiento en la producción de cafés especiales en cuanto a los saberes locales y conocimientos codificados.

Demostrar la viabilidad para generar mayores ingresos al campesino cafetero de la meseta de Popayán al incorporarse al mercado turístico como pequeño empresario.

Desarrollar mecanismos para el registro y divulgación de los procesos culturales relacionados con la producción del café especial (videos, multimedias, base de datos, etc).



## MARCO CONCEPTUAL DEL PROYECTO

La presente investigación, fundamentada en una visión sistémica entiende que los procesos sociales, económicos, cognitivos se encuentran totalmente articulados y que por lo tanto cualquier propuesta de desarrollo local debe obedecer a la realidad de los grupos humanos, De ahí que se vea en la cultura, la interculturalidad, diálogo de saberes, la tecnoculturalidad, y gestión de conocimiento elementos fundamentales para proponer nuevas alternativas de desarrollo social.

### Conocimientos locales, Interculturalidad y diálogo de saberes

La cultura para los grupos humanos se convierten en un gran dispositivo de conocimiento y saber, que le permite interactuar ambiente” (Gutiérrez, 1999), así a toda practica social, económica está soportada por un gran cúmulo de conocimiento y experiencias que se han adquirido a través del tiempo, sin embargo, en una perspectiva del desarrollo muchos de los saberes locales han sido invisibilizados y negados, no reconociendo en ellos su gran importancia. Reconocer que todos los grupos humanos poseen ricas experiencias acumuladas significa de una parte reconocer que las mismas son fuentes esenciales para el planteamiento de alternativas de desarrollo local y, en segundo lugar, que al estar relacionados con los conocimientos expertos constituyen nuevas formulas para organizar la vida social y económica de las comunidades estudiadas.

### Gestión de Conocimiento

La gestión de conocimiento surge como resultado del cambio de paradigma de la sociedad industrial a la sociedad de la información y el conocimiento. Cuando los factores que miden el desarrollo cambian se hace necesario pensar en los que aparentemente es intangible y que sin embargo es susceptible de ser valorado en términos sociales y económicos.

Mike Schroeke de PricewaterhouseCoopers, define la gestión del conocimiento como “un entorno dentro de una organización que permite la recogida, agregación, gestión, distribución y análisis de un juego equilibrado de información, para orientar positivamente las decisiones de los gestores”. Para el ILPES, la gestión estratégica del conocimiento “es una disciplina emergente que tiene como objetivo generar, compartir y utilizar el conocimiento tácito (know-how) y explícito (formal) existente en un determinado espacio, para dar respuestas a las necesidades de los individuos y de la comunidades en su desarrollo.

Una forma de describir las formas de conversión del conocimiento es como lo hacen Wikström y Norman al diferenciar entre tres tipos de procesos de conocimiento que se presentan en una organización: los procesos generativos, los procesos productivos y los procesos representativos.

Los procesos generativos son aquellos procesos en los que se genera nuevo conocimiento, especialmente en actividades que buscan la resolución de problemas. Se produce mientras se resuelven los problemas. El conocimiento generativo es importante para incrementar la reserva de recursos de conocimientos de la organización y para darle a ésta la posibilidad y las capacidades de insertarse en nuevas formas de hacer negocios o de ofrecer mejores productos.

Los procesos productivos se llevan a cabo cuando se acumula nuevo conocimiento buscando que la organización esté en la capacidad de utilizarlo para generar ofertas a sus clientes o usuarios. Es decir son procesos en los que se produce conocimiento que se manifiesta y se utiliza. Por ejemplo, “Una tableta para aliviar el dolor de cabeza es conocimiento manifiesto que se deriva de los procesos de conocimiento de una compañía farmacéutica” (citado en Chun Wei Choo, 1999: 151).

Los procesos representativos se presentan cuando la organización comparte con el usuario o comunidad su conocimiento manifiesto. El conocimiento se pone a disposición de las comunidades con las que se trabaja o a disposición de los clientes para que ellos formen su propia idea de éste. “Por ejemplo, cuando se vende una máquina, ésta se convierte en representante, fuera de la compañía, de todos los procesos de conocimiento que existen dentro de ella y que condujeron a su existencia. A través de procesos representativos, se fija un precio al conocimiento manifiesto.” (citado en Chun Wei Choo, 1999: 151).

### Desarrollo Territorial

“La visión económica del desarrollo de las regiones puede integrar dos factores agregados a la tradición, tienen que ver, el primero con los efectos diferentes en términos cualitativos y cuantitativos que en cada región tiene el conjunto de políticas económicas tanto globales como sectoriales, efectos que pueden ser coadyuvantes al efecto positivo de un flujo de recursos o que pueden actuar también como frenos al crecimiento, y el segundo, con la así llamada capacidad de organización social de la región, un elemento multidimensional de carácter principalmente institucional, social y cultural que da origen a una red y a un cierto modo de funcionamiento de esa misma red, cuestión que se asociaría a la posibilidad de transformar impulsos de crecimiento en estadios de desarrollo, algo no del todo alejado del concepto contemporáneo de capital social” (Bosier, 1982)

En este contexto la tecno-culturalidad hace énfasis en los procesos productivos o en la expresión de la cotidianidad de los grupos sociales mediando prácticas ancestrales para la generación de manifestaciones que reafirman su identidad (artesanías, ritos, medicina tradicional, entre otras) y que pueden convertirse en un producto turístico altamente motivador para determinado segmento del mercado. (Castrillón: 2001), es un elemento fundamental que permite pensar el desarrollo local desde la alternativa del turismo teniendo en cuenta fundamentalmente el patrimonio cultural.

### El Papel del Medio Audiovisual en la Investigación

El desarrollo del medio audiovisual y su aplicación en el estudio de la cultura y la sociedad representa un paso tecnológico irreversible. La documentación visual supone ya un valioso instrumento para la recolección de datos en la investigación etnográfica y el uso de documentales como material pedagógico es cada vez más difundido, por ello es necesario de un marco teórico y una metodología específica para la producción de un texto visual que involucre las nuevas tecnologías con el conocimiento antropológico.

El video como técnica de investigación etnográfica remite siempre al proceso por el cual se han obtenido las imágenes, al contexto de filmación, edición y exhibición. La utilidad etnográfica de un video dependerá del análisis del investigador y del proceso que ocupa su construcción, organización y tratamiento de la información a través de la imagen. Se denomina documental etnográfico al producto dirigido hacia la comunicación o exposición de resultados y entendemos por etnografía filmica al material generado a partir de una investigación, generalmente producido en forma directa durante su trabajo de campo.

## METODOLOGÍA UTILIZADA PARA EL DESARROLLO DE INVESTIGACIÓN

El tipo de investigación apropiado en el caso de este proyecto es la investigación–acción o investigación Modo 2. En el Modo 2 de hacer ciencia la comunidad además de ser el objeto de investigación, participa e incide en los resultados de acuerdo a sus necesidades y conveniencias; en contraposición en el Modo 1 o tradicional que usa ambientes de laboratorio para mantener bajo control los agentes externos (Gibbons: 1994).

### Hipótesis de trabajo en las que se apoyó el proyecto

El desconocimiento de los saberes, los procesos culturales y en general valor agregado cultural que generan los cafés especiales producidos en la Meseta de Popayán no han sido percibidos como alternativas de desarrollo local y regional

### Estrategias investigativas

Las características metodológicas del proyecto no obedecen a un solo sentido, ni a enfoques predeterminados, ni a un solo tipo de disciplina o ciencia. Si atiende a algún llamado es al planteado por el diálogo de diferentes saberes y la interdisciplinariedad.

Una investigación interdisciplinaria, ante todo, considera que la unidad de investigación está estructurada por diversos elementos o agregados, las que en ningún momento están aisladas sino en constante interacción, flujo e intercambio. En este sentido, se ve en la interdisciplinariedad un ámbito flexible y abierto que alberga diferentes disciplinas, en el cual cada una de ellas aporta, coopera teórica, epistemológica y metodológicamente, permitiendo una mirada multifocal de los diversos niveles de entropía y sinergia.

La dialogía es el segundo elemento que caracteriza a esta investigación, el diálogo propone una estrecha correlación con la voz del otro, con sus formas valorativas y en todas las esferas de la cultura, proponiendo así un pensamiento o un movimiento que se dirige a una visión múltiple del mundo y de la pluralidad de lo real.

Considerando que la región de estudio es un entramado de componentes, relaciones y sentidos que constituyen el orden complejo donde lo ambiental y lo cultural están en permanente intercambio y variabilidad, es conveniente acudir al enfoque de “sistemas dinámicos adaptativos”, para observar los procesos de cambio y adaptación de los procesos económicos, culturales y cognitivos.

## LOS RESULTADOS PRINCIPALES O HALLAZGOS QUE PUEDEN SINTETIZARSE DE LA REFERIDA INVESTIGACIÓN

### Análisis del Proceso Productivo

El café como actividad social, productiva y económica ha sido inducida en la comunidad caucana, sin embargo en la zona de Timbío esto ha ocurrido hace varias generaciones, situación que permite identificar distintas tecnologías presentes que han ido ganando espacio y se han evaluado según sus resultados en lo productivo.

La presencia de métodos artesanales de producción en contraste con métodos más tecnificados resulta particularmente interesante, los factores económicos, de rendimiento productivo y volúmenes de producción son determinantes en el uso de estas tecnologías. Algunas resultan

costosas para un caficultor de pequeña escala, razón por la cual muchas son contaminantes o poco efectivas.

Las técnicas en cada fase del proceso productivo resultan de enorme interés porque cada una cuenta con un soporte en investigaciones científicas que se han adecuado hasta ser aplicables en la zona.

### Cultura de la Comunidad

Una revisión inicial de la literatura sobre la explotación de los recursos renovables, muestra que los campesinos demuestran en ella un papel paradójico, en ocasiones son calificados como los únicos seres conscientes de la degradación del medio ambiente sabios en el manejo de sus ecosistemas y como grupo perfectamente adaptado a su entorno natural, o bien, se les acusa con mayor o menor frecuencia de constituir una de las principales causas del desgaste de los recursos físicos, caracterizados por bajísimos niveles de productividad, recursos que en otras manos podrían rendir mucho más, además de ser la principal causa de procesos que degradan el medio ambiente en sus zonas.

Se percibe que las comunidades caficultoras son raizales ya que habitan desde hace más de tres generaciones las zonas de la meseta de Popayán. Estas poblaciones campesinas por su cercanía a la zona urbana cuentan con acceso a servicios de apoyo para su actividad productiva, de manera que no es una cultura aislada de su entorno, por el contrario, se reafirma a través de sus prácticas cotidianas, valorando su trabajo y desarrollándolo de manera responsable.

Esta actividad económica ya está íntimamente involucrada con la cultura de la población, no es fácil imaginar cuales serían las características de estas comunidades antes de adoptar la producción de café.

Se tienen dos tipos de caficultores: i) los hacendados, que utilizan sus fincas como unidades productivas para recibir ingresos adicionales a otra actividad principal, brindan empleo e ingresos a la región, pero que no viven diariamente en la zona, usualmente generan volúmenes de producción elevados, en comparación con otros. ii) Existen caficultores de pequeña escala, que son campesinos cuya actividad agrícola les permite subsistir, viven con su familia y cuentan con un fuerte arraigo a la tierra porque les ha sido heredada de generación en generación. En época de cosecha estos caficultores también brindan empleo a personas de la región.

A través del desarrollo de distintas visitas y diálogos con los caficultores y recolectores de café de la región se ha determinado su nivel de escolaridad, nivel socio económico, territorio que habita y factores culturales que se han afianzado a través de su participación en el proceso productivo de los cafés especiales.

### Identificación de los Procesos de Gestión de Conocimiento

La actividad cafetera como una forma de obtener sustento ha generado una dinamización de la cultura local, desde el cultivo de otros productos agrícolas hasta la aparición del café como principal producto de cultivo para los campesinos caficultores de la Meseta de Popayán. En este sentido, una cultura que pretenda continuar vigente se adapta y articula a los cambios del entorno e imprime en ellos su sello distintivo. El café como actividad productiva ha permeado hacia todas las dimensiones de la cultura campesina y ha constituido una nueva cosmovisión para estas comunidades.

Se han considerado algunos procesos de gestión de conocimiento, a saber: generación, transferencia, combinación y apropiación. A continuación se describe cada una brevemente y se explican los hallazgos en cada uno durante la ejecución de la iniciativa en mención.

**Generación de Conocimiento:** son aquellos procesos de investigación básica; el trabajo realizado por parte de instituciones interfaz y la propuesta de mejoramiento que el campesino realiza como parte de su quehacer diario. Todas estas formas de generación de conocimiento son indispensables y permiten un desarrollo armónico entre el entorno y la unidad productiva.

En lo que respecta a los procesos de investigación básica alrededor del proceso productivo se cuenta con un Centro de Investigación de Alto nivel denominado CENICAFÉ, “esta institución se dedica a desarrollar nuevas variedades y técnicas de cultivo que en general se han denominado producción tecnificada, la cual se resume en la introducción de variedades sin sombrero, intensivas en insumos, resistentes a algunas plagas, con una alta productividad por árbol y adaptadas a las condiciones de casi nula mecanización que tiene la producción nacional” (Ramírez: 2002).

Las denominadas instituciones interfaz, por su parte, toman los desarrollos de investigación básica y los adaptan y presentan en forma adecuadas para las comunidades rurales. El Comité Departamental de Cafeteros del Cauca en este sentido ha diseñado un sistema de asistencia que le permite tener un acompañamiento cercano a los productores, algunas estrategias más ampliamente difundidas para generar conocimiento y presentarlo son las prácticas desarrolladas en la finca para comprobar que una tecnología es eficiente y exitosa. Otros esquemas para facilitar la comunicación del conocimiento generado son las cartillas y talleres de capacitación.

En lo que respecta al conocimiento generado por el campesino durante su actividad diaria este está más involucrado en sus saberes ancestrales que le brindan espacios de reflexión y recuperación de aquellos conocimientos que se creían perdidos pero que vuelven a aparecer como nuevos recursos para la creación de nuevo conocimiento.

**Transferencia de Conocimiento:** es el proceso de movilizar conocimiento de una fuente a un receptor, puede ser formal cuando se realiza a través de contratos para ceder el uso de un conocimiento y brindarlo a un receptor que lo requiere. Pero también puede ser no formal, cuando no se realiza en forma rigurosa y no existe un acuerdo legal que obligue a ambas partes en este proceso. Es importante aclarar que para muchas comunidades rurales la formalidad no está determinada por la existencia de un contrato o un documento, sino que la voluntad y acuerdo verbal son tan válidas como los esquemas reconocidos en los ámbitos legales, no obstante, se reconoce que en los procesos de transferencia formales hay un proceso de negociación un tanto más complejo debido a que se involucran variables de ambas partes que usualmente no llegan a un acuerdo inmediato.

En este proceso es esencial determinar como el conocimiento que se genera se traslada a otros actores, esto permite que los procesos de transferencia sean más exitosos. La experiencia en los procesos de transferencia tecnológica formal en la producción de los cafés especiales ha sido liderada por el Comité Departamental de Cafeteros, gremio que realiza los procesos de negociación y acuerdo de tal manera que el productor, quien es el principal beneficiario no es consciente de esta actividad previa. Los procesos de transferencia en este sentido se puede verificar a través de estudios de caso porque no es posible generalizar este tipo de procesos. Se pueden distinguir dos objetos de transferencia de tecnologías, en primer lugar los equipos de soporte a la producción, las materias primas, etc; y en segundo lugar los métodos o mejores prácticas para el cultivo y procesamiento del café.

Las prácticas de transferencia no formales son las denominadas aprendizaje de campesino a campesino, donde los productores aprenden de otros que tienen mayor experiencia o que han tenido oportunidad de participar en un proceso formal de transferencia de tecnología. En comunidades indígenas este es el esquema inicial de transferencia porque estas comunidades prefieren corroborar que una tecnología funciona en las fincas vecinas antes de intentar utilizarla en sus propias fincas.

Combinación de Conocimiento: este es quizá el proceso más complejo de definir dado que ocurre en la singularidad de cada productor, que cuenta con conocimientos anteriores y los integra a los nuevos conocimientos presentados en un proceso de transferencia tecnológica. Algunas prácticas ancestrales como la siembra de especies frutícolas, ornamentales o medicinales en las plantaciones de café muestran como las técnicas aprendidas del Comité Departamental de Cafeteros se fusionan con las costumbres de los productores y generan condiciones tecnológicas nuevas que facilitan su permanencia y evolución en las comunidades.

Apropiación de conocimiento: Todos los procesos anteriores requieren de este proceso para garantizar que el conocimiento se integre en la cultura de las comunidades, esto debe percibirse en factores culturales como las costumbres, las fiestas, las historias, es decir, en la cosmovisión de los productores, sólo entonces se puede determinar que un conocimiento no está en su estado esencial sino que se encuentra íntimamente ligado a una comunidad y no es posible pensar esa comunidad sin considerar este conocimiento como parte de lo que la caracteriza.

#### Método Para el Desarrollo de Productos Turísticos Involucrando la Tecnoculturalidad

Basados en esta realidad, el desarrollo de un nuevo producto turístico que privilegie los procesos productivos y las expresiones de identidad de las comunidades rurales en países como el nuestro, implica repensar la forma como este se concibe, teniendo en cuenta, por un lado, las motivaciones del turista postmoderno (Molina, 1998) y por el otro, los requerimientos de estas comunidades para asegurar su sustentabilidad (económica, cultural, social, ambiental).

En este contexto pueden considerarse dos elementos básicos: Los “saberes ancestrales” y las percepciones culturales de estos grupos sociales (cosmovisiones) que se manifiestan en sus maneras de obrar, de hacer y de producir (procesos). En esta dirección se ha avanzado al diseño conceptual de un producto turístico.

#### CONCLUSIONES

La tecnoculturalidad como aspecto diferenciador para el producto turístico diseñado ofrece condiciones que le permiten contar con diferenciación frente a los otros productos similares encontrados en el mercado.

La gran mayoría de los conocimientos sobre tecnologías inducidas están en forma exclusiva en el Comité Departamental del Cafeteros del Cauca, de manera que este actor clave es quien puede ser un soporte fundamental en el momento de implementar el producto turístico desde la óptica del proceso productivo.

Los análisis de aspectos culturales requieren dos técnicas diferentes, utilizar por una parte entrevistas y convivencia directa con la comunidad campesina, y de otra parte, entrevistar a los hacendados para comprender su visión del café como actividad que transforma lo cultural.

Los elementos del análisis del proceso productivo son bastante complejos porque involucra, generación de conocimiento en instituciones que desarrollan investigación básica, generación de conocimiento por parte de instituciones interfaz (como el Comité Departamental de Cafeteros) y conocimiento derivado de la práctica ancestral y cotidiana de la comunidad campesina.

La divulgación constante de los avances de este proyecto ha permitido que algunos actores clave del sector turístico regional empiecen a indagar sobre el potencial del producto turístico generado.

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# **HACIA EL PLANTEAMIENTO DE UNA ESTRATEGIA INTEGRAL PARA MEJORAR LA COMPETITIVIDAD DE PRODUCTORES RURALES DE PEQUEÑA ESCALA EN EL CAUCA – COLOMBIA**

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## **RESUMEN**

*Con el apoyo de Colciencias-Sena, el Grupo de investigación en Modelos Regionales de Competitividad del CREPIC-UNICAUCA, en los últimos 6 meses ha venido adelantando el proyecto Estrategia Integral para Mejorar la Competitividad de Agrocadenas de Productores Rurales de Pequeña Escala en el departamento del Cauca que pretende desarrollar enfoques para mejorar la productividad y competitividad de cadenas agroalimentarias procurando su conversión en cadenas de valor mediante una adecuada gestión del conocimiento de los productores rurales, las instituciones de apoyo local, la academia y los actores gubernamentales; los enfoques resultantes se obtienen con ejercicios de amplia participación y con aprendizajes directos, por parte del equipo investigador, del contacto con la realidad de varias cadenas productivas locales. Se espera que la Estrategia Integral permita la autogestión de los encadenamientos por parte de los productores rurales, haciendo un uso adecuado del apoyo institucional pero sin generar dependencias nocivas.*

## **ANTECEDENTES**

En los diferentes proyectos estratégicos realizados en la región en los últimos años se han sistematizado varias experiencias y se han realizado aprendizajes en los diferentes frentes de acción de la propuesta que permiten concluir que no se parte de cero, sino que por el contrario, es indispensable compendiar estas lecciones aprendidas en una guía metodológica que facilite su difusión y apropiación entre las comunidades de productores rurales y entre la institucionalidad local de apoyo. A continuación se describen brevemente los avances en los 7 factores claves del proceso investigativo propuesto:

### Diseño de Estrategias de Gestión Tecnológica

Los proyectos “Agenda Caucana de Ciencia y Tecnología” –CAUCACYT- y “Sistemas Colectivos de Agregación de Valor” (Colciencias 2004), trabajaron de la mano en diferentes aspectos de la gestión tecnológica de las agrocadenas, tales como la conformación de redes sociales de conocimiento con los actores de las cadenas incluyendo a los investigadores y las instituciones y la aplicación de modelos de gestión estratégica para lograr una visión compartida; así mismo se avanzó significativamente en la consolidación del Sistema Regional de Ciencia, Tecnología e Innovación.

### Desarrollo de Enfoques de Articulación Entre Productores Rurales y la Institucionalidad Regional de Apoyo



Desde el año 2000 el Cauca está trabajando en una estrategia sistemática de articulación de esfuerzos de la institucionalidad regional bajo el impulso de iniciativas como el CARCE del gobierno nacional. Agenda Interna, un proceso continuo de diálogo entre las instituciones y los productores rurales para construir las apuestas agroindustriales. En la actualidad, la región cuenta con una Red Interinstitucional de Apoyo operando con mesas de trabajo coordinadas por el CARCE.

#### Desarrollo de Esquemas de Integración y Articulación Productiva Soportados en la Asociatividad Entre Productores Rurales

En los pasados cinco años, el CREPIC y sus socios han adelantado procesos de fortalecimiento de agrocadenas de productores de pequeña escala, utilizando diferentes enfoques y metodologías tales como de “Estrategias de Competitividad para Agrocadenas” desarrollada por el Instituto de Innovación Rural del CIAT, Ministerio de Agricultura, Colciencias, FOMIPYME, PADEMER, USAID-Programa Colombia de la Universidad de Georgetown y el Banco Mundial entre otros.

#### Generación de Procesos de Inteligencia Competitiva

Algunas agrocadenas en el Cauca han obtenido información sobre mercados gracias a financiadores como FOMIPYME que propició la realización de estudios e inteligencias de mercado, para cadenas como Chontaduro, seda y guadua. La Agencia de Cooperación Alemana GTZ apoyó a los paneleros, con un plan de negocios y un estudio de Inteligencia de mercados. Además, se han realizado estudios de mercado para la cadena piscícola y la Cámara de Comercio del Cauca a través del equipo técnico de la agenda interna aportó un monitoreo de demandas internacionales para el año 2004 donde se obtuvieron perfiles de mercado para las cadenas de seda, miel y piscicultura.

#### Gestión del Conocimiento

El proyecto CAUCACYT abordó la temática de gestión de conocimiento con la finalidad de fortalecer la consolidación de las redes sociales creadas en dicho proyecto; también se realizaron caracterizaciones de cadenas productivas y redes sociales que permitieron elaborar una primera versión de un modelo de gestión de conocimiento para este tipo de aplicación. Además se obtuvo un inventario de información sobre los proyectos y procesos más relevantes que documentan el proceso de consolidación del Sistema Regional de Ciencia, Tecnología e Innovación del Cauca. En la actualidad, el proyecto Mapa de Conocimiento está realizando un mapeo e inventario de conocimientos en cadenas productivas y redes sociales; se espera que al finalizar esta iniciativa se pueda contar con la oferta y demanda de conocimientos en las agrocadenas y redes objeto de estudio.

#### Enfoque de Comunicación Soportado en TIC

En el Cauca se han están adelantando proyectos soportados en TIC que contribuyen al desarrollo de las cadenas productivas, lo más destacados son: LINK-ALL cuyo objetivo principal es la creación de una plataforma tecnológica en los sectores de artesanía, eco-turismo y patrimonio cultural, para impulsar la adopción de prácticas de IT innovadoras, soportar la colaboración, promocionar el intercambio de experiencias, transferencia de know-how, mejorar las habilidades, y favorecer un mayor acceso de éstos al mercado global mediante un modelo de desarrollo integrado y sostenible. En el caso de Colombia se está trabajando con CORSEDA (Cooperativa para el Desarrollo de la Sericultura en el Cauca).

## Enfoque de Gestión Ambiental

En el departamento del Cauca, se han desarrollado iniciativas orientadas a la gestión integral de los recursos naturales, entendiendo que la naturaleza multiobjetivo del desarrollo sostenible hace necesaria la construcción de una perspectiva sistémica e interdisciplinaria, donde sea la dimensión socio-ambiental (cadenas de valor) y no el producto (sistemas de producción) el eje orientador para la selección de prioridades; para dilucidar cuales son las estrategias a implementar en el tiempo y balancear la “productividad” de las acciones presentes con su impacto sobre la capacidad futura de los sistemas de producción.

## Descripción del Problema

Este proyecto de investigación-acción que lidera el CREPIC, cuenta con la participación protagónica de los productores regionales de seda y piscícolas, la Cámara de Comercio del Cauca, además de investigadores de la Universidad del Cauca y el CIAT y un buen número de instituciones y ONGs locales; pretende encarar el desafío que representa la sistematización, apropiación y difusión de estas experiencias exitosas, para dar respuesta a su pregunta de investigación: ¿Cómo mejorar la apropiación de Estrategias Integrales de Competitividad por parte de productores rurales de pequeña escala del Departamento del Cauca, de tal manera que contribuyan a la migración de sus Cadenas Productivas a Cadenas de Valor y estimulen la participación y compromiso de la institucionalidad de apoyo regional con el fin de facilitar su acceso a los exigentes pero mejor remunerados mercados diferenciados?

Para abordar esta pregunta es necesario, en primer termino, reconocer que en esencia una cadena productiva es una red social de actores y su conversión en cadena de valor se fundamenta en diversos factores entre los que se destacan: i) generar una visión estratégica compartida entre los actores de la cadena, ii) viabilizar su orientación hacia la demanda, iii) propiciar una cultura de aprendizaje colaborativo que facilite la co-innovación y la gestión optima tanto individual como colectiva de sus procesos productivos y, iv) mejorar los flujos de información y comunicación a lo largo de toda la cadena; la incorporación de estos factores en una estrategia de asociatividad de productores rurales de pequeña escala permite incrementar la cohesión de la cadena y su adaptabilidad a las variaciones del entorno y el mercado, lo que se traduce en mayor competitividad.

## Justificación de la Iniciativa

El proyecto persigue una innovación en la estrategia de intervención de las cadenas productivas procurando su conversión en cadenas de valor mediante: (i) la apropiación de esquemas de integración y articulación productiva soportados en la asociatividad entre productores con elementos de la inteligencia competitiva y la gestión tecnológica que les permita alcanzar los exigentes requerimientos de las demandas actuales, (ii) la generación conjunta de un nuevo enfoque de articulación entre productores rurales y la institucionalidad regional de apoyo que establezca directrices de política para la generación de capacidad de autogestión en las organizaciones rurales.

## OBJETIVO DEL PROYECTO

### Objetivo General

Desarrollar una estrategia integral de intervención para cadenas de productores rurales de pequeña escala que facilite su evolución a cadenas de valor.

### Objetivos Específicos

Desarrollar participativamente una estrategia de asociatividad de productores que integre elementos de inteligencia competitiva y gestión tecnológica.

Generar conjuntamente un nuevo enfoque de articulación entre productores y la institucionalidad de apoyo regional que permita orientar políticas que estimulen la autogestión en las organizaciones rurales.

Desarrollar una guía metodológica mediante la sistematización de la información generada en el proceso de consolidación de las cadenas de valor.

## MARCO TEÓRICO

Para abordar esta investigación es necesario, en primer termino, reconocer que en esencia una cadena productiva es una red social de actores (López: 2003) y su conversión en cadena de valor se fundamenta en una adecuada gestión de conocimiento en la red que consiga i) generar una visión estratégica compartida entre los actores de la cadena, ii) viabilizar su orientación hacia la demanda, iii) propiciar una cultura de aprendizaje colaborativo que facilite la co-innovación y la gestión optima tanto individual como colectiva de sus procesos productivos y, iv) mejorar los flujos de información y comunicación a lo largo de toda la cadena; la incorporación de estos factores en una estrategia de asociatividad de productores rurales de pequeña escala permite incrementar la cohesión de la cadena y su adaptabilidad a las variaciones del entorno y el mercado, lo que se traduce en mayor competitividad.

En virtud de lo anterior se ha definido que la unidad de análisis en este proceso de investigación es la cadena productiva. La definición de Cadena de Valor se enmarca en el nuevo concepto de relaciones interorganizacionales A diferencia de la cadena productiva, una cadena de valor “se entiende como una alianza vertical o red estratégica entre un número de organizaciones empresariales independientes dentro de una cadena productiva. Las cadenas de valor son cadenas productivas orientadas a la demanda que involucran productos diferenciados y especializados, relaciones de coordinación y reglas de juego claramente definidas para su gestión, rentas más elevadas en los mercados, estrecha interdependencia entre actores y visión de largo plazo”.

## ESTRATEGIA DE GESTIÓN TECNOLÓGICA

La implantación de la estrategia tecnológica de la empresa debe basarse en un período de reflexión a partir de respuestas a preguntas que se pueden englobar en dos grupos. Por un lado, las propiamente relacionadas con la tecnología, como: ¿en qué estado se hallan las tecnologías que se dominan?, ¿qué alternativas tecnológicas describen? O ¿qué tecnologías están desarrollando nuestros competidores? Por otro lado, el conjunto de preguntas que están más relacionadas con la operatividad global de la empresa, como: ¿cuáles son las estrategias de

nuestros competidores?, ¿en qué negocios debemos competir en el futuro? Ó ¿cuáles son nuestras fortalezas y debilidades?. En la tabla 1 se muestra la clasificación que hizo (Morin -1985) para sistematizar el tratamiento de la tecnología, la cual ha sido particularmente útil en este proyecto.

Tabla 1. Funciones Asociadas a la Gestión Tecnológica

<b>FUNCIÓN</b>	<b>DESCRIPCIÓN</b>
Inventariar	Conocer las tecnologías que se dominan
Vigilar	Alertar sobre la evolución de nuevas tecnologías Vigilar la tecnología de los competidores
Evaluar	Determinar la competitividad y el potencial tecnológico propio. Estudiar posibles estrategias.
Enriquecer	Diseñar estrategias de I+D. Priorizar tecnologías clave e incipientes. Comprar tecnología.
Optimizar	Gestionar los recursos de forma eficiente.
Proteger	Política de propiedad industrial: patentes, marcas

Fuente: Fidel Castro Díaz, Ciencia, Innovación y Futuro 1999

## RESULTADOS

### Análisis de los Componentes del Proyecto

Las primeras sesiones de trabajo en conjunto permitieron al equipo del proyecto analizar la complejidad de trabajar con tantos componentes a la vez al interior de una cadena productiva, se decidió que la mejor manera de abordar este aspecto era identificar aspectos clave en cada componente.

Se consideró que la estrategia integral es una estrategia de gestión de conocimiento y que los componentes, gestión tecnológica, gestión ambiental e inteligencia competitiva constituyen los espacios para aplicar la estrategia. Por su parte la gestión de información y las competencias informáticas TIC son herramientas de soporte a la gestión de conocimiento.

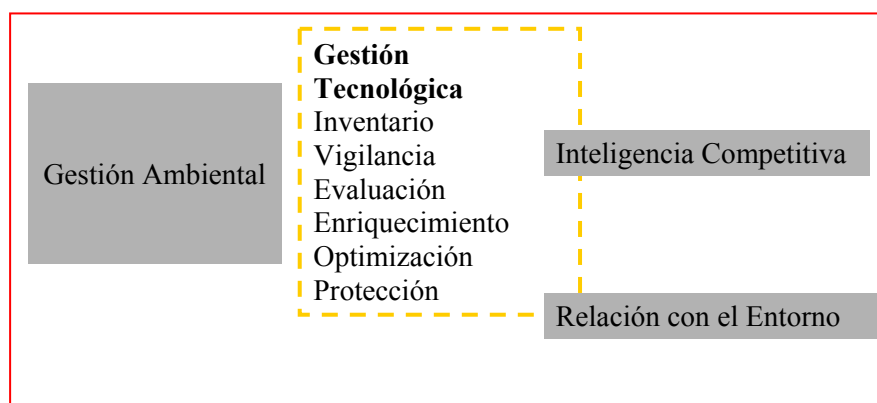
La asociatividad es el componente más difícil de analizar en este proceso, porque puede ser un eje transversal o un componente, se ha decidido manejarlo como un eje transversal dado que es una condición indispensable para que se pueda tener una estrategia de gestión de conocimiento exitosa

La gestión tecnológica tiene distintos puntos de contacto con los demás componentes (Figura 1), a saber:

- Con la gestión ambiental guarda una relación especial debido a que muchas de las tecnologías empleadas en los sistemas productivos obedecen al mejoramiento en prácticas sostenibles y de cuidado al medio ambiente.
- Con la inteligencia competitiva comparte una actividad común denominada vigilancia tecnológica, este aspecto será abordado en forma conjunta para evitar duplicidad en los esfuerzos para la toma y análisis de la información.
- Con el componente denominado relación con el entorno existe una actividad llamada de optimización tecnológica en donde se describen las alianzas entre una cadena productiva y una institución con el objeto de desarrollar una tecnología, relación con el entorno es más

amplio que los casos de desarrollo conjunto de tecnología, sin embargo algunos de los casos que se analicen en este componente estarán dirigidos a mejoramiento tecnológico.

Figura 1: Relación Entre los Componentes Abordados en el Proyecto y la Gestión Tecnológica



Fuente: Deycy Sánchez

#### Herramientas para el Desarrollo Participativo: Diagnóstico, Planificación, Monitoreo, Evaluación

La revisión de herramientas participativas ayudó a seleccionar algunas que posiblemente puedan emplearse en el diálogo con los productores rurales.

Tabla 3: Herramientas Participativas y su Uso en la Construcción de la Estrategia Tecnológica

<b>Inventario</b>	Informantes clave, diálogo semiestructurado, mapa de servicio y oportunidades/ inventario, calendarios estacionales, mapa de recursos, análisis de problemas, análisis de beneficios/ clasificación preeliminar, mapeo finca.
<b>Vigilancia</b>	Prospectiva tecnológica, informantes clave
<b>Evaluación</b>	Matriz de necesidades prioritarias de extensión, árbol de problemas / censo de problemas, presupuesto de producción
<b>Enriquecimiento</b>	Transferencia
<b>Optimización</b>	Modelo sistémico, mapa de intercambios, censo de problemas de comunicación, alianza estratégica.
<b>Protección</b>	No se ha encontrado

Fuente: Deycy Sánchez

#### Estrategia Preliminar para el Proceso de Intervención

Teniendo en cuenta las dinámicas adelantadas en el departamento del Cauca, es importante no pasar por alto cada uno de los desarrollos y considerarlos como insumos esenciales en la integración de una metodología que sirva a las cadenas productivas para evolucionar a cadenas de valor. A saber:

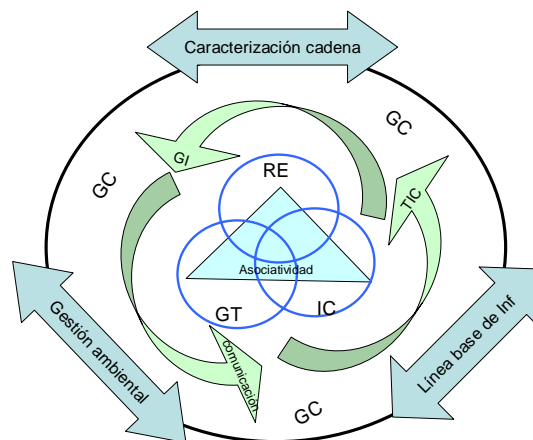
Para el desarrollo de esta metodología, la cadena productiva debe contar con el apoyo de un articulador que acompañe el proceso y gestione las dinámicas al interior y exterior de la cadena

Se debe organizar un equipo de apoyo integrado por los actores de la cadena y brindarles capacitación en el uso de herramientas informáticas y búsqueda de información, con el fin que se encarguen de la búsqueda de información y desarrollo de procesos que integran la aplicación de la metodología. La conformación de una base de información y conocimiento, como medio de consignación y documentación de los procesos adelantados, de los aciertos y desaciertos y de las experiencias de los productores de pequeña escala, es una de las estrategias de gestionar el conocimiento.

Se busca la integración de los componentes de Gestión de Conocimiento para el desarrollo de un modelo de negocio autosostenible : principalmente con el desarrollo de esta fase se haría la integración estratégica de los componentes de gestión de conocimiento que agregan valor a la cadena.

- La base que da soporte a la estrategia integral esta fundamentada en el desarrollo de un componente de asociatividad, para afianzar la confianza y el acercamiento entre ellos, en pro de una cultura donde prima el trabajo participativo y permite a estos actores conocer más de su actividad productiva y el como la pueden ayudar a ser más competitiva mediante la implementación de estrategias de gestión y el uso de herramientas tecnológicas.
- Teniendo ya consolidada la base de la asociatividad e integración del equipo humano y conociendo las necesidades de información, las fortalezas y debilidades de las cadenas, se desarrollan las debida actividades para la implementación de las estrategias de gestión: gestión tecnológica, inteligencia competitiva, relación con el entorno y al mismo tiempo todo este conjunto esta apoyado por componentes transversales como la gestión ambiental, las TIC, la comunicación y la gestión de la información y las competencias informacionales. Cada una de estas estrategias trabajan por separado pero están altamente relacionadas las unas con las otras, es decir el éxito de una estrategia depende de la evolución y de la implementación de la otra.

Figura 3: Modelo de GC para la estrategia Integral



Fuente: Luz Stella Pemberthy G.

## CONCLUSIONES

- La estrategia integral de intervención es una estrategia de gestión de conocimiento.
- El componente asociatividad es un componente básico para garantizar la buena implementación de la estrategia integral.
- La gestión tecnológica, inteligencia competitiva y gestión ambiental son espacios para implementar la estrategia.
- La comunicación y las TIC son herramientas de soporte para la gestión de conocimiento.

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# **ERRORES DE DISEÑO EN EMPRESAS DE AUTOPARTES Y EL APRENDIZAJE ORGANIZACIONAL**

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## **ABSTRACT**

La industria automotriz es en la actualidad uno de los ejes de la economía mundial, de ahí su importancia, resulta importante analizar lo que esta ocurriendo con el mercado internacional, y como se están moviendo los gustos y preferencias de los consumidores, la lucha por el mercado es feroz, uno de los elementos distintivos para marcar la diferencia, es que tan rápido puedan aprender las organizaciones, para superar sus errores y encontrar modelos que les permitan tener un desempeño mas exitoso.

## **INTRODUCCION**

Las organizaciones automotrices, tanto ensambladoras de vehículos como fabricantes de auto partes, a pesar de tener sistemas para poder controlar sus procesos de diseño de sus productos, siguen sufriendo la aparición de errores, fallas y deficiencias en sus procesos que representan un costo muy alto para estas organizaciones.

El siglo XX fue sin duda el siglo del automóvil, nace, crece y se desarrolla la industria automotriz norteamericana, asumiendo el liderazgo durante casi todo el siglo pasado. Los tres grandes como se les conoce, se enseñorearon, no solo del mercado Norteamericano, sino que también del mercado mundial, estas empresas son GENERAL MOTORS (GM) FORD y CHRYSLER.

Sin embargo a finales del siglo, estos 3 protagonistas comenzaron a perder participación en el mercado, compañías no norteamericanas comenzaron a incrementar su participación en el mercado mundial, principalmente compañías de países orientales como Japón y Corea.

Marcas como Toyota, Honda, Nissan y Hyundai, comenzaron a vender primero y producir después sus vehículos en suelo Norteamericano, conquistando de manera paulatina el gusto de los consumidores Estadounidenses.

En el año de 1999 Toyota desplazo en el tercer lugar de producción de vehículos automotores a Chrysler, en el año 2002 hizo lo mismo con Ford y la expectativa es que para el 2010 se convierta en el primer productor mundial de vehículos en el orbe.

Las causas de la pérdida de las marcas de Detroit, frente a las orientales se debe principalmente a la calidad de sus productos, su costo, la velocidad en los cambios de modelo, entre otros.

En la década de los 80's y finales de los 90's, los vehículos Ford era uno de los representantes norteamericanos mas sólidos, tenia la reputación de ser vehículos elaborados con mucha calidad, aderezados con el slogan de "Calidad el primer trabajo", sin embargo, varios eventos en los que estuvieron involucrados algunas de sus principales plataformas, dejaron un amargo sabor de boca a los consumidores, estimulando la búsqueda de otras marcas y rompiendo con la lealtad de algunos de ellos.

El caso mas sonado fue el de la camioneta Explorer, un vehículo deportivo utilitario, que presento problemas con las llantas de la marca Firestone, experimentando volcaduras a raíz del estallido de



algunas de las llantas. Iniciando así una serie de acusaciones mutuas entre la Ford y Firestone, dos empresas, dos familias entrelazadas entre si, desde los comienzos de la producción en masa de los automóviles. Error de diseño en llantas o el eje de las camionetas, finalmente un error de diseño que le costo a las compañías mucho dinero y ver como su prestigio sufría un golpe muy fuerte.

Pero si se observa desde el punto de vista de la rentabilidad la lucha por el mercado norteamericano automotriz, los locales (GM, FORD, CHRYSLER), están perdiendo la batalla, ya que según Micheline Maynard, en el año 2002 la utilidad que presentaron las los 3 grandes fabricantes de automóviles norteamericanos, apenas alcanzo el 1.4% (Maynard, 2003).

En contraste el mismo año Toyota, Honda, Nissan y BMW obtuvieron ganancias con un margen superior al 10%. Si bien es cierto que esta baja en la rentabilidad no es atribuible en un 100% a los errores de diseño si es este uno de los factores que generan perdida de competitividad entre los productores de automotores japoneses y estadounidenses.

Basta con mencionar nuevamente el problema de las camionetas Explorer, en el 2004 un juez del condado de San Diego California (EE.UU.) obligo a Ford a pagar 122 millones de dólares por daños compensatorios y 246 millones de dólares por daños punitivos, a un cliente cuya Explorer se había volcado después de tronar una de sus llantas (Ford Recall, 2004).

Este caso nos permite imaginarnos la cantidad tan alta que representan para la industria automotriz, los errores de diseño, claro que no todos van a costar lo que este esta costando a Ford, pero si nos sirve de parámetro, para elucubrar lo que conlleva un error de diseño.

Lo mas sorprendente es la cantidad tan grande de los errores de diseño, Desde el 2004 y de acuerdo con el sitio de Internet AUTO TALK USA, Ford acumulo 24 llamadas (recalls) a propietarios de vehículos para hacerles reparaciones de garantía en algunos de sus sistemas, en ese mismo periodo GM tuvo 17 y Chrysler 14.

Por lo que se asume que las organizaciones no tienen un sistema confiable que le permita, aprender de sus errores y ajustarse así misma, para poder evitar que estos u otros similares se vuelvan a presentar.

## INDUSTRIA AUTOMOTRIZ

La producción mundial de vehículos en el 2005, ascendió a 65.3 millones de unidades, la industria presenta características de oligopolio (Álvarez 2002) ya que el 50 % de la producción mundial se encuentra concentrada en 5 ensambladoras, las cuales representan tan solo el 1% del total de los fabricantes ; General Motors es el principal productor en el ámbito mundial porque participa con el 14% de la producción mundial, en segundo lugar se encuentra TOYOTA con el 11%, enseguida FORD que contribuye con el 10%; le siguen Volkswagen y Chrysler con el 8 y 7.4% respectivamente (Álvarez, 2002).

Y si consideramos a los siguientes cinco productores el porcentaje sube a 75 % del total de la producción de vehículos automotores en el mundo con tan solo el 2 % del total de los 48 participantes en el mercado, los cuales tienen entre un 4 y un 6 % de participación en el mercado, ellos son: Nissan, Honda, Peugeot-Citroen, Hyundai y Renault. (Ver tabla No. 1)

Tabla 1: Producción de vehículos por país y región. Fuente OICA.

PRODUCCIÓN POR BLOQUES							
<b>BLOQUE #1</b>							
País	Producción 1999	Producción 2000	Producción 2001	Producción 2002	Producción 2003	Producción 2004	Producción 2005
Estados Unidos	13,024,978	12,799,857	11,449,473	12,274,917	12,077,726	11,989,387	11,980,912
Canadá	3,058,813	2,963,830	2,535,471	2,627,695	2,546,124	2,710,683	2,688,363
México	1,549,925	1,934,927	1,856,008	1,821,435	1,585,914	1,564,816	1,670,403
<b>TOTAL BLOQUE</b>	<b>17,633,716</b>	<b>17,698,614</b>	<b>15,840,952</b>	<b>16,724,047</b>	<b>16,209,764</b>	<b>16,264,886</b>	<b>16,339,678</b>
<b>BLOQUE #2</b>							
País	Producción 1999	Producción 2000	Producción 2001	Producción 2002	Producción 2003	Producción 2004	Producción 2005
Europa	19,771,197	20,275,343	20,101,338	19,898,642	20,004,927	20,829,774	20,801,468
Asia	16,870,900	17,928,025	17,893,419	19,925,841	21,971,432	24,086,520	25,817,187
Resto del Mundo	1,983,079	2,393,575	2,489,558	2,291,769	2,432,477	2,984,075	3,507,075
<b>TOTAL BLOQUE</b>	<b>38,625,176</b>	<b>40,596,943</b>	<b>40,484,315</b>	<b>42,116,252</b>	<b>44,408,836</b>	<b>47,900,369</b>	<b>50,125,730</b>
<b>PRODUCCION TOTAL MUNDIAL</b>	<b>56,258,892</b>	<b>58,295,557</b>	<b>56,325,267</b>	<b>58,840,299</b>	<b>60,618,600</b>	<b>64,165,255</b>	<b>66,465,408</b>

La producción mundial de vehículos ha aumentado de un 3 a un 4 % lo cual refleja la dinámica de la industria, que mantiene un crecimiento año tras año, crecimiento vinculado al de la población mundial, así como al crecimiento económico de algunos de los países, las únicas excepciones en los últimos 7 años fue el 2001 donde en lugar de crecimiento fue decremento en un 3%, y por el contrario en el 2004 el incremento subió hasta un 6%.

A nivel de regiones el bloque Norteamericano con la inclusión de Canadá y estados Unidos, ha tenido una baja en su producción de cerca de 1 millón de unidades, lo que representa un porcentaje de alrededor del 6 por ciento. Por otro lado en Europa la producción del 2005 comparada con la del 2000 se mantuvo en 20 millones de vehículos, no así para el bloque asiático que tuvo un aumento en su producción de 8 millones de vehículos automotores, que significa un 44 % , y el resto de los países productores de vehículos incrementaron su producción en mas de 1 millón de unidades, teniendo junto con Asia el crecimiento real de la producción mundial de un 14 % del total de los vehículos producidos en el mundo.

Resulta significativo, el hecho de que el incremento fuerte se de en Oriente y en el resto del mundo, ya que las armadoras japonesas y coreanas, están repuntando su producción, caso contrario el de Estados Unidos, cuyas armadoras han ido perdiendo presencia en los primeros lugares y no falta mucho para que pierdan el liderazgo.

Las armadoras japonesas comandadas por Toyota, han cambiado la estrategia y ahora no solo producen sus vehículos en Capón y Corea, sino que están produciendo vehículos en territorio Norteamericano, con obreros norteamericanos e inmersos en la cultura chauvinista, que no tuvo otra opción que comenzar a consumir los vehículos “extranjeros”, que dejaron de serlo porque ahora ellos mismos los ensamblaban, además de que la confiabilidad, el bajo costo de mantenimiento, de consumo de combustible así como su valor de reventa en el mercado.

Esto remarca el deterioro de la producción estadounidense, ya que la producción de las plantas de Toyota recién abiertas en San Antonio y la de Baja California en México, están compensando la disminución del volumen de las ensambladoras norteamericanas especialmente Ford y General Motors.

Honda, Nissan y la misma Hyundai, han seguido los pasos del maestro Toyota, y poco a poco comienzan a obtener fidelidad de los consumidores Estadounidenses, con vehículos “Made in USA”, pero con Tecnología Japonesa o Coreana.

## LAS ORGANIZACIONES QUE APRENDEN

¿Por qué las organizaciones deberían de aprender? Es innegable que quien no conoce su historia, esta irremediabilmente condenado a repetirla, si una organización no aprende de sus errores, es proclive a volver a cometerlos.

Jeffrey Pfeffer comenta la importancia de que las organizaciones conozcan lo que han sido cuando señala “El desconocimiento del pasado tiene un coste real, ya que muy probablemente quien no comprenda la evolución de las organizaciones y de la relación laboral hasta el presente tendera a cometer antiguos errores” (Hesselbein, Goldsmith, Beckhard, 1998).

Por eso es que la competencia por vender sus productos, captar la preferencia del cliente e incrementar sus utilidades ha provocado que las organizaciones busquen mejorar la forma en que realizan sus negocios, como publicitan sus mercancías, como administran sus recursos, como manufacturan sus productos, de que manera proporcionan sus servicios, etc.

¿Cómo puede un equipo de gerentes talentosos con un cociente intelectual de 120 tener un cociente intelectual colectivo de 63? La disciplina del aprendizaje en equipo aborda esta paradoja. Sabemos que los equipos pueden aprender en los deportes, en las artes dramáticas, en la ciencia aun en los negocios, hay sorprendentes ejemplos donde la inteligencia del equipo supera la inteligencia de sus integrantes, y donde los equipos desarrollan aptitudes extraordinarias para la acción mas coordinada. Cuando los equipos aprenden de veras, no solo generan resultados extraordinarios sino que sus integrantes crecen con mayor rapidez (Senge, 1992).

Peter Senge (1992) comenta que el pensamiento sistémico se convierte en la quinta disciplina, es la disciplina que integra las otras disciplinas, fusionándolas en un cuerpo coherente de teoría y practica, el pensamiento sistémico nos recuerda continuamente que el todo puede superar la suma de las partes.

Pero el pensamiento sistémico también requiere las otras cuatro disciplinas concernientes a la visión compartida, los modelos mentales, el aprendizaje en equipo y el dominio personal para realizar su potencial. La construcción de una visión compartida alienta un compromiso a largo plazo. Los modelos mentales enfatizan la apertura necesaria para desnudar Las limitaciones de nuestra manera actual de ver el mundo. El aprendizaje en equipo desarrolla las aptitudes de grupos de personas para buscar una figura mas amplia que trascienda las perspectivas individuales. Y el dominio personal alienta la motivación personal para aprender continuamente como nuestros actos afectan al mundo. Algunos directivos reconocen que un compromiso con el aprendizaje individual exige un replanteo radical de la filosofía empresarial (Senge, 1992).

## LAS SIETE INCAPACIDADES PARA APRENDER

¿Pero porque no aprenden las organizaciones? De acuerdo con algunos de los teóricos del aprendizaje organizacional, estas son algunas de las razones.

Primera Incapacidad: La ceguera. Esto debe entenderse como la incapacidad para percibir en forma exacta, el ambiente de la organización y los resultados obtenidos contra los resultados esperados.

Segunda: La candidez. se presenta cuando, ante situaciones complejas, se aplica la simple heurística o las reglas de cajón, sin un análisis cuidadoso, enfocándose en una sola causa.

Tercera incapacidad: La homogeneidad. Es una incapacidad de aprendizaje que se presenta, cuando los diferentes enfoques y formas para analizar los problemas de la organización son muy parecidos, impidiendo resolver problemas mas complejos.

Cuarta incapacidad: el acoplamiento estrecho. Es la incapacidad de aprendizaje que se presenta cuando los diferentes departamentos y subunidades están controladas en forma tan estrecha que no existen grandes diferencias entre las políticas y los procedimientos de las diversas unidades.

Quinta incapacidad: la parálisis. se refiere a la incapacidad para poder implementar procedimientos nuevos. Se presenta cuando una organización se aferra a la forma probada y demostrada de hacer las cosas. Es recomendable evitar la parálisis por análisis.

Sexta incapacidad: el aprendizaje de supersticiones. Es el nombre que se le ha dado a la incapacidad para interpretar debidamente el significado de la experiencia.

Séptima: la difusión deficiente. Esta incapacidad de aprendizaje se presenta cuando una persona o unidad de la organización aprenden, pero jamás lo contagian a otras partes de la organización (Yeung, Ulrich and Glinow, 2000).

La capacidad de la organización para aprender es su capacidad para generar y generalizar ideas con impacto, que trasciendan los diferentes limites de la organización, por medio de iniciativas y procedimientos administrativos específicos. Por consiguiente, la capacidad para aprender esta fundamentada en tres cimientos: la generación de ideas, la generalización de ideas y la identificación de incapacidades para aprender (Yeung, Ulrich and Glinow, 2000).

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# GOBIERNO CORPORATIVO DE COMPAÑÍAS NO LISTADAS EN MERCADOS EMERGENTES: UN ESTUDIO SOBRE MEXICO

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## ABSTRACT

*El tema de Gobierno Corporativo ha tomado relevancia sin precedentes en diversos foros a nivel mundial (Banco Mundial, OCDE). Sin embargo, la mayor parte de la literatura sobre este tema esta dominado primordialmente por el estudio de este dentro de empresas listadas en las Bolsas de Valores de mercados emergentes, a pesar de que en la mayoría de las economías actuales (como por ejemplo Europa Occidental, Estados Unidos y Latinoamérica), las empresas medianas o grandes no listadas (algunas de ellas con estructura de propiedad familiar), conforman un sector mucho mas amplio, representativo y crucial, ya que muchas de estas empresas son el cimiento de muchas economías nacionales. Este estudio investigara la relación que hay entre el Gobierno Corporativo y los elementos que conforman al mecanismo de control interno de una empresa (Consejo de Administración, Alta Dirección y Estructura de Propiedad) con el desempeño económico de la empresa , medido este ultimo a través de indicadores tales como Crecimiento en Dividendos, Crecimiento en Ganancias, Crecimiento en Volumen de Ventas, Crecimiento dentro del Segmento de Mercado, Desempeño Comparado contra el Competidor mas Grande, Desempeño en General, Resistencia a Fuerzas Competitivas y Adopción de Productos por el Mercado.*

## INTRODUCCION

*"Los dos procesos, la acumulación del hombre y la acumulación del capital; no pueden ser separados.....cada uno hace al otro posible y necesario, cada uno provee un modelo para el otro" (Foucault, M., 1977, "Discipline and Punish: the birth of prison", London Penguin, p. 221)*

Los últimos treinta años del mundo empresarial a nivel mundial, han sido testigos de la erosión paulatina y gradual en las habilidades y responsabilidades de los Consejos de Administración (o "de Directores", termino con el cual es conocido en los Estados Unidos). Además de los escándalos éticos que han plagado a organizaciones bien establecidas o nuevas en los últimos 4 años, (de aquí en adelante, los conceptos de empresa, organización, organización publica, compañía, firma y corporación serán usados como sinónimos) organizaciones sobre-diversificadas experimentaron caídas que bien pudieron ser evitadas con una apropiada supervisión por parte de los miembros del Consejo de Directores. (MacAvoy y Millstein, 2003)

Debido a esto, algunos autores empiezan a señalar a los Consejos de Administración activos de bajo rendimiento, y señalan que muy poca gente puede realmente explicar cuál es el valor que los Consejos añaden a las organizaciones. Los Consejos deberían ser uno de los principales activos de capital intelectual de cualquier organización, y sus intuiciones sobre las mejores prácticas empresariales deberían sentar las bases sobre los comportamientos a nivel ejecutivo.

Por lo tanto, el estudio del Gobierno Corporativo ha sido en los últimos años tema relevante en foros académicos y, generalmente, su estudio ha sido enfocado casi en su totalidad a empresas que se encuentran listadas en Bolsas de Valores, debido a los requisitos legales de acceso a la información que estas últimas exigen a las primeras.

Sin embargo, dentro de una economía nacional, estas empresas no serían una muestra representativa, ya que en países como Estados Unidos o México, sus economías están representadas y sustentadas en buena medida por empresas medianas y grandes no listadas en Bolsa de Valores (algunas de ellas inclusive con una estructura de propiedad familiar), alcanzando estas un porcentaje importante dentro de estas economías. Y sorpresivamente, la literatura existente hoy en día ha dejado casi en el olvido a estas en lo que respecta al tema de Gobierno Corporativo.

Así, conocer como están estructurados sus Consejos de Administración, que atributos tienen, como se llevan a cabo sus procesos y que efectos tiene lo anterior en el desempeño de estas empresas es de vital importancia. No solo es el hecho que tiene para los accionistas y para la sociedad en general la manera en que estas organizaciones son administradas y reguladas internamente sino que, por la importancia que tienen, economías nacionales enteras podrían estar en juego.

De esta forma, estaremos en posición de avanzar en el conocimiento del sistema actual de Gobierno Corporativo en compañías no listadas en mercados emergentes (tema de gran actualidad hacia el seno de organizaciones mundiales como la OCDE), y conocer si este mecanismo tan superlativo de supervisión del accionar diario y futuro de las organizaciones se está llevando a cabo de forma responsable.

## GOBIERNO CORPORATIVO

Colley, Doyle, Logan y Stettinius (2005) definen Gobernancia y lo que, en teoría, un buen modelo de Gobernancia en las empresas de hoy debe contener para poder tener éxito. Por lo tanto, Gobernancia es el acto o proceso de gobernar (Colley, et al, 2005). Monks y Minow (1995) definen al Gobierno Corporativo como la relación existente entre varios participantes en determinar la dirección y el desempeño de las corporaciones y en donde los participantes primarios son (1) los accionistas, (2) la dirección (encabezada por el CEO, Chief Executive Officer o Director Ejecutivo en español) y (3) el Consejo de Directores.

Por otra parte, para la Organización para la Cooperación y el Desarrollo Económico (OCDE, 1999), el término *Gobierno Corporativo* hace referencia al sistema a través del cual los negocios son dirigidos y controlados; especificando la distribución de derechos y responsabilidades entre los diferentes participantes en la corporación, tal como el consejo, dirección, accionistas y otros grupos de poder; definiendo las reglas y procedimientos para la toma de decisiones en los temas corporativos; y proporcionando la estructura a través de la cual los objetivos de la compañía son fijados, así como los medios para lograr esos objetivos y controlar la rentabilidad.

Colley, et. al (2005) menciona que el modelo de Gobernancia de una típica corporación exitosa incluye a; 1) Un Consejo de Administración efectivo que lleva a cabo sus actividades con integridad y competencia; 2) A un competente CEO contratado por el Consejo y a quien se le ha dado autoridad para manejar a la corporación; 3) La selección por parte del CEO del negocio (o negocios) en los cuales la corporación operara, con el consentimiento y opinión del Consejo; 4) Que el CEO tenga recursos y planes para alcanzar las metas de la organización, ejecute de manera efectiva los planes y que los intereses del Consejo y de la administración estén alineados con aquellos de los accionistas, 5) Sistemas que aseguren que las obligaciones de la Corporación con sus “Stakeholders” (clientes, empleados, acreedores, proveedores, distribuidores, la comunidad y dueños) son cumplidas con integridad y en cumplimiento de las reglamentaciones y leyes aplicables, y 6) La presentación completa en tiempo y forma del desempeño de la empresa a los dueños y a la comunidad de inversionistas.

Por lo tanto, y ya que el Consejo de Administración es el representante formal de los accionistas de la organización, y que su tarea principal es supervisar el desempeño de esta y de su administración (Kosnik, 1987), la responsabilidad del desempeño de la organización recae en última instancia en el Consejo.

### El Gobierno Corporativo en Diferentes Países

El término *Gobierno Corporativo* es percibido de manera diferente de un país a otro, refiriéndose a diferentes temas, personas o instituciones y con diferente intensidad y naturaleza en función del país y de las circunstancias; por lo tanto, la protección legal de los inversionistas será diferente en cada país dependiendo del origen de las reglas (La Porta, López-de-Silanes, Shleifer y Vishny, 1998).

Cuadro 1: Evolución Internacional de los principales Informes y Códigos sobre el Gobierno Societario (1978-1998) Fuente: Bueno Campos (1998:113)

<b>Periodo de iniciación: 1978-1989</b>	<b>Periodo constituyente: 1990-1994</b>
Informe FCPA (USA-77)	Informe IAIM (IRLANDA-91)
Informe FSL (USA-78)	Informe ALI (USA-92)
Informe SEC (USA-80)	Informe CADBURY (REINO UNIDO-92)
Informe NYSE (USA-88)	Informe CADBURY (REINO UNIDO-94)
Informe MCDONALD (CANADÁ-88)	Informe DEY (CANADÁ-94)
Informe TREADWAY (USA-89)	Informe KING (SUDÁFRICA-94)
Informe BOLSA HONG KONG (1989)	
<b>Periodo de desarrollo: 1995-1996</b>	<b>Periodo actual o de madurez: 1997-1998</b>
Informe BOSH (AUSTRALIA-95)	Informe PETERS (HOLANDA-97)
Informe AIMA (AUSTRALIA-95)	Informe KEIDANREN (JAPÓN-97)
Informe VIÈNOT (FRANCIA-95)	Informe INTERIM (JAPÓN-97)
Informe LEVY-LANG (FRANCIA-95)	Informe DE KIRGUIZISTÁN (1997)
Informe GREENBURY (REINO UNIDO-95)	Informe CONFEDERACIÓN INDUSTRIAL (INDIA-97)
Informe CÍRCULO DE EMPRESARIOS (ESPAÑA-96)	Informe DE BRASIL (1997)
Informe ERNST & YOUNG (R. UNIDO 95)	Informe OCDE (1998)
Informe KIRBY (CANADÁ-96)	Informe HAMPEL (REINO UNIDO-98)
Informe PIAC (CANADÁ-96)	Informe OLIVENCIA (ESPAÑA-98)
Informe TIAA-CREF (USA-96)	Informe FBC (BÉLGICA-98)
Informe NACD (USA-96)	Informe CALPERS (USA-98)
Informe MARINI (FRANCIA-96)	Informe CORDÓN (BÉLGICA-98)
Informe ASE (HOLANDA-96)	
Estudio EGON ZEHNDER (REINO UNIDO-96)	

### CONSEJO DE ADMINISTRACIÓN

El Consejo de Administración se configura como vértice del sistema de control interno de las empresas (Jensen, 1993), caracterizándose por ser un elemento clave en el estudio del Gobierno Corporativo puesto que implica la supervisión y validación de importantes decisiones corporativas (Fama, 1980; Mizruchi, 1983; Zahra y Pearce, 1989; Bainbridge, 1993), además de ser el encargado de contratar y despedir al director ejecutivo o general e incluso de fijar su remuneración (Baysinger y Bulter, 1985; Hermalin y Weisbach, 1991). Tal y como señalan Baysinger y Butler (1985), Miller (1993) y Chatterjee y Harrison (2001), el Consejo de



Administración tiene como objetivo, entre otros, orientar los asuntos de la organización y velar por los intereses de los accionistas a través del control de la alta dirección, actuando así como órgano intermedio entre accionistas y equipos directivos a los que, en algunas situaciones extremas, puede llegar incluso a sustituir en sus funciones (Salas, 2002). Como principal mecanismo interno de resolución de conflictos de agencia dentro de la empresa (Jensen, 1993), este órgano centra su labor en la supervisión del comportamiento del equipo directivo (Baysinger y Bulter, 1985; Hermalin y Weisbach, 1991).

Figura 1. Atributos y dimensiones del Consejo de Administración que influyen en los resultados de la empresa. Fuente: Kakabadse, Kakabadse y Kouzmin (2001:26)

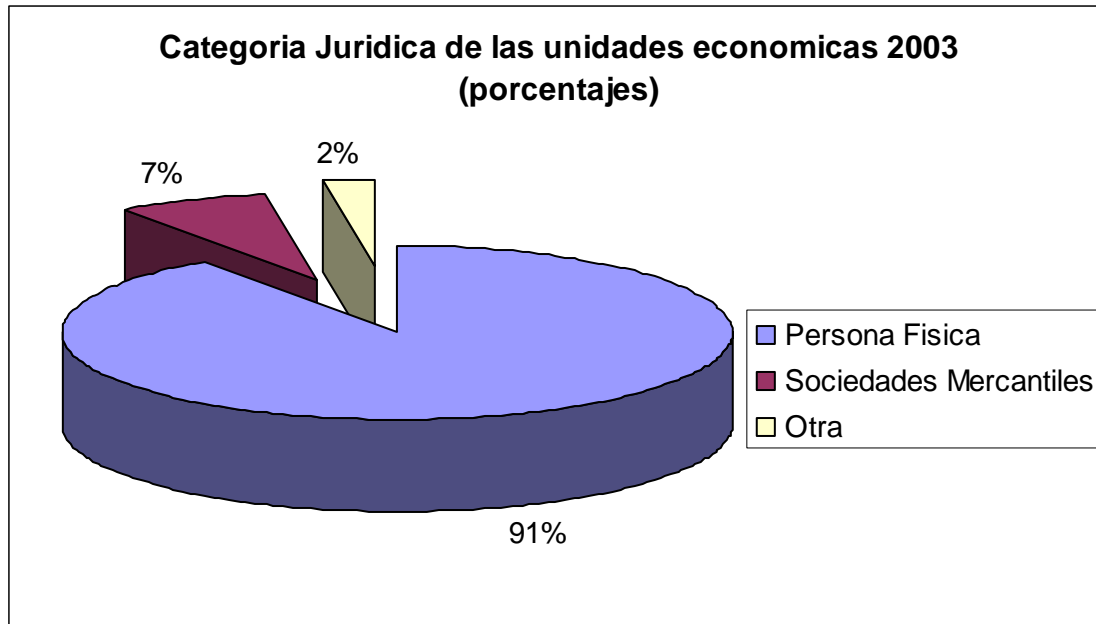
COMPOSICIÓN	CARACTERÍSTICAS	ESTRUCTURA	PROCESOS
Tamaño del consejo	Antecedentes de los consejeros, creencias y atributos	Estructura de liderazgo	Intensidad y calidad de las relaciones entre consejeros
Representación de consejeros externos	Orientación de los consejeros (interna/externa)	Eficiencia de la estructura del consejo (liderazgo, flujo de información entre consejeros)	Interfaz director/presidente y el consejo
Representación minoritaria	Independencia		Nivel de consenso
	Especialización externa		Comprensión y explicación de los procedimientos y acciones del consejo
	Grupos de interés		Procedimientos internos
	Recursos de impacto		

#### GOBIERNO CORPORATIVO EN EMPRESAS NO LISTADAS.

Casi toda la literatura existente se ha enfocado a estudiar al Gobierno Corporativo y su desarrollo dentro de Corporaciones o empresas listadas en Bolsas de Valores, dejando a un lado aquellas empresas medianas y grandes no listadas (algunas de ellas con estructura de propiedad familiar).

Sin embargo, estas ultimas presentan un rico e interesante tema a estudiar, ya que merecen especial atención sobretudo en países cuyos mercados de capitales no están desarrollados por completo y cuyas economías dependen en buena parte del accionar de estas empresas ya que, por ejemplo, mas del 40% de las mas grandes empresas en Europa Occidental están controladas por familias (Faccio y Lang, 2002).

Figura 2. Categoría Jurídica de las empresas en México, Fuente: Censos Económicos 2003, INEGI



En el año 2005, la OCDE llevo a cabo en Turquía la primer reunión sobre Gobierno Corporativo de Empresas no Listadas en Mercados Emergentes:

([http://www.oecd.org/document/37/0,2340,en\\_2649\\_34795\\_35951141\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/37/0,2340,en_2649_34795_35951141_1_1_1_1,00.html)), dando así un gran paso para dirigir la atención del mundo académico a investigar los retos que este tema presenta para estas compañías y sus economías. Así, la OCDE elaboro un reporte llamado “Corporate Governance of Non Listed Companies” donde analiza la situación de esta clase de empresas en varias economías emergentes (tales como China, India, Macedonia, Bulgaria, Marruecos, entre otros). Para México, el reporte presenta varios datos relevantes para las 100 mayores empresas de este tipo, su estructura de propiedad, la composición del Consejo de Administración y de su alta dirección, transparencia financiera y formas de financiamiento, así como la tendencia de ellas a solo cumplir estrictamente con los requerimientos legales (OCDE, 2005). Sin embargo, algunas investigaciones de este reporte, incluyendo la de México, están conformadas por opiniones personales sin tener una investigación empírica como sustento.

Este interés ha surgido también en otros organismos, como en el IFC (International Finance Corporation, [http://ifcln1.ifc.org/ifcext/corporategovernance.nsf/Content/CG\\_Tools](http://ifcln1.ifc.org/ifcext/corporategovernance.nsf/Content/CG_Tools)), una división del Banco Mundial, quien implementa una metodología entre sus clientes (algunos de ellos empresas familiares) a fin de mejorar sus prácticas de Gobierno Corporativo.

#### GRUPOS EMPRESARIALES EN LATINOAMERICA. EL CASO DE MEXICO.

En muchos países del mundo, las grandes empresas familiares juegan un papel superlativo en su desarrollo. Y los países de Latinoamérica no son la excepción.

Una característica de estos grupos empresariales es que casi siempre son propiedad y tienen el control de ellos, familias (Sargent, 2005). En este sentido, La Porta, López de Silanes y Shleifer (1999) encontraron que el 100% de las empresas pertenecientes a su muestra en México, eran

controladas por familias. Y esto, por ende, aparecía también en las empresas que cotizaban en la Bolsa Mexicana de Valores (Babatz, 1997), en donde la propiedad de estas empresas esta altamente concentrada en familias.

En cuanto a su estructura de propiedad se refiere, estos grupos empresariales han evolucionado poco desde sus comienzos, a pesar de los cambios que en materia económica han ocurrido en el mundo actual (apertura de mercados, liberalización económica, privatizaciones, etc.). Lo anterior, ha restringido a estos grupos empresariales de crecer, especialmente en sectores de tecnología intensiva y de capital intensivo. Los emprendedores latinoamericanos prefieren retener la mayoría de acciones con derechos de voto a fin de mantener sin rivales el control del imperio familiar. Sin este interés en mente, (emisión de acciones) no debería ser sorpresa que los mercados de capitales en Latinoamérica estén subdesarrollados (Sargent, 2005). E irónicamente, algunas de estas empresas son las que mas altos dividendos pagan (La Porta, López-de-Silanes, Shleifer y Vishny, 2000). Además; Lora, Cortes y Herrera (2001) encuentran que las compañías en Latinoamérica no emiten o contratan deuda y mantienen muy baja la razón deuda-capital respecto a empresas localizadas en otras regiones del mundo.

Con todo lo anterior, no es sorpresa que los grupos empresariales latinoamericanos estén hambrientos de financiamiento (Sargent, 2005; Babatz, 1997). Por ende, las repercusiones en el ámbito socio-económico deberán de ser importantes.

Tal vez la más grande consecuencia de mejorar las prácticas de Gobierno Corporativo recae en el impacto que tiene esto en la inversión foránea. En un estudio de Gobierno Corporativo desde la perspectiva de los inversores institucionales, Coombes y Watson (2000) encontró que en tres cuartos de los inversores institucionales, estas prácticas de Gobierno Corporativo son tan importantes como el desempeño financiero corporativo al decidir sus inversiones. Más del 80% de ellos dijeron que estarían dispuestos a pagar más por acciones de empresas con buen Gobierno Corporativo.

En México, a iniciativa del Consejo Coordinador Empresarial a través del Comité de Mejores Prácticas Corporativas emitió el Código de Mejores Prácticas Corporativas (CMPC) donde se establecen recomendaciones para un mejor Gobierno Corporativo de las sociedades mexicanas. El CMPC, que aplica solo a las organizaciones que participan en la Bolsa Mexicana de Valores, es apenas un conjunto de recomendaciones de seguimiento voluntario.

A partir de los modelos de Hoskisson y Hitt (1990) y de Zahra y Pearce (1989), y teniendo en cuenta que el objetivo del presente trabajo de investigación se centra en analizar la influencia de la estructura del Gobierno Corporativo de la empresa sobre una apreciación en su rentabilidad, también se estudiará el comportamiento de la Estructura de la Propiedad, el Consejo de Administración y la Alta Dirección (como mecanismos de control interno de la empresa). De esta forma, se puede estudiar la presencia de discrecionalidad directiva en la dirección del crecimiento seguida por la empresa, sugiriéndose que las empresas con mecanismos internos de control activos poseerán estructuras de gobierno óptimas que afectarán a su resultado empresarial.

¿Será el estado actual del Gobierno Corporativo y de los mecanismos de control interno de las empresas medianas y grandes no listadas en México (Estructura de la Propiedad, el Consejo de Administración y la Alta Dirección) un obstáculo para su desarrollo?

POBLACION, MUESTRA Y DISEÑO DE LA INVESTIGACION.

Nuestro estudio es transeccional correlacional y descriptivo, ya que mediremos la relación entre las variables independientes (prácticas de Gobierno Corporativo, características y atributos del Consejo de Administración, características de la alta dirección y estructura de propiedad) y la dependiente (desempeño de la empresa), por lo tanto, aplicaremos la técnica de regresión múltiple. Así mismo, a fin de enriquecer la investigación, usaremos un modelo multimodal, en donde se entrevistara de manera abierta a miembros de los Consejos a fin de conocer sus percepciones acerca del tema en México y que la Metodología del IFC y la de Kula (2005); bases de esta investigación, no abarcan.

Se extenderá la literatura existente en el tema al proveer conocimiento acerca del Gobierno Corporativo en empresas medianas y grandes no listadas en México. Las investigaciones recientes sobre Gobierno Corporativo se han enfocado en su gran mayoría a empresas listadas en mercados de capitales desarrollados y solo existen algunas investigaciones dirigidas a estudiar nuestro objeto de estudio en empresas no listadas en mercados emergentes. Así mismo, no se tiene conocimiento en este momento de algún estudio en México para empresas no listadas.

La población para esta investigación son las mayores empresas medianas no listadas en México. Nuestro marco muestral será el Índice Mundo Ejecutivo 1000 del año 2006, índice que contiene las 1000 empresas mas grandes (listadas y no listadas) de México. La muestra probabilística serán aquellas empresas medianas y grandes no listadas localizadas en las ciudades de Guadalajara, Monterrey y Ciudad de México que pertenezcan a este Índice. Estas ciudades son las de mayor importancia socio-económica en el país. De este resultado haremos el cálculo correspondiente para conocer el tamaño de la muestra de la investigación. Se hará un muestreo por agrupamiento. Queda pendiente determinar el nivel de precisión.

La variable dependiente en el estudio es el desempeño de la empresa. No hay consenso sobre lo que constituye una medida apropiada del desempeño de la empresa (Johnson, J. L., Daily, C. M. y Ellstrand, A. E., 1996, p. 430; Daily, C. M., McDougall, M. M., Covin, J. G. y Dalton, D. R., 2002, p.389). Así mismo, es poco probable que un solo indicador pueda de manera adecuada capturar muchos aspectos del desempeño de la empresa. Nuestra investigación, al igual que la de Kula (2005), usara múltiples medidas subjetivas del desempeño de la empresa basado en el juicio de los entrevistados. Estudios como los de Covin, J. G., Slevin, D. P. y Schulz, R. L. (1994) y Venkatraman y Ramanujam (1986) encuentran consistencia entre las percepciones del desempeño por parte de los gerentes y medidas objetivas de desempeño. Por lo tanto seguiremos el procedimiento empleado por Kula:

([http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=684313](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=684313))

y (<http://ifcln1.ifc.org/ifcext/corporategovernance.nsf/Content/CGTools-FamilyFounderUnlisted>) por la IFC para medir las variables independientes que nos interesan. Se llevara a cabo la implementación de la metodología del IFC, la cual, esta dividida en 4 apartados: Compromiso hacia un Buen Gobierno Corporativo, Estructura y Funcionamiento del Consejo de Administración, Controles Internos: Transparencia y Apertura de Información, y finalmente Políticas hacia Accionistas Minoritarios.

Kula (2005) desarrollo entrevistas semi-estructuradas, auxiliándose del envío de cuestionarios y midió el desempeño de las empresa en base a múltiples indicadores subjetivos de ello. En nuestro caso, usaremos cuestionarios auto administrados los cuales, serán enviados por correo electrónico.

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# **LA CALIDAD EN EL SERVICIO COMO VENTAJA COMPETITIVA DE UNA EMPRESA AUTOMOTRIZ, EN EL MERCADO LOCAL DE ORIZABA**

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## **RESUMEN**

*La calidad en el servicio hoy en día, es un término que cada día se escucha con más frecuencia en las pláticas entre empresarios, es por esto que algunas personas han incursionado en el conocimiento de este tema tal vez con el propósito de ser competitivos buscando la diferenciación de su producto. Este término involucra aquellos elementos que el cliente considera importantes para satisfacer sus expectativas y necesidades, esto varía de acuerdo al giro y naturaleza de los negocios, con el objeto de estudiar este tema en el presente documento se hace un análisis de una concesionaria de una compañía de automóviles en la ciudad de Orizaba. En el negocio en cuestión se ha detectado que existe cierta inconformidad por parte de los clientes en el aspecto de la calidad en el servicio, esto motivó el interés para realizar un estudio para detectar áreas de oportunidad susceptibles de mejora. La investigación se desarrolla elaborando un análisis de los factores definidos como importantes en la calidad en el servicio para esta concesionaria automotriz en base a las teorías estudiadas en el proceso de elaboración, estos son; percepción del cliente, atención al cliente, conocimiento de la información, honestidad, seguimiento, satisfacción del cliente, resolución de problemas, tiempo de atención, tiempo de entrega, aspecto de las instalaciones, aspecto del personal calidad del producto, precio, y financiamiento. Con este estudio en relación con lo que los clientes han manifestado se llegó a la conclusión que principalmente es importante considerar la mejora de; el tiempo de entrega, la capacitación al personal de servicio, la atención, y las existencias en refacciones. Para esto se presentan algunos planteamientos que quedan a disposición y criterio la empresa en estudio.*

Entre otros resultados de la globalización de los mercados, esta la exigencia de los clientes, quienes ahora son más conocedores y más complejos en sus gustos, ahora saben exactamente lo que quieren de un producto o un servicio, y por su parte los gerentes reconocen que se pueden obtener ventajas competitivas sustanciales mediante un mejor servicio al cliente, por lo que el servicio se ha convertido en un medio poderoso para diferenciar a una empresa de sus competidores.

Toda empresa cuenta con determinados parámetros que miden la calidad de sus productos o servicios, cuando las actividades no se están llevando a cabo eficientemente se salen de éstos parámetros y traen como consecuencia repercusiones en la actividad principal de la empresa que se traduce reducción las ventas y por lo tanto de los beneficios. Estas variaciones que salen de los parámetros requeridos en muchas de los casos constituyen desviaciones importantes en los procesos reduciendo la competitividad de la empresa, y puede formar una mala imagen en el cliente de la misma impactando negativamente en el largo plazo.

En las empresas automotrices varios han sido los enfoques que se han dado para ubicar el servicio al cliente, sobresaliendo principalmente el que se le proporcionaba al automóvil en el taller mecánico y en el mejor de los casos como la función de un departamento que atendía las quejas de los clientes insatisfechos. La administración moderna habla de servicio personal, no de

servicio técnico. Y para poder precisar más este enfoque y hacerlo más manejable se habla de la experiencia del cliente en su contacto con un producto o un servicio, de esta manera es posible; diseñar, planear y controlar las condiciones, que según la experiencia tenga la empresa de lo que quiere el cliente o que posiblemente piense y sienta del producto o servicio. Es importante la experiencia del servicio porque en función de ella el cliente emite un juicio de valor respaldado por los hechos que lo van a llevar a tomar una decisión favorable o desfavorable con respecto a la empresa, grupo o persona que realiza el servicio.

## EMPRESA EN ESTUDIO

La empresa en estudio es una concesionaria perteneciente a la industria automotriz, cuyo principal giro es la compra venta de autos nuevos; la marca a la que pertenece es considerada como una de las mejores a nivel nacional. Para enmarcar el contexto poblacional, la ciudad de Orizaba está integrada por 118, 593 habitantes, de los cuales un 73 por ciento son mayores de 15 años (INEGI, 2004). Este segmento es al que va dirigido el producto de la empresa, ya que cuenta con una amplia gama que va desde los autos compactos hasta los de súper lujo y los precios de los autos que maneja varían desde los 77,000 pesos hasta 332,000 pesos, la variabilidad tanto en la gama como en los precios hacen que el producto vaya dirigido tanto a los adolescentes y jóvenes como a las personas adultas de ambos sexos y de distintas posiciones económicas.

El problema radica en que para que la empresa en estudio sea competitiva en este mercado, es necesario brindar un nivel atractivo de calidad en el servicio, y para que esto pueda suceder deben estar involucrados todos los departamentos de la empresa y todo el personal; comenzando con el departamento de ventas, ya que es a través de éste principalmente que la empresa se da a conocer en el mercado y es la primera etapa por la que pasan los clientes, posteriormente el departamento de servicio y refacciones porque es un punto fundamental en el ingresos de la empresa y de la calidad en el servicio que se proporcione al cliente, de estos departamentos depende en gran proporción que el cliente sea un prospecto para comprar un auto nuevo.

Todo esto va dirigido a dar respaldo a las ventas generadas por la división correspondiente, ya que es el principal generador de las utilidades porque son los automóviles vendidos los que consumen el resto de los servicios de la empresa, de esta manera se trata de ofrecer un óptimo servicio al cliente para que sea fiel a la empresa y su compra se vuelva un ciclo cada vez más corto.

## DISEÑO DE LA INVESTIGACIÓN

La metodología utilizada para realizar el diagnóstico de la situación actual de la empresa en cuanto a la calidad en el servicio, está conformada por un instrumento de medición que es una encuesta aplicada a una muestra de clientes.

La encuesta consta de veintitrés preguntas en total, cuatro de las cuales son preguntas abiertas y diecinueve preguntas en las que se aplica el escalamiento tipo Likert. Debido a que la dirección de las preguntas que se presentan es positiva, se califica favorablemente al factor medido, y entre los sujetos estén más de acuerdo con la pregunta, su actitud es más favorable, por lo que las respuestas que indican “siempre” tienen la mayor puntuación de las alternativas, quedando de la siguiente manera:

- (4) Siempre
- (3) Casi siempre
- (2) Algunas veces
- (1) Nunca

Las puntuaciones finales se obtienen sumando los valores obtenidos respecto a cada frase, por lo que se le denomina escala aditiva. La puntuación se considera alta o baja según el valor de la respuesta a las preguntas. Es decir, en la escala para evaluar la calidad en el servicio de la



empresa automotriz, la puntuación mínima posible es de 19 y la máxima es de 76, porque hay diecinueve preguntas.

## CONCLUSIONES

La calidad en el servicio es un concepto que como tal es probable que el cliente no lo visualice, sin embargo toma en cuenta cada uno de los elementos que lo conforman. De acuerdo a los resultados de la encuesta en cuanto a la calidad en el servicio como concepto global, la empresa obtuvo un resultado favorable; sin embargo al evaluar los elementos que conforman a la calidad en el servicio por separado y al solicitar al cliente que proporcione su opinión sobre los puntos débiles que considera afectan la calidad en el servicio, se puede observar cuáles son aquellos que son susceptibles de mejorar.

El elemento que requiere de mayor atención de acuerdo a los resultados obtenidos en las preguntas elaboradas específicamente de cada elemento de la calidad en el servicio, es el tiempo de entrega ya que es el que obtuvo la menor puntuación de respuestas favorables del total de los elementos evaluados y al mismo tiempo obtuvo también la mayor puntuación desfavorable de las alternativas de respuesta, en este caso también figura con una alta puntuación desfavorable el tiempo de entrega en la compra, por lo que es evidente que el factor del tiempo de entrega en general, es decir tanto en el departamento de servicio como en el departamento de ventas, es un elemento en el que la empresa se encuentra en desventaja competitiva.

De acuerdo a las observaciones hechas de manera directa por los clientes existen diversos factores que deben ser atendidos, ya que son en los que existe alguna inconformidad, dichos factores se enlistan a continuación:

### Factor

Mejor precio  
Capacitación y actualización del personal de servicio  
Atención al cliente  
Optimización en la programación de tiempos de entrega  
Compromiso con el cliente  
Entrega a domicilio  
Existencias en refacciones  
Flexibilidad en la solución de problemas  
Cultura organizacional (actitud)  
Publicidad  
Instalaciones adecuadas

Cabe mencionar que los resultados de las observaciones hechas de manera directa por los clientes coinciden con los resultados obtenidos con las preguntas de la encuesta así como con lo expuesto al inicio del presente trabajo. Al englobar los factores y hacer un análisis se observa que la mayoría de ellos vienen a recaer en unos pocos, que son los factores considerados como susceptibles de mejora. Es importante recalcar que los elementos obtenidos en este punto fueron factores repetidos continuamente por la mayoría de los clientes, y en ello radica su importancia.

Dichos factores son la atención al cliente, la optimización en la programación de tiempos de entrega, la capacitación y actualización del personal de servicio y las existencias en refacciones. El factor de la atención engloba aspectos que abarcan desde la misma atención que se le brinda al cliente hasta aspectos como el no dejarlos solos en la sala de ventas, la eficiencia en los trámites que se realizan, el supervisar que todo lo que se le entrega al cliente sea correcto y se encuentre en buenas condiciones, el interés que demuestran los agentes de ventas para el trámite y la

entrega, entre otros; es decir todos aquellos elementos que hagan sentir al cliente una atención personalizada y de calidad, y que haga al personal competitivo y eficiente.

Como se puede observar, los factores que son susceptibles de mejorar abarcan aspectos claramente definidos de los distintos departamentos de la empresa que tienen una relación directa con el cliente, que son ventas, servicio y refacciones. Es decir la atención, que es un elemento que se relaciona con ventas, refacciones y servicio; los tiempos de entrega en el departamento de ventas y servicio; la capacitación de personal en el departamento de servicio; y las existencias en el departamento de refacciones.

## RECOMENDACIONES

Analizando las causas de los problemas, se concluye que es necesario llevar a cabo una revisión de los procesos en los que está involucrada la atención al cliente de manera directa, como lo son el trámite de crédito, la programación física y administrativa para la entrega de una unidad nueva o de servicio, el seguimiento al cliente antes y después de la compra o servicio, el proceso de abastecimiento de piezas en refacciones y la evaluación del personal entre otros; todo esto con el fin de realizar una reestructuración, en donde posiblemente se tendrá que realizar la eliminación de formatos o actividades internas que no son necesarios o que de alguna manera hacen poco ágiles y eficientes los procesos, para ello se pueden utilizar diversas herramientas como apoyo, como lo son el diagrama de causa y efecto, la técnica de los cinco porqués, etc., de ésta manera será posible detectar cuáles son las causas de las inefficiencias en la atención, el tiempo de entrega, la capacitación del personal de servicio y las existencias en refacciones, que son los cuatro factores detectados que requieren de una mejora.

Una vez que se haya realizado la revisión de los procesos, se recomienda ordenarlos consecutivamente y elaborar una lista de chequeo de cada uno de ellos, de manera que el personal de cada departamento se asegure de cumplir con las actividades correspondientes a cada proceso y cuide hacerlo con calidad. Esta es una manera de asegurar el cumplimiento de cada paso de un proceso para que no existan consecuencias negativas a la hora de interactuar con el cliente y al mismo tiempo ser eficientes en la realización de actividades, lo que a un largo plazo crea hábitos positivos en el personal, como la disciplina y la responsabilidad. Esta reestructuración de los procesos mejorará los factores de tiempos de entrega y atención al cliente.

Además es necesario implantar en el personal una cultura de servicio por lo que se sugiere proporcionar al personal cursos de inducción relacionados con ello y mantener una capacitación constante al personal de cada departamento para así contribuir al logro de los objetivos, ya que sin la colaboración del personal no es posible efectuar los cambios pertinentes.

Con la cultura de servicio en la mentalidad del personal, se logrará el involucramiento de éste y en especial de aquellos que tienen un contacto directo con el cliente, es necesario reforzar los conceptos de la calidad en el servicio, así como su cultura organizacional y de ésta manera asegurar la preparación de estrategias y acciones para un futuro de acuerdo a las nuevas tendencias y requerimientos de los clientes. Es necesario crear una conciencia de la intervención del personal en la calidad en el servicio, tanto para los beneficios de la empresa en general así como en cada departamento.

En el aspecto de la capacitación del personal del departamento de servicio, se recomienda realizar un proceso de reclutamiento y selección, así como una evaluación más estricta al contratar personal en dicho departamento, al igual que proporcionar al personal cursos de inducción para que se familiaricen con todos los elementos básicos y los elementos técnicos relacionados con la

marca; además de mantenerlos actualizados en cuanto a las nuevas tendencias de la industria automotriz, y específicamente de las innovaciones de los modelos de la marca. Es importante que no sólo el departamento de ventas tenga y conozca la información de las características generales de los autos y sus innovaciones, sino que el personal de servicio también debe estar al tanto de dicha información para realizar su trabajo con calidad y brindar un mejor servicio al cliente.

Respecto a mejorar el funcionamiento del departamento de refacciones en cuanto a las existencias de las mismas, es aconsejable que la empresa adquiera un software especializado que permita controlar estadísticamente los requerimientos de refacciones así como las refacciones en existencia, para de ésta manera mantener un inventario de las piezas que son mayormente requeridas por los clientes y no hacerlo esperar demasiado en conseguirlas. También se debe capacitar al personal o contratar personal nuevo capacitado.

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